

# ICC A117.1 Comments on 2<sup>nd</sup> Draft

Proposal list to the 2017 A117.1 for the 2023 edition –  
03-30-2025  
Chapter 6

## CHAPTER 6 PLUMBING ELEMENTS AND FACILITIES

### 06-05 – 2021 overview

Propo sal numb er	Proponent	Standar d Section s	Commit tee Actions	Mtg. Date	Notes; Groups; groupings
06-05	Mazz	603.5	AS 21-9-1	7-28-2022 1-18-2024	Final Action AM by BC1

Comme nt 1 <sup>st</sup> draft	Proponent	Requeste d Action	Commit tee Action	Mtg. Date	Notes; Groups; groupings
BC1	Paarlberg, ICC	Negative	AS 17-10-3	1-18-2024	
PC1	Skulski	D	NA	1-18-2024	

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Pace, HUD	AM			
BC2	Buuck, NAHB	AM			
BC3	Paarlberg, ICC	D			

### 06-05 – 2021 603.5

**Proponent:** Marsha Mazz, representing United Spinal Association

**Revise as follows:**

#### SECTION 603 TOILET AND BATHING ROOMS

**603.5 Diaper changing tables.** Diaper changing tables shall comply with Sections 309 and 902. Diaper changing tables shall not be located in toilet compartments required to comply with Section 604.9.

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**REASON:** A common complaint among United Spinal Association members is that baby changing tables are left in the down position and are difficult, if not impossible, to return to a closed position because their location in an accessible compartment makes it impossible to get into position to close them. Even though Section 604.3.3 prohibits a diaper changing table from overlapping the clearance around the water closet, it can still block access to the toilet when in the open position.

Committee Action: 21-9-1 As Submitted

## **REPORT OF HEARING:**

### **Modification (if any):**

**Committee Reason:** The baby changing tables are often left in the open position. When this is in the accessible stall, this can be an obstruction for persons with disabilities that need that space to use the water closet.

603.5-MAZZ.doc

## **06-05 – 2021 Ballot Comments**

<b>BALLOT COMMENT 1- FIRST DRAFT:</b>
<i>Proponent:</i> <b>Kim Paarlberg representing ICC</b>
<i>Desired Action:</i> Negative with comment
<i>Modification:</i> See Ballot Comment 1

## **06-05 – 2021 Ballot Comment 1**

### **603.5**

**Proponent:** Kimberly Paarlberg, ICC

### **Modify the proposal with the following:**

**603.5 Diaper changing tables.** Diaper changing tables shall comply with Sections 309 and 902. Diaper changing tables ~~shall not be where~~ located in toilet compartments ~~required to comply with Section 604.9.~~ shall not overlap the clear floor space required for the water closet or the accessible route to the transfer space when in the useable position.

**Exception:** Self-closing diaper changing tables shall be permitted to be measured in the stowed position.

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**REASON:** While we appreciate the concern about diaper changing stations possibly interfering with access to a wheelchair accessible water closet compartment when the station is inadvertently left in the open position, this appears to be more of an operational concern. This could be addressed by options such as self-rising tables, or tables located out of the way of the compartment door. This proposal would not allow for baby changing tables in any stalls, no matter how large. Many mothers use the compartment walls to contain

their other children while they change an infant. Not all states require baby changing stations, so this could also result in small facilities not providing baby changing tables due to lack of space in the room. There needs to be a reasonable compromise.

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**Committee Action for Ballot Comment 1:**

AS 17-10-3

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:** Diaper changing tables are required in some states, so providing them is not always an option. Some small bathrooms may not have space to locate the diaper changing tables outside of the accessible compartment. If they were located outside the door of the accessible compartment, this could still be an obstruction for using the accessible compartment. This compromise would minimize the chance of the diaper changing table being an obstruction within the accessible stall.

**06-05 Paarlberg.doc**

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**06-05 – 2021 Public Comment 1**  
**603.5**

**Proponent:** Jennifer Skulski, Skulski Consulting LLC

**Request disapproval.**

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**REASON:**

While we appreciate that commentors have had negative experiences with broken diaper changing units obstructing the accessible route and turning space in the accessible toilet compartment, that is an issue of facility maintenance, not the rationale to introduce a restrictive and prohibitory technical provision. As a practitioner that conducts accessibility assessments of public facilities, our data indicates that broken diaper changing tables where the unit is stuck in the down position or does not completely fold up so not to obstruct the accessible route accounts for less than 10 percent of the total instances of non-compliance. Of that 10 percent, less than 2 percent of those instances is when the diaper changing table is located within the wheelchair accessible toilet compartment. The overwhelming issue of non-compliance with diaper changing tables is with the mounting height to pull the unit open and the resulting work surface height and knee clearance. The accessibility standards, while minimum requirements in their very nature, define what it means for an element or space to be “accessible” and serve as the gateway or jumping off point to more universal and inclusive designs that meet the needs of a wider spectrum of users. Approximately 12 percent of the U.S. population identifies as having a mobility impairment (Centers for Disease Control and Prevention. Disability and Health Data System, updated May 2023). The U.S. Department of Education's National Institute on Disability and Rehabilitation Research finds that more than 6.8 million community-resident Americans use assistive devices, such as wheelchairs, scooters, and walkers, to help them with mobility. Approximately 2.2 percent of the U.S. population, because of the use of a mobility device, require the extra space within the accessible toilet compartment. However, the spatial provisions of the accessible toilet compartment actually meet the needs of a much wider spectrum of users such as people who have neurodivergent diagnoses and parents or caregivers with small children. The extra space of the accessible toilet compartment can accommodate individuals with sensory impairments and social anxiety disorders who may feel confined in small spaces or disoriented by the acoustics of a heavily used public restroom. And,

obviously, the size of the accessible toilet compartment is beneficial to parents of small children and caregivers, especially in existing facilities where a single user or family restroom is not available. Typically, wall-mounted diaper changing tables have been located near the main entrance or common wall of the public restroom, the busiest area of the restroom. For infants, toddlers, new parents, and caregivers, this high traffic area is stressful, lacks privacy, and creates an obstruction to the circulation path for other users. Locating the wall-mounted diaper changing table in the accessible toilet compartment is an attempt by facility owners to provide a more calming environment with privacy for the child and caregiver.

The proposed modifications for 06-05-2021 and 06-06-2021 restrict the use of the accessible toilet compartment rather than encouraging a more accessible and more inclusive design. The prohibitive tone of the proposed modifications lacks empathy for other user groups and the means by which accessible design can benefit people with disabilities along with their non-disabled family members, friends, and companions. We urge the committee to vacate the proposed modification.

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**Committee Action for Public comment 1:** NA

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

06-05 Skulski.doc

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**06-05 – 2021 1<sup>st</sup> draft Committee Action**

**Committee Action for First Ballot:** AM by BC1 – 17-10-3

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:** Diaper changing tables are required in some states, so providing them is not always an option. Some small bathrooms may not have space to locate the diaper changing tables outside of the accessible compartment. If they were located outside the door of the accessible compartment, this could still be an obstruction for using the accessible compartment. This compromise would minimize the chance of the diaper changing table being an obstruction within the accessible stall.

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**06-05 – 2021 2<sup>nd</sup> draft Ballot Comment 1  
603.5**

**Proponent:** Rex Pace HUD

**Vote:** negative with comment; AM

**Further revise as follows:**

**603.5 Diaper changing tables.** Diaper changing tables shall comply with operable parts and with Sections 902. Diaper changing tables where located in single user and family/companion toilet compartments rooms shall not overlap the maneuvering clearance around the water closet or the accessible route to the transfer space when in the useable usable position. Diaper changing tables shall not be permitted in wheelchair accessible toilet compartments.

### **Exception Exceptions:**

1. Self-closing diaper changing tables shall be permitted to be measured in the stowed position.
2. In alterations diaper changing tables shall be permitted outside the maneuvering clearance around the water closet in wheelchair accessible toilet compartments.

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**REASON:** The Standard should not encourage a known barrier to be permitted in the wheelchair accessible stall. In new construction this configuration can be avoided. Allowing the diaper changing table in a single user or family/companion toilet room allows for more space to get around the table if it is down. This cannot be done in a toilet compartment. Not all users have the strength or dexterity to put the table up. The requirement would also permit two different user groups with mostly distinct needs in the same location which will create unnecessary conflict when a person is changing a diaper as opposed to a person with a disability needs the only accessible stall. A location outside of the wheelchair accessible toilet compartment will provide more flexibility for all users and prevent conflicts in the compartment being occupied when a person with a disability may urgently need to use it.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:** AS/AM/D

### **REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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## **06-05 – 2021 2<sup>nd</sup> draft Ballot Comment 2**

### **603.5**

**Proponent:** Josh Schorr ATBCB

**Vote:** negative with comment; AM

### **Further revise as follows:**

**603.5 Diaper changing tables.** Diaper changing tables shall comply with *operable parts* and Section 902. Diaper changing tables ~~where shall not be~~ located in wheelchair accessible toilet compartments. Diaper changing tables located in single-user or family or companion toilet rooms shall not overlap the *maneuvering clearance* around the water closet or the *accessible* route to the transfer space when in the useable position.

**Exception:** Self-closing diaper changing tables shall be permitted to be measured in the stowed position.

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**REASON:** We don't want to encourage placement of the diaper changing station within the accessible toilet compartment in a multi-user toilet room. Beyond maintenance issues potentially leading to accessibility issues, if the only diaper changing station is within the wheelchair accessible compartment, then the person with a disability cannot use the toilet if someone else is changing a diaper.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 2:** AS/AM/D

### **REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-05 – 2021 2<sup>nd</sup> draft Ballot Comment 3  
603.5**

**Proponent:** Kimberly Paarlberg, ICC

**Vote:** negative with comment

**Request disapproval.**

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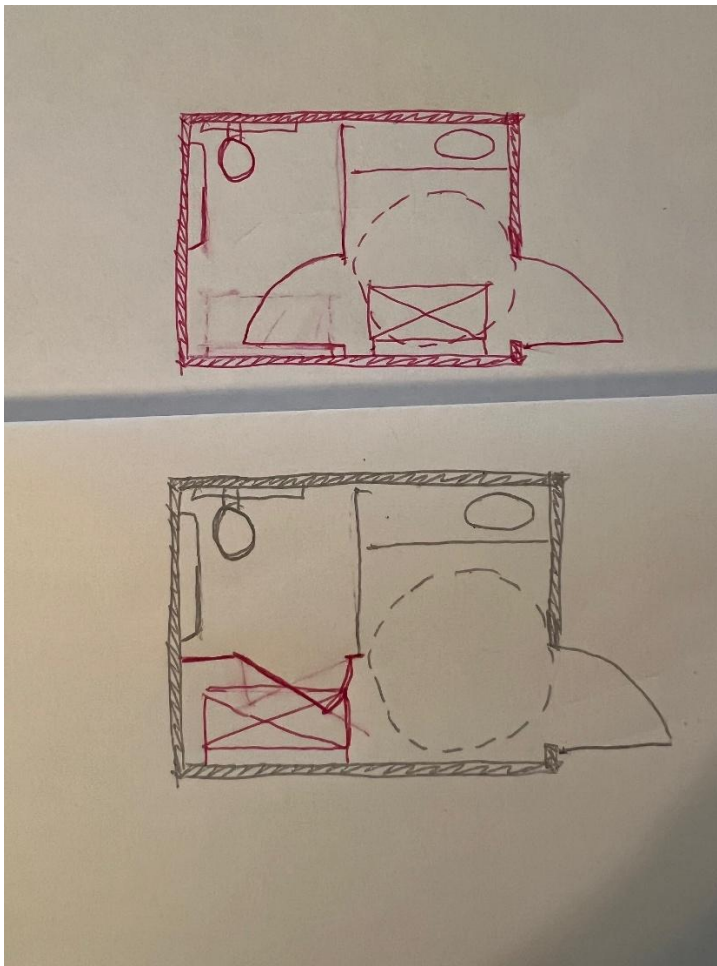
**REASON:**

I understand the concerns raised by the proponents, but I don't believe the end results is the desired solution. The modification could be read for this to be the route to the transfer space or within the room – so that language is broken. This is not an issue for single occupant toilet rooms because diaper changing tables cannot overlap the water closet clearances.

Below is the layout for a standard single compartment toilet room. To put the diaper changing table outside of the compartment, either the toilet room loses the larger and more accessible end of room compartment and the table is in front of the stall door (and someone tries to argue that wheelchair access to the work surface is from the end); or the diaper changing table moves into the space in front of the lavatory, which also blocks the stall door, and access to the lavatory. Both options are bad for everyone.

In addition, the compartment does assist mom's with multiple children in containing other her children while she is changing the baby.

Diaper changing tables being down is a maintenance issue, not a construction problem.



**Committee Action on 2<sup>nd</sup> draft Ballot Comment 3:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

**06-05 – 2021 2<sup>nd</sup> draft Committee Action**

**Committee Action for First Ballot:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Further modify as follows:**

**Committee Reason:**

<b>Report for 06-05– 2021</b>		
<b>Committee decision:</b> AS	<b>Committee Vote at Meeting:</b> 21-9-1	<b>Committee Vote on Ballot:</b> 39-1-1
<b>REPORT OF HEARING:</b>		
Modification (if any):		
Committee Reason: The baby changing tables are often left in the open position. When this is in the accessible stall, this can be an obstruction for persons with disabilities that need that space to use the water closet.		

**Report for 06-05– 2021****Committee decision: AM BC1****Committee Vote at Meeting: 17-10-3****Committee Vote on Ballot:****REPORT OF HEARING – FIRST DRAFT**

Modification (if any):

**603.5 Diaper changing tables.** Diaper changing tables shall comply with Sections 309 and 902. Diaper changing tables ~~shall not be where~~ located in toilet compartments ~~required to comply with Section 604.9;~~ shall not overlap the clear floor space required for the water closet or the accessible route to the transfer space when in the useable position.

Exception: Self-closing diaper changing tables shall be permitted to be measured in the stowed position.

Committee Reason: Diaper changing tables are required in some states, so providing them is not always an option. Some small bathrooms may not have space to locate the diaper changing tables outside of the accessible compartment. If they were located outside the door of the accessible compartment, this could still be an obstruction for using the accessible compartment. This compromise would minimize the chance of the diaper changing table being an obstruction within the accessible stall.

**BALLOT COMMENT- SECOND DRAFT:**

Proponent:

Desired Action:

Modification:

Reason:

**Committee decision: AS/AM/D****Committee Vote at Meeting:****Committee Vote on Ballot:****FINAL ACTION:**

Modification (if any):

Committee Reason:



## 06-07 – 2021 overview

Propo sal numb er	Proponent	Standar d Section s	Commit tee Actions	Mtg. Date	Notes; Groups; groupings
06-07	Paarlberg	603.6	D 28-1-0	7-28-22 1-18-24	Final Action D

Comme nt 1 <sup>st</sup> draft	Proponent	Requeste d Action	Commit tee Action	Mtg. Date	Notes; Groups; groupings
BC1	Thompson, PMI	Negative	NA	1-18-24	
BC2	Paarlberg, ICC	Negative	AS 12- 12-5	1-18-24	

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Thompson, PMI	AM			

## 06-07 – 2021

### 603.6

**Proponent:** Kimberly Paarlberg, International Code Council

**Revise text as follows:**

### SECTION 603 TOILET AND BATHING ROOMS

**603.6 Operable parts.** Operable parts on at least one towel dispensers ~~and~~ or hand dryers serving lavatories ~~complying with Section 606~~ shall comply with Table 603.6.

**TABLE 603.6  
MAXIMUM REACH DEPTH AND HEIGHT**

Maximum Reach Depth	0.5 inch (13 mm)	2 inches (51 mm)	5 inches (125 mm)	6 inches (150 mm)	9 inches (230 mm)	11 inches (280 mm)
Maximum Reach Height	48 inches (1220 mm)	46 inches (1170 mm)	42 inches (1065 mm)	40 inches (1015 mm)	36 inches (915 mm)	34 inches (865 mm)

**REASON:** The intent of this proposal is a coordination between this requirement typical minimum requirements in a toilet room.

Table 603.6 effectively does not allow for a towel dispenser or hand dryer to be located over a counter. Best/common design practice is to now make all lavatories in a bathroom comply with Section 606. By changing this required to say at least one towel dispense and hand dryers has to meet the reach depths, that allows for other towel dispensers to be located over the counters. Thus Little People of America will always have access to at least one, and other towel dispensers can be located over the lavatories. This would be consistent with the typical requirement for ‘at least one’ of other items in the toilet room. This would also allow for the reach in style of hand dryers is there was an accessible feature in the room (which I do not know how to make accessible). There is even a kind of hand dryer now that is in the lavatory.



Example of one towel dispenser meeting table and one not.



Example of reach in hand dryer.



Hand dryer in the lavatory.

Committee Action: 28-1-0 Disapproved

## REPORT OF HEARING:

Modification (if any):

**Committee Reason:** This proposal an 06-08 are addressing similar issues. See the committee reason for 06-08.

603.6-PAARLBERG.doc

## 06-07 – 2021 Ballot Comments

### BALLOT COMMENT 1- FIRST DRAFT:

*Proponent:* **Kyle Thompson representing PMI**

*Desired Action:* Negative with comment

*Modification:*

*Reason:* The standard currently requires that all towel dispensers and hand dryers in a bathroom comply with Table 603.6 which is impractical. The requirement should be applied in such a way as to provide equal access to disabled communities. The intent of the proposed revision is to ensure that a person has access to at least one hand drying method associated with an accessible lavatory complying with Section 606. The hand drying method must depend on the type of appliances that are installed for drying hands which could be either a towel dispenser or a hand dryer.

**BALLOT COMMENT 2- FIRST DRAFT:**  
*Proponent: Kim Paarlberg representing ICC*  
*Desired Action: Negative with comment*  
*Modification: See Ballot Comment 2*

## 06-07 – 2021 Ballot Comment 2

### 603.6

**Proponent: Kimberly Paarlberg, ICC**

**Replace with the following:**

#### **SECTION 603 TOILET AND BATHING ROOMS**

**603.6 Operable parts.** Operable parts on at least one towel dispensers and hand dryers serving lavatories ~~complying with Section 606~~ shall comply with Table 603.6. At least one towel dispenser and one hand dryers serving the required accessible lavatory shall comply with Section 309.

**TABLE 603.6  
MAXIMUM REACH DEPTH AND HEIGHT**

<b>Maximum Reach Depth</b>	0.5 inch (13 mm)	2 inches (51 mm)	5 inches (125 mm)	6 inches (150 mm)	9 inches (230 mm)	11 inches (280 mm)
<b>Maximum Reach Height</b>	48 inches (1220 mm)	46 inches (1170 mm)	42 inches (1065 mm)	40 inches (1015 mm)	36 inches (915 mm)	34 inches (865 mm)

**REASON:** This was attempted to be addressed in 6-07 and 6-08. The original proposals intended to clarify that at least one towel dispenser/hand dryer had to comply with the reach requirements set by Little People. The committee asked that this also be clarified for persons using wheelchairs at the accessible lavatory.

**Committee Action for Ballot Comment 2:** AS 12-12-6

#### **REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:** Chair voted to create a tie – so final action is D. Scoping should not be added to standard.

**06-07 Paarlberg.doc**

## 06-07 – 2021 1<sup>st</sup> draft Committee Action

Committee Action for First Ballot:

Final Action D

### REPORT OF HEARING:

Modification (if any):

Committee Reason: Scoping should not be added to standard.

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## 06-07 – 2021 2<sup>nd</sup> draft Ballot Comment 1

### 603.6

Proponent: Kyle Thompson, PMI

Vote: negative with comment, AM

Replace with the following:

**603.6 Operable parts.** Operable parts on at least one towel dispensers and hand dryers serving lavatories complying with Section 606 shall comply with Table 603.6. At least one towel dispenser and one hand dryers serving the required accessible lavatory shall comply with operable parts.

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**REASON:** By changing this requirement to say at least one towel dispense and hand dryers has to meet the reach depths, that allows for other towel dispensers to be located over the counters. This provides better access for everyone.

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Committee Action on 2<sup>nd</sup> draft Ballot Comment 1: AS/AM/D

### REPORT OF HEARING:

Modification (if any):

Committee Reason:

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## 06-07 – 2021 2<sup>nd</sup> draft Committee Action

Committee Action for First Ballot: AS/AM/D

### REPORT OF HEARING:

Modification (if any):

Further modify as follows:

Committee Reason:

Report for 06-07– 2021		
Committee decision: D	Committee Vote at Meeting: 28-1-0	Committee Vote on Ballot: 38-2-1
REPORT OF HEARING:		
Modification (if any):		
Committee Reason: This proposal an 06-08 are addressing similar issues. See the committee reason for 06-08.		

<b>Report for 06-07– 2021</b>		
<b>Committee decision: D</b>	<b>Committee Vote at Meeting: 12-12-6</b>	<b>Committee Vote on Ballot:</b>
<b>REPORT OF HEARING – FIRST DRAFT</b>		
Modification (if any):		
Committee Reason: Scoping should not be added to standard.		
<b>Committee decision: AS/AM/D</b>	<b>Committee Vote at Meeting:</b>	<b>Committee Vote on Ballot:</b>
<b>FINAL ACTION:</b>		
Modification (if any):		
Committee Reason:		

## 06-11 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-11	Boecker	603.7(New )	AS 19-9-5	8-11-2022 2-15-2025	Final AM BC1

Comment 1 <sup>st</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Paarlberg, ICC	Negative	AM 25-0-0	2-15-2024	
BC2	Buuck, NAHB	Affirmative	NA		
BC3	Thompson, PMI	Negative	NA		

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Buuck, NAHB	AM			

## 06-11 – 2021

### 603.7(New)

**Proponent:** Gene Boecker, Code Consultants, Inc.

**Add new text as follows:**

#### SECTION 603 TOILET AND BATHING ROOMS

**603.7 Benches.** Where shower rooms include space for changing clothes, accessible shower rooms shall include a bench complying with Section 903. Where benches are located within shower compartments, the accessible bench shall be provided within the accessible shower compartment.

**REASON:** To get into a shower and back into public spaces requires changing clothes. This is why the provisions in Section 803 were created because Dressing, Fitting and Locker rooms all involve changing clothes. Unfortunately, the way the current text is written, if a group locker room is provided with a Men's shower room and a Women's shower room, the accessible bench can comply and be located in the locker area, outside privacy separations. The bench should be provided where other benches are provided. If there are benches in the shower room, an accessible bench should be provided in the accessible shower room or compartment.

**Committee Action:** 19-9-5 As Submitted

#### REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:** Dressing rooms adjacent to shower compartments need to be addressed. There was a concern about the terms in the first sentence not being commonly understood. In the 2<sup>nd</sup> sentence the bench is outside the shower compartment, not within. The proponent needs to bring forward some revisions.

603.7-BOECKER.doc

## 06-11 – 2021 Ballot Comments

### BALLOT COMMENT 1- FIRST DRAFT:

Proponent: *Kimberly Paarlberg, ICC*

Desired Action: Negative with comment

Modification: See Ballot Comment 1

### BALLOT COMMENT 2- FIRST DRAFT:

Proponent: *Daniel Buck, NAHB*

Desired Action: Affirmative with comment

Modification: See Ballot Comment 2

### BALLOT COMMENT 3- FIRST DRAFT:

Proponent: *Kyle Thompson, PMI*

Desired Action: Negative with comment

Modification:

Reason: The original proposal was outside of the scope of A117.1. Rough in requirements belong in the building and plumbing codes. The proposed modification would address the concern noted in the original proposal “that water closets are set far away from the back wall” without specifying the rough in location of the drain line connection. We agree with the committee that if the real issue is the space in front of the WC, then the dimension of that space should be defined versus specifying rough in dimensions or limiting the WC design/dimensions.

## 06-11 – 2021 Ballot Comment 1

603.7

**Proponent:** Kimberly Paarlberg, ICC

**Further revise as follows:**

**603.7 Benches.** ~~Where shower rooms include space for changing clothes accessible shower rooms shall include a bench complying with Section 903. Where benches are located within shower compartments, the accessible bench shall be provided within the accessible shower compartment.~~ Where bathing rooms include changing rooms or changing alcoves adjacent to showers, the changing room or changing alcove serving the accessible shower compartment shall directly access the accessible shower and meet the dressing room requirements in Section 803.

**REASON:** While I agree with the intent, there are problems with the language. This section is about toilet and bathing rooms – this says shower rooms. All locker rooms with showers have space for changing. The last sentence could be read to exempt the permanent seat in the shower by saying the bench is in the shower compartment – is that in front, or in the shower itself? Shower compartment is what ICC A117.1 uses for the shower itself in Section 608. By referencing Section 803 you will get a turning space to facilitate dressing and transfer to the shower, the bench and hooks and shelves.



This figure is in the 2017 ICC A117.1 commentary.

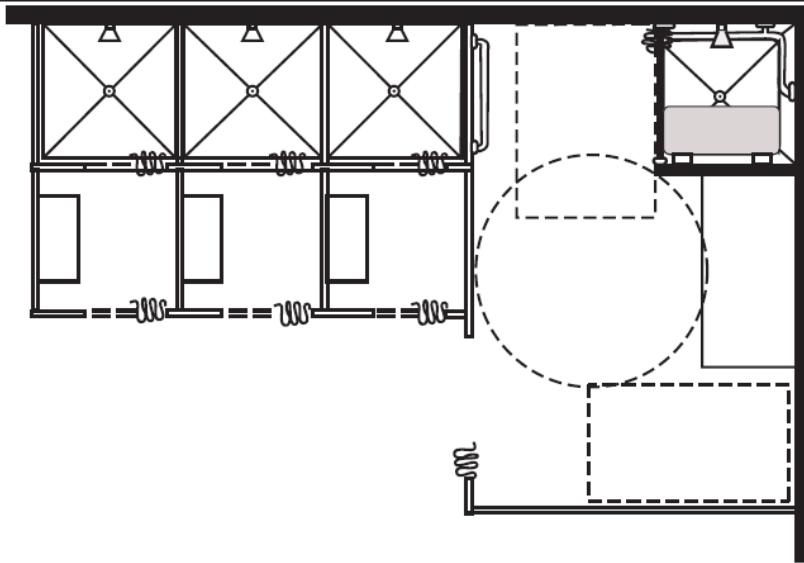


Figure C608.2.1.2(b)  
TRANSFER SHOWER WITH DRESSING ROOMS

Committee Action for Ballot Comment 1: AM 25-0

## REPORT OF HEARING:

Modification (if any):

Replace the proposal will the following:

**603.7 Benches Changing space.** ~~Where shower rooms include space for changing clothes accessible shower rooms shall include a bench complying with Section 903. Where benches are located within shower compartments, the accessible bench shall be provided within the accessible shower compartment. Where shower compartments include adjacent space for changing clothes, the changing space serving the accessible shower compartment shall comply with Section 803.~~

**Committee Reason:** The modification brought forward is more technically accurate than the approved text. This will ensure that where there are changing spaces in front of shower stalls that this amenity will also be available for the accessible shower.

06-11 Paarlberg.doc

## 06-11 – 2021 1<sup>st</sup> draft Committee Action

Committee Action for First Ballot: AM BC1 25-0

## REPORT OF HEARING:

**Modification (if any):**

**Replace the proposal with the following:**

**603.7 Benches Changing space.** ~~Where shower rooms include space for changing clothes accessible shower rooms shall include a bench complying with Section 903. Where benches are located within shower compartments, the accessible bench shall be provided within the accessible shower compartment. Where shower compartments include adjacent space for changing clothes, the changing space serving the accessible shower compartment shall comply with Section 803.~~

**Committee Reason:** The modification brought forward is more technically accurate than the approved text. This will ensure that where there are changing spaces in front of shower stalls that this amenity will also be available for the accessible shower.

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## 06-11 – 2021 2<sup>nd</sup> draft Ballot Comment 1

### 603.8

**Proponent:** Dan Buuck NAHB

**Vote:** affirmative with comment, AM

**Further revise as follows:**

**603.8 Changing space.** Where shower compartments include adjacent space for changing clothes that includes benches, coat hooks or shelves, the changing space serving the *accessible* shower compartment shall comply with Section 803.

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**REASON:** The language “include adjacent space for changing clothes” is vague and will be misunderstood. The proposed change includes more specific language, based on Section 803, of what items need to be provided for a space to be considered a changing space.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:** AS/AM/D

### REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:**

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## 06-11 – 2021 2<sup>nd</sup> draft Committee Action

**Committee Action for First Ballot:** AS/AM/D

### REPORT OF HEARING:

**Modification (if any):**

**Further modify as follows:**

**Committee Reason:**

<b>Report for 06-11– 2021</b>		
<b>Committee decision:</b> AS	<b>Committee Vote at Meeting:</b> 19-9-5	<b>Committee Vote on Ballot:</b> 37-3-1
<b>REPORT OF HEARING:</b>		
Modification (if any):		
Committee Reason: Dressing rooms adjacent to shower compartments need to be addressed. There was a concern about the terms in the first sentence not being commonly understood. In the 2 <sup>nd</sup> sentence the bench is outside the shower compartment, not within. The proponent needs to bring forward some revisions.		
<b>Committee decision:</b> AM BC1	<b>Committee Vote at Meeting:</b> 25-0	<b>Committee Vote on Ballot:</b>
<b>REPORT OF HEARING – FIRST DRAFT</b>		
Modification (if any):		
<b>Replace the proposal will the following:</b>		
<p><b>603.7 Benches Changing space.</b> <del>Where shower rooms include space for changing clothes accessible shower rooms shall include a bench complying with Section 903. Where benches are located within shower compartments, the accessible bench shall be provided within the accessible shower compartment. Where shower compartments include adjacent space for changing clothes, the changing space serving the accessible shower compartment shall comply with Section 803</del></p>		
Committee Reason: The modification brought forward is more technically accurate than the approved text. This will ensure that where there are changing spaces in front of shower stalls that this amenity will also be available for the accessible shower.		
<b>Committee decision:</b>	<b>Committee Vote at Meeting:</b>	<b>Committee Vote on Ballot:</b>
<b>FINAL ACTION:</b>		
Modification (if any):		
Committee Reason:		

## 06-13 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-13	Pauls	604.2, 604.3.1, 604.5, 604.9.6, 604.10.1, 604.11.5, 604.12(New), 607.1, 607.2, 607.9(New), 607.9.1(New), 607.9.2(New), 608.1, 608.9(New), 608.9.1(New), 608.9.2(New), 608.9.3(New), 609, 609.1, 609.2.1, 609.2.2, 609.3, 609.4, 609.4.1, 609.4.2, 609.5, 609.6, 609.7, 609.8, 609.9(New)	Divided question between 604, 607, 608 or 609: 604 - D 24-6-2 607 – Tabled till end of Chapter 6 Replacement for 12-15-2022; Divide question Part 1 Definition D 23-3-3 Part 2 603, 604 D 25-4-2 Part 3 609-609.8 D 24-6-2 Part 4 609.9 AM 26-1-4 Part 5 612 & 612.1 Scope AM 14-15-2 Part 6 612.1 General-612.5 D 25-1-2	8-11-2022; 12-15-2022; 1-5-2023; 1-19-2023 2-1-2024	

<b>Comment 1<sup>st</sup> draft</b>	<b>Proponent</b>	<b>Requested Action</b>	<b>Committee Action</b>	<b>Mtg. Date</b>	<b>Notes; Groups; groupings</b>
<b>PC1</b>	Pauls	All Parts AM	AS Part 1 6-21-3 AS Part 2 5-16-1	2-1-2024	
BC1	Toji, HLAA	Part 1 Negative	NA	2-1-2024	
BC2	Pauls	Part 1 Negative	NA	2-1-2024	
BC3	Toji, HLAA	Part 2 Negative	NA	2-1-2024	
BC4	Pauls	Part 2 Negative	NA	2-1-2024	
BC5	Toji, HLAA	Part 3 Negative	NA	2-1-2024	
BC6	Pauls	Part 3 Negative	NA	2-1-2024	
BC7	Pauls	Part 4 Negative	NA	2-1-2024	
BC8	Dain, AIA	Part 4 Affirmative	NA	2-1-2024	
BC9	Anderson, AHLA	Part 4 Negative	NA	2-1-2024	
<b>BC10</b>	Paarlberg, ICC	Part 4 Negative	NA	2-1-2024	See BC10
BC11	Gaskins, NACS	Part 4 Negative	NA	2-1-2024	
BC12	Buuck, NAHB	Part 4 Affirmative	NA	2-1-2024	See PC2
<b>PC2</b>	Buuck, NAHB	Part 4 - AM	AS 22-3	2-1-2024	
BC13	Pauls	Part 5 Affirmative	NA	2-1-2024	
BC14	Dain, AIA	Part 5 Negative	NA	2-1-2024	
BC15	Pace, HUD	Part 5 Negative	NA	2-1-2024	
<b>BC16</b>	Paarlberg, ICC	Part 5 Negative	AS 24-1	2-29-2024	See BC16
BC17	Buuck, NAHB	Part 5 Affirmative	NA	2-1-2024	
BC18	Thompson, PMI	Part 5 Negative	NA	2-1-2024	
BC19	Anderson, AHLA	Part 5 Negative	NA	2-1-2024	
BC20	Gasking, NACS	Part 5 Negative	NA	2-1-2024	
BC21	Toji, HLAA	Part 6 Negative	NA	2-1-2024	

BC22	Pauls	Part 6 Negative	NA	2-1-2024	
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BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Pauls	Part 4 AM			

## 06-13 – 2021

604.2, 604.3.1, 604.5, 604.9.6, 604.10.1, 604.11.5, 604.12(New), 607.1, 607.2, 607.9(New), 607.9.1(New), 607.9.2(New), 608.1, 608.9(New), 608.9.1(New), 608.9.2(New), 608.9.3(New), 609, 609.1, 609.2.1, 609.2.2, 609.3, 609.4, 609.4.1, 609.4.2, 609.5, 609.6, 609.7, 609.8, 609.9(New)

**Proponent:** Jake Pauls, Jake Pauls Consulting Service, representing self

**Revise as follows:**

### CHAPTER 6 PLUMBING ELEMENTS AND FACILITIES

#### SECTION 601 GENERAL

**601.1 Scope.** Plumbing elements and facilities required to be accessible by scoping provisions adopted by the administrative authority shall comply with the applicable provisions of Chapter 6.

#### SECTION 604 WATER CLOSETS AND TOILET COMPARTMENTS

**604.1 General.** Water closets and toilet compartments shall comply with Section 604. Compartments containing more than one plumbing fixture shall comply with Section 603. Wheelchair accessible compartments shall comply with Section 604.10.

**Exception:** Water closets and toilet compartments primarily for children's use shall be permitted to comply with Section 604.11 as applicable.

**604.2 Location.** The water closet shall be located with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches (405 mm) minimum and 18 inches (455 mm) maximum from the side wall or partition. Water closets located in ambulatory accessible toilet compartments specified in Section 604.10 shall have the centerline of the water closet 17 inches (430 mm) minimum and 19 inches (485 mm) maximum from the side wall or partition.

**Exception:** Ambulatory accessible water closets complying with Section 604.12.

#### 604.3 Clearance.

**604.3.1 Clearance width.** Clearance around a water closet shall be 60 inches (1525 mm) minimum in width, measured perpendicular from the sidewall.

**Exception:** Ambulatory accessible water closets complying with Section 604.12.

**604.5 Grab bars and stanchions.** Grab bars and stanchions for water closets shall comply with Section 609 and shall be provided in accordance with Sections 604.5.1 and 604.5.2. Grab bars shall be provided on the rear wall and on the side wall closest to the water closet.

**Exceptions:**

1. Grab bars and stanchions shall not be required to be installed in a toilet room for a single occupant, accessed only through a private office and not for common use or public use, provided reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with Section 604.5.
2. In detention or correction facilities, grab bars and stanchions shall not be required to be installed in housing or holding cells or rooms that are specially designed without protrusions for purposes of suicide prevention.
3. Ambulatory accessible water closets served by vertical stanchions complying with Section 604.12.

**604.9 Wheelchair accessible toilet compartments.**

**604.9.6 Grab bars and stanchions.** Grab bars and stanchions shall comply with Section 609. For ambulatory accessible toilet compartments, side wall grab bars complying with Section 604.5.1 located on the wall closest to the water closet, and a rear wall grab bar complying with Section 604.5.2, shall be provided.

**604.10 Ambulatory accessible toilet compartments.**

**604.10.1** Ambulatory accessible compartments shall comply with Section 604.10. Ambulatory accessible water closets shall comply with 604.12.

**Exception:** Water closets and toilet compartments primarily for children's use shall be permitted to comply with Section 604.11 as applicable.

**604.11 Water closets and toilet compartments for children's use.**

**604.11.5 Grab bars and stanchions.** Grab bars and stanchions for water closets shall comply with Section 604.5.

**604.12 Grab bars or stanchions for ambulatory accessible water closets.** A minimum of one grab bar or vertical stanchion, complying with Section 609 shall be provided in front of and to the side of the water closet such that the grab bar or stanchion center line is within 28 in (710 mm), measured horizontally, reachable distance from the center of the front of the water closet. The grab bar or vertical stanchion shall be graspable at a height, above the finished floor level, of 36 inches (915 mm) minimum and 60 inches (1525 mm) maximum. Such grab bar or stanchion shall be permitted to serve also for a required vertical grab bar or vertical stanchion, for an adjoining bathtub or shower, complying with Sections 607 or 608, provided that it is graspable at a height, above the finished floor level, of 36 inches (915 mm) minimum and 60 inches (1525 mm) maximum.

## **SECTION 607 BATHTUBS**

**607.1 General.** Bathtubs shall comply with Section 607.

**Exception:** Ambulatory accessible bathtubs shall comply with Sections 607.2, 607.8 and 607.9.

**607.2 Clearance.** A clearance in front of bathtubs extending the length of the bathtub and 30 inches (760

mm) minimum in depth shall be provided. Where a permanent seat is provided at the head end of the bathtub, the clearance shall extend 12 inches (305 mm) minimum beyond the wall at the head end of the bathtub.

**Exception:** The clearance in front of an ambulatory accessible bathtub, complying with Section 607.8, shall extend half the length, minimum, of the bathtub.

**607.9 Ambulatory Accessible Bathtubs Grab Bars or Stanchions.** One grab bar or stanchion, minimum, shall be provided on the access side or an end wall (head end or control end) adjacent to the access side in accordance with one of the options in Section 607.9.1. This grab bar or stanchion shall be usable from the clear floor space required by Section 607.2. A second grab bar or stanchion, minimum, shall be provided on the non-access side (back wall) of the bathtub in accordance one of the options in Section 607.9.2.

**607.9.1 Access side, or adjacent end, grab bar or stanchion options.** The end wall vertical grab bar shall extend from 24 inches (610 mm) maximum to 60 inches (1524 mm) minimum above the finished floor. To avoid interference between a shower curtain rod or track for an access side set of sliding doors, the vertical grab bar on one end wall shall be provided between 9 inches (230 mm) and 12 inches (305 mm) horizontally, from the centerline of the grab bar to the exterior side of the bathtub. A second set of options for the access side vertical grab bar or stanchion shall have its centerline 2 inches (50 mm) maximum, measured horizontally, inside the exterior wall to 6 inches (150 mm) outside the exterior bathtub wall. The stanchion option, shall extend from the bathroom ceiling to either the floor or, with a steel bathtub, to the bathtub rim.

**607.9.2. Non-access side grab bar or stanchion options.** A horizontal or diagonal grab bar or a horizontal stanchion shall be provided on the back wall, or non-access side of each bathtub. Grab bars shall be 36 inches (915 mm) long, minimum. The centerline of the horizontal grab bar or stanchion, as well as the lower end of a diagonal grab bar, shall be 8 inches (200 mm) minimum and 10 inches maximum above the bathtub rim. The upper end of the diagonal grab bar shall extend to 12 inches (305 mm), maximum, horizontal, to the control end wall. Diagonal grab bar slope shall be 30 degrees minimum to 60 degrees maximum to horizontal. The horizontal stanchion shall extend to each of the end walls. The horizontal grab bar shall be centered between the end walls.

**Exception:** For relatively deep bathtubs, where the required centerline height for the horizontal grab bar exceeds 30 inches (762 mm) above the adjacent finished floor elevation, this height shall be permitted to be 3 inches (76 mm), maximum, from its centerline to either the bathtub rim height or the top of the deck for the bathtub installation which can also be the base into which the grab bar is fixed.

## **SECTION 608 SHOWER COMPARTMENTS**

**608.1 General.** Shower compartments shall comply with Section 608.

**Exception:** Ambulatory accessible showers shall comply with Sections 608.8 and 608.9.

**608.9 Grab bar or stanchion at the access to showers.** A grab bar or stanchion shall be provided for the shower in accordance with Section 608.9.1, 608.9.2 or 608.9.3. Location dimensions in Section 608.9 are to the centerline of the grab bar or stanchion at the fixed end of its graspable tubing component.

**608.9.1 At shower exterior.** A vertical grab bar or stanchion shall be provided outside of the shower compartment, adjacent to the access opening within 28 inches (710 mm) of the center of the shower entrance opening width. The grab bar or stanchion shall extend from 24 inches (610 mm) maximum to 60 inches (1524 mm) minimum, measured vertically above the finished floor.

**608.9.2 For smaller shower interior.** For showers with interior plan dimensions, including diagonally between corners, 51 inches (1295 mm) maximum, a vertical grab bar shall be provided, interior to the



shower compartment, 30 inches (762 mm) maximum, measured horizontally from the control wall on the side closest to the access opening. The grab bar shall extend from 24 inches (610 mm) maximum to 60 inches (1524 mm) minimum, measured vertically above the finished floor outside the shower.

**608.9.3 For larger shower interior.** For showers with any interior plan dimensions exceeding 51 inches (1295 mm), including diagonally between corners, a grab bar or stanchion located interior to the shower compartment shall be 28 inches (710 mm) maximum, measured horizontally to the access to the shower. If oriented vertically, the grab bar or stanchion shall extend from 24 inches (610 mm) maximum to 60 inches (1524 mm) minimum, measured vertically above the finished floor outside the shower. If oriented horizontally, the grab bar or stanchion shall have a length 36 inches (915mm) minimum at a height, measured vertically above the finished floor outside the shower, of 48 inches (1220 mm) minimum and 60 inches (1524 mm) maximum.

## **SECTION 609**

### **GRAB BARS AND STANCHIONS**

**609.1 General.** Grab bars and stanchions in toilet or bathing facilities shall comply with Section 609.

**609.2 Cross section.** Grab bars and stanchions shall have a cross section complying with Section 609.2.1 or 609.2.2.

**609.2.1 Circular cross section.** Grab bars and stanchions with a circular cross section shall have an outside diameter of 1 1/4 inches (32 mm) minimum and 2 inches (51 mm) maximum.

**609.2.2 Noncircular cross section.** Grab bars and stanchions with a noncircular cross section shall have a cross section dimension of 2 inches (51 mm) maximum, and a perimeter dimension of 4 inches (100 mm) minimum and 4.8 inches (120 mm) maximum. Corner radius shall be 1/4 inch (6 mm) minimum.

**609.3 Spacing.** The space between the wall and the grab bar or stanchions shall be 1 1/2 inches (38 mm) minimum. The space between the grab bar or stanchion and projecting objects below and at the ends of the grab bar or stanchion shall be 1 1/2 inches (38 mm) minimum. The space between the grab bar or stanchion and projecting objects above the grab bar or stanchion shall be 12 inches (305 mm) minimum.

**Exceptions:**

1. The space between the grab bars or stanchions and shower controls, shower fittings, and other grab bars or stanchions above the grab bar or stanchion shall be permitted to be 1 1/2 inches (38 mm) minimum.
2. Recessed dispensers projecting from the wall 1/4 inch (6.4 mm) maximum measured from the face of the dispenser and complying with Section 604.7 shall be permitted within the 12-inch (305 mm) space above and the 1 1/2-inch (38 mm) spaces below and at the ends of the grab bar or stanchion.

**609.4 Position of grab bars and stanchions.**

**609.4.1 General.** Grab and stanchions shall be installed in a horizontal position, 33 inches (840 mm) minimum and 36 inches (915 mm) maximum above the floor measured to the top of the gripping surface or shall be installed as required by Items I through 3.

1. The lower grab bar or stanchion on the back wall of a bathtub shall comply with Section 607.4.1.1, ~~or 607.4.2.1 or 607.9.2.~~
2. Vertical grab bars and stanchions shall comply with Sections 604.5.1.2, 604.9.6, 604.12, 607.4.1.2.2, 607.4.2.2, 607.9, and 608.3.1.2 and 608.9.
3. Grab bars at water closets primarily for children's use shall comply with Section 609.4.2.

**609.4.2 Position of children's grab bars and stanchions.** At water closets primarily for children's use complying with Section 604.11, grab bars and stanchions shall be installed in a horizontal position 18 inches (455 mm) minimum and 27 inches (685 mm) maximum above the floor measured to the top of the gripping surface. A vertical grab bar or stanchion shall be mounted with the bottom of the bar or stanchion located between 21 inches (535 mm) minimum and 30 inches (760 mm) maximum above the floor and with the centerline of the bar or stanchion located between 34 inches (865 mm).

**609.5 Surface hazards.** Grab bars plus stanchions and any wall or other surfaces adjacent to grab bars and stanchions shall be free of sharp or abrasive elements. Edges shall be rounded.

**609.6 Fittings.** Grab bars and stanchions shall not rotate within their fittings.

**609.7 Installation and configuration.** Grab bars and stanchions shall be installed in any manner that provides a gripping surface at the locations specified in this standard and does not obstruct the clear floor space. Horizontal and vertical grab bars and stanchions shall be permitted to be separate bars, a single piece bar, or combination thereof.

**609.8 Structural strength.** Allowable stresses shall not be exceeded for materials used where a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the grab bar, stanchion, fastener mounting device, or supporting structure.

**609.9 Durability in presence of water.** Grab bars and stanchions, including mountings, shall be installed and sealed, or provided with permanent drainage such as weep holes for components subject to water intrusion, to protect structural elements from moisture.

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## REASON:

**Preliminary Justification for Proposal on Ambulatory Accessible Toilets, Bathtubs and Showers —  
Submitted by Jake Pauls  
[bldguse@aol.com](mailto:bldguse@aol.com) & [www.bldguse.com](http://www.bldguse.com)**

**Preamble.** Two points to make right at the beginning.

**First**, the task of spearheading the A117 Committee consideration of usability of bathing, showering and toileting facilities, going under the label of “ambulatory accessible,” is far beyond the capability of the proponent. In his 79<sup>th</sup> year, the proponent has seen the entire range of toileting and bathing facilities in his lifetime. Indeed, the first four years of his life took place in homes that totally lacked built-in facilities for toileting, bathing and showering which now take up the second longest chapter in A117.1. Thus it is ironic that, later in life, he has seen the complete spectrum, right up to occupying (for a couple of nights) the Presidential Suite of one of the world’s largest hotel chain’s properties, in addition to enjoying Japanese toileting and bathing facilities (mixing the ultra modern with the most traditional plumbing in Japan).

**Second**, A117.1—now in its seventh decade of life (just a bit over a decade younger than the proponent)—is now being asked to address not just the visible part of the iceberg that figuratively makes up this preeminent accessibility/usability standard’s Chapter 6, but the huge part that has been mostly out of sight, below the surface with this “iceberg.” All parts of the “iceberg” are important and the proponent asks for patience on the part of his fellow A117 Committee members as they are now being asked to help determine what we should know about—and *act on*—the largely uninvestigated topic of ambulatory, bipedal, use of facilities to which we have now devoted six decades of attention to largely wheel-based access and use.

This scope change is combined with a technical expansion to include the older of the two “Points of Control” we have come to rely upon. That is recognition, in A117.1, of *stanchions* which predated grab bars—*by perhaps a century*—and which are (in the proponent’s professional opinion) often superior to grab bars in

function and aesthetics.

**Foundations.** Connecting both wheeled and bipedal ambulation-based access to bathing, showering and toileting is the science and technology of ergonomics and, in a secondary way, public health. As a Certified Professional Ergonomist (like a few others on the A117 Committee) and now the longest serving representative on several ICC and NFPA committees formally representing the American Public Health Association, the proponent brings important perspectives to our (now virtual) deliberation table. These perspectives are not sufficient to achieve acceptance of this proposal. This will take a major effort.

**Possible Need for a Task Group or Work Group.** The proponent's first recommendation is that a task/work group be formed of a small number of interested, informed members of the Committee (and a few experts from outside the Committee) to address the foregoing change proposal and this feeble justification statement, albeit accessible and vital to all with vision—both in functional and cerebral capabilities—to move the next edition of A117 to fill an important niche.

This niche, on bathing, showering and toileting, already is mostly addressed by another ANSI standard with a safety motivation (in NFPA 101); now we need to address such facilities with a usability focus in the most widely respected ANSI standard on usability—A117.1. (*The ball is now in our court and, like in a game, we need to play with some common rules, namely those set by ANSI to avoid contradictions among standards addressing similar issues.*) NFPA adopted requirements for safety of bathtubs and showers in its 2018 editions of NFPA 101 and 5000, updating the terminology to include “stanchions” in its 2021 editions. Both NFPA and ICC-ANSI A117.1 share a concern for ambulation of facility users, the latter recognizing the a large proportion of people with disabilities are, indeed, ambulatory and the former recognizing that a significant number of people requiring safety in buildings are not ambulatory.

**Option If A117 Committee Does Nothing.** Unless ICC wishes to reference NFPA 101 in A117.1 for requirements on grab bars and stanchions for usability as well as safety, A117.1 needs to develop its own requirements covering ambulatory accessible water closets, bathtubs and showers.

**Basic Tools (Including Visual Aids).** Fortunately, the tools we will employ in this task are largely identified. The build upon basic ergonomic concepts such as anthropometry, reach capabilities, balance (as affected by location of ones Center of Mass—COM), and points of control. At the beginning of the Justification you will be asked to view a few PowerPoint presentations that provide centrally important information forming the foundation for the proposed new language for A117.1 requirements in Chapter 6, Plumbing Elements and Facilities. These were developed only in recent days and there is not yet an audio description of the images publicly available. Sincere apologies to those not able to see the images. We will work on that, collectively, in coming months as a video, with descriptive audio track, is produced on this topic.

**Related Efforts.** Note that this topic, at least of bathing and showering, is being currently addressed by three organizations in relation to several documents, that will be published in the mid 2020s. They are:

- International Code Council (for the *International Building Code* and the *International Residential Code*)
- National Fire Protection Assn. (for the *Life Safety Code* and the *NFPA Building Construction and Safety Code*)
- Canadian Commission on Building and Fire Codes (for the *National Building Code of Canada*)

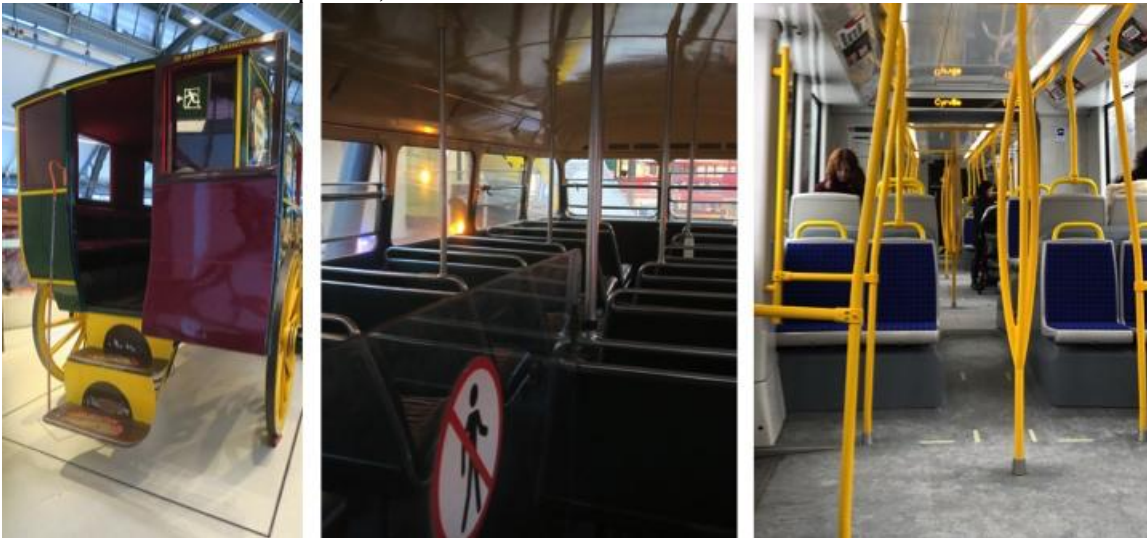
**Borrowing from Other Deliberations.** The proponent of the A117.1 changes is also the lead proponent of changes to all these documents affecting the technical requirements and scoping for all occupancies (with a very few exceptions for some institutional settings). Thus this proposal for A117.1 is an amalgam of several other proposals (dating back to 2007 in the case of one co-proponent's early proposal in Canada). This will explain any unevenness or inconsistencies (in concepts and terminology) in this proposal for A117.1. *Apologies for this.*

**Terminology.** We start with terminology in case the ANSI A117 Committee feels we should define what stanchions are (and perhaps what Points of Control are, including those involving use of stanchions). For the following, the proponent borrows freely from proposals and explanatory presentations prepared for other codes/standards developing bodies in the USA and Canada in recent months of 2021.

**Stanchion.** An often vertical, tubular structure serving as a hand-grasped, point of control that is fixed

between separate supporting structures, surfaces or other railings as opposed to being mounted, in cantilever fashion, on walls as occurs with conventional grab bars.

The montage of photographs below represent about two centuries of development of stanchions in the field of transportation vehicle design and use by ordinary people without any formal background in ergonomics, codes/standards development, etc.



The term “*Point of Control*” has a shorter history with the meaning most relevant to bipedal ambulation being the human extremities used for bodily support on underfoot surfaces and various handholds to facilitate safe movement; stationary erect, sitting or other posture; and the states between these activities. We have, potentially, four major points of control: two feet and two hands. Occupational rules such as for safe ladder climbing or descent spell out three points of control are prudent to maintain reasonable safety. Building codes for home stairways are largely based on two points of control in stair descent and ascent, namely one weight-bearing foot and one hand grasping a functional (as opposed to mainly decorative) railing. Our bathtub and shower designs have largely been based on a single point of control—one weight-bearing foot on either a slip resistant surface (far from certain with bathing plus other surfaces and water)—or less than one point of control if the weight-bearing foot slips.

The whole point of the major changes submitted for the A117.1 standard is to add at least one point of control to the single weight-bearing foot in entry to and exiting from a bathtub or shower enclosure. This is truly a very modest change but one that can double the points of control available to bathers. The table below sets out all the options for points of control showing how modest the change is—in merely doubling the single point of control (or less with slippery underfoot conditions) with the proposed additions to the A117.1 standard.

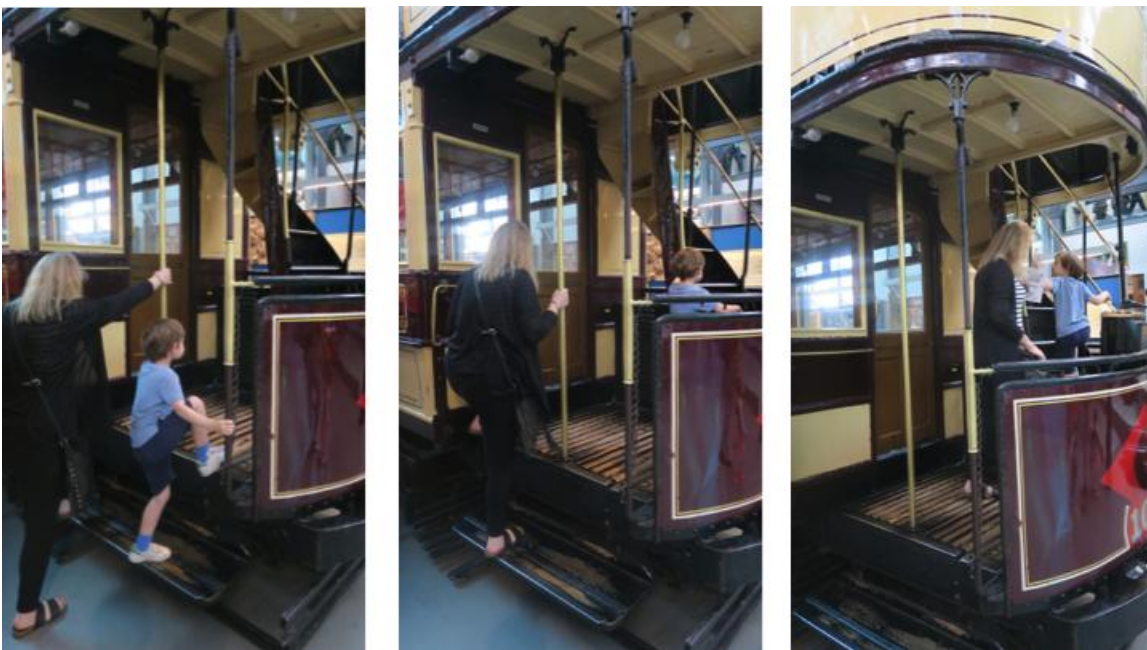
Number of Points of Control Via Hands or Feet	≤1	1	2	3	3-4
Standard walker for older adult with altered gait.					✓
Occupational settings with risk of worker falls from heights. Also, stairs where users can use two handrails simultaneously, one on each side.				✓	
<u>Stairs where users have only a single handrail.</u> <u>Grab bar(s) usable for bathtub/shower entry/egress.</u>			✓ ★		
Bathtubs/showers with slip resistant underfoot surfaces when wet.		✓			
Bathtubs/showers without slip resistant underfoot surfaces when wet, the common condition currently.	✓				

For toilet use-related (stand-to-sit and sit-to-stand) transfers, both ergonomics and scientifically-established personal preferences are for points of control for each of our two arms/hands to be available. (See the paper, Kennedy, Arcelus, Guitard Goubiran, and Sveistrup [2015]. Toilet Grab-Bar Preference and Center of Pressure



Deviation During Toilet Transfers in Healthy Seniors, Seniors With Hip Replacements, and Seniors Having Suffered a Stroke. *Assistive Technology: The Official Journal of RESNA*, 27:2, 78-87. The leading preference, from this study, was for two handholds on vertical points of control—e.g., stanchions or grab bars—one on each side, and at the front of the toilet; second preference was for only one such point of control (out of five options including also horizontal, swing-away and diagonal options.)

Based on both the above table and the referenced study, the changes sought in this proposal for A117.1 are modest and well warranted by science and logic that can be understood intuitively by most primates, including humans on committees such as for A117.1 on the basic issues involved with toileting, bathing and showering. The photographic series, below with a century-old trolley, provides a brief story of how effective stanchions are, even for young children encountering steps comparable in height to what is needed to surmount the wall of a typical bathtub; the height depicted here is about 16 inches (400 mm), comparable to what is found in minimum standard (e.g., IRC) permitted stairways for dwelling units—except there is no intermediate step to use as many older people need to do when using stairs (with both feet using every step). Note also the relatively puny grab bar to the woman's left; it lacks the usefulness of the stanchion.



For a more contemporary transportation facility, albeit pre-Pandemic in crowding, see the very extensive use of stanchions, here captured on the Washington, DC, region Metro subway system. Stanchions are familiar to most people around the world for the postural control and personal space advantages they offer. They even appear in posters on such transit systems, giving social messages about these key features for our comfort and safety. The same message holds for adding stanchions to A117.1: “How come there is nowhere to hold on?”



An important lesson, from the photo sequence above, is that stanchions provide more options for placement and more options for users to choose the points of control they perceive as important to their task and safety. In other words ordinary people, even of young age, are displaying skill in ergonomics (the science and technology of how people utilize things, systems, etc. available to them to perform tasks effectively and safely).

For purposes of this A117.1 proposal, along with grab bars, it should be clear that stanchions are reliable, indeed superior, time-tested means of providing for “points of control” and they provide options for location and length that greatly exceed what conventional grab bars can provide—as they do not rely on walls from which they cantilever. (The can be *between walls*, *between floor and ceiling*, etc.) The illustration below combines all of the stanchion and conventional grab bar options set out in the accompanying detailed re-write of A117.1 Chapter 6, “Plumbing Elements and Facilities,” specifically for **Section 607.9 Ambulatory Accessible Bathtubs Grab Bars or Stanchions**.

All of the eight options are illustrated in the graphic below. The options are in two groups, three options for the one stanchion or grab bar on the non access side or back wall and five options for the one required grab bar or stanchion on the access side (front). At the front, the vertical stanchion has options for placement anywhere along the length of the bathtub (depending on fixture layout in the bathroom and where the clear, half bathtub length area (required by Section 607.2) is located—here in front of the water closet (WC). Here it is shown mid-tub length (where it is mounted on the *steel* tub rim, but could also be floor mounted for other tubs) so it also serves the WC per proposed new Section 604.12 Grab bars or stanchions for ambulatory accessible WC.



### **607.9 Ambulatory Accessible Bathtubs Grab Bars or Stanchions.**

One grab bar or stanchion, minimum, shall be provided on the access side or an end wall (head end or control end) adjacent to the access side in accordance with one of the options in Section 607.9.1. This grab bar or stanchion shall be usable from the clear floor space required by Section 607.2. A second grab bar or stanchion, minimum, shall be provided on the non-access side (also referred to, where present, as the back wall) of the bathtub in accordance one of the options in Section 607.9.2.

Note the four options for the access side, end wall-mounted grab bar do not permit placing this grab bar where it would interfere with the installed shower curtain rod (or track) or installation of an enclosure system of sliding glass panels for example. Several inches of horizontal dimension are reserved on the end walls for such water control barriers, e.g., a shower curtain, to seal to the end walls. (The most common defect with grab placement the author saw repeatedly in his many stays in hotels around the world was having both the shower curtain and the vertical grab bar competing for the same region of the end wall. The result: during a shower, water ended up leaking to the bathroom floor, in some cases getting into end walls with moldy results.)

Here follow the proposed texts for the bathtub grab bars or stanchions with a graphic below them illustrating the full range of options, including diagonal grab bar slopes.

#### **607.9.1 Access side, or adjacent end, grab bar or stanchion options.**

The end wall vertical grab bar shall extend from 24 inches (610 mm) maximum to 60 inches (1524 mm) minimum above the finished floor. To avoid interference between a shower curtain rod or track for an access side set of sliding doors, the vertical grab bar on one end wall shall be provided between 9 inches (230 mm) and 12 inches (305 mm) horizontally, from the centerline of the grab bar to the exterior side of the bathtub. A second set of options for the access side vertical grab bar or stanchion shall have its centerline 2 inches (50 mm) maximum, measured horizontally, inside the exterior wall to 6 inches (150 mm) outside the exterior bathtub wall. The stanchion option, shall extend from the bathroom ceiling to either the floor or, with a steel bathtub, to the bathtub rim.

#### **607.9.2. Non-access side grab bar or stanchion options.**

A horizontal or diagonal grab bar or a horizontal stanchion shall be provided on the back wall, or non-access side of each bathtub. Grab bars shall be 36 inches (915 mm) long, minimum. The centerline of the horizontal grab bar or stanchion, as well as the lower end of a diagonal grab bar, shall be 8 inches

(200 mm) minimum and 10 inches maximum above the bathtub rim. The upper end of the diagonal grab bar shall extend to 12 inches (305 mm), maximum, horizontal, to the control end wall. Diagonal grab bar slope shall be 30 degrees minimum to 60 degrees maximum to horizontal. The horizontal stanchion shall extend to each of the end walls. The horizontal grab bar shall be centered between the end walls.



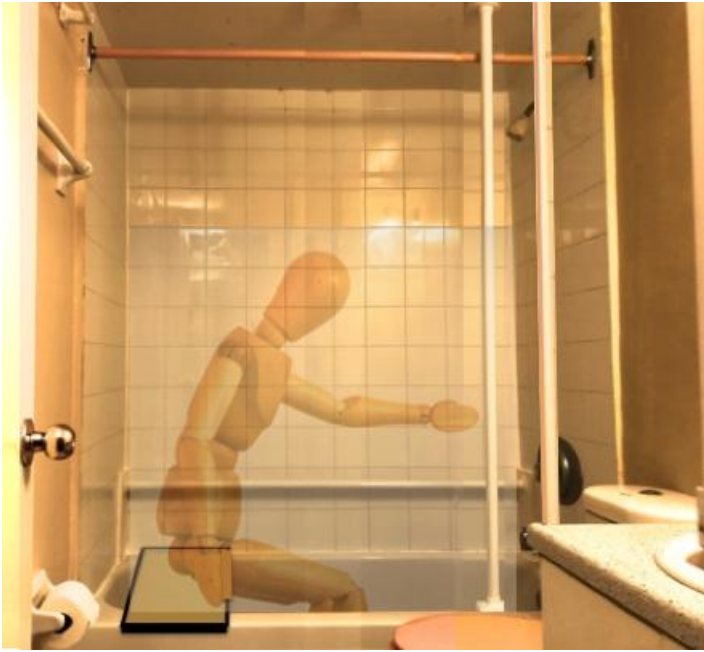
A significant aspect of the proposal for A117.1 is the introduction of stanchions, the history and ubiquity—outside of bathrooms—has already been addressed above. In the photos below, they are seen in three of the contexts at the heart of A117.1 Chapter 6, as it will be amended with the acceptance of this proposal which deals, typically with new construction. All of the examples below represent retrofit installations. Moreover, they are all retrofits in rental contexts where damage to walls is frowned upon by owners. Thus all of the examples shown of stanchions in this proposal narrative, include stanchions that can be removed (followed with the usual repainting between tenancies) without any screw holes in floors, ceilings and, most important (usually) walls. Modern RTV (Room Temperature Vulcanizing) adhesives hold these stanchions in place with holding capability meeting the 250-pound strength requirement. This adds new usefulness to A117.1 and, more importantly, to many people who develop disabilities of all types as they age and who want to “age in place” where they feel most at home. Stanchions also avoid any grab bar stigma issues as, evident especially in the two photos at the center and right sides below, the stanchions appear totally integrated with the décor, even serving as a much needed lighting pole to enhance bathroom lighting while saving energy. These stanchions all comply with the proposed requirements, completely for the contexts illustrated, from left to right: bathtub access side vertical stanchion (with a no-cost bonus of also serving as the newly required vertical stanchion for the WC). At the center is another stanchion, this one color coordinated with its surrounds and the structural supports—to the vanity—color coordinated with it (while giving extra structural support to the stanchion). At the right, the satin stainless steel stanchion matches the décor of the shower enclosure and is discretely tucked into a recess while being accessible for both entering and exiting, stepping over the 4-inch sill below the shower door. Both of the stanchions at the center and right occupy the same bathroom and both contend with the 8-foot ceiling there.





The photo at the left side demonstrates two options for a center tub-length stanchion, one affixed with RTV adhesive to a 60-year old enamel steel bathtub that has no problem with a test 330-pound, lateral load held for three hours. For newer, less rigid bathtub materials such as acrylic or fiberglass, manufacturers have raised a huge fuss over rim mounting of stanchions. They are easily appeased with the option of mounting on the adjacent floor—which is far more sturdy than the newer tubs are and has no issues with the RTV adhesive. Again, with many solid, well-performing steel bathtubs currently installed, there is much scope for both the rim- and floor-mounting options for securing stanchions in both new and existing bathrooms.

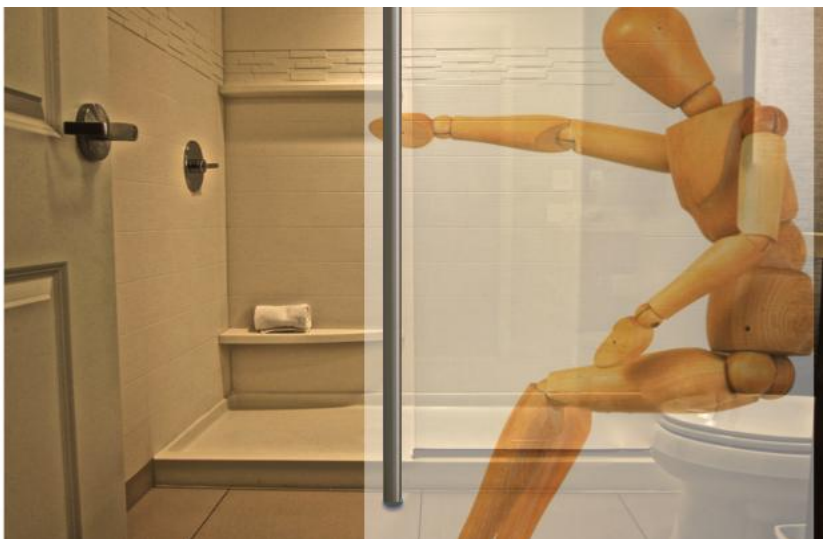
There was also some opposition—*quickly addressed*—from those concerned with the stanchion being in the way of some people with disabilities not being able to swing their fully extended legs over the tub rim when seated on a bathtub seat. Note that in the photo above, left side, there is barely room for such legs at the closely positioned WC which effectively blocks almost half the length of the tub. Notably the proposed language for A117 allows the vertical, access-side stanchion to be placed anywhere on or immediately adjacent to the entire length of the bathtub. Thus the stanchion can be placed where it suits a bather who desires to use a bathtub seat, etc.



This augmented photo illustrates the possible dilemma over such vertical stanchion placement. Is it too close to the seat; is it too far from the seat (like the water controls are), or is it just right? The proposal is open to all options on this matter (keeping in mind the value of the stanchion also serving the water closet as set out in proposed new Section 604.12 in which the performance requirement of a 28-inch reach distance is utilized.) The 28 inches is based on a reachability analysis as well as being explained and illustrated in Appendix A to this proposal). Note also a second vertical stanchion digitally added at the vanity side serving the water closet.

**Section 608 Shower Compartments.** Focusing now on Section 608, there has been increasing evidence, especially in hotels, that bathtubs were being replaced with dedicated showers occupying the same generous space formerly taken up with a combination bathtub with shower. The showers were neither transfer type nor roll in showers, thus some new design considerations were in order for ambulatory accessible showers. The photograph which follows demonstrates what appears to be one of these conversions. This realization that showers, even in hotels, were becoming more spacious, led to the division of proposed Sections 608.9 with three options for the single required grab bar or stanchion for ambulatory users. This section needs some input from fellow A117 Committee colleagues. My effort on this is clearly preliminary but, like much else with ambulatory accessible bathroom facilities, a solution to the usability problem (along with safety issues that are the work of NFPA and other committees) is a start and is better than what exists currently.





As with the bathtub section and the water closet section, there is scope for dual utilization of stanchions especially for adjoining facilities. Thus a lot of work was done with reachability studies which is partly reflected in the accompanying Appendix A, a PowerPoint presentation prepared for the Canadians who are reaching the end of a long road, dating back to their first proposal for improved bathroom utilization of grab bars (submitted by a colleague, Dr. Nancy Edwards, an expert on falls) later augmented by my Canadian proposal in 2015 paralleling my proposals of that year to NFPA that led to changes in the 2018 NFPA 101 and 5000 on requirements for both grab bars and stanchions (first identified as “poles” in the 2018 editions). My relatively intensive work in the last year on grab bars and stanchions for bathing usability as well as safety is reflected in Appendix A.

Given the rush of dealing with multiple model codes and standards simultaneously, there is not as much time available for word-smithing and writing very detailed justifications. Appendix A makes up for a lot of that and, as has happened already in this justification, some sample pages from the presentation in Appendix A have been used in this justification that give a flavor for the analysis that has been done to treat the three facility types—water closets, bathtubs and showers—in as integrated a fashion as possible. The augmented photo below is the final example of this. It shows what appears to be a hotel bathroom conversion where the long footprint of the shower means that its entrance is possibly too far from the water closet to share the stanchion. (This is what happens when space is no longer at such a premium as it was in the humble 5 by 7 foot bathroom seen in a number of the illustrations herein and in Appendix A. Reachability becomes more of an challenge when trying to economize on number of stanchions needed.

Finally—*almost*— at least for this preliminary justification section of the proposal, a critical detail that, I hope will be accepted to no longer specify a fixed 1.5-inch clearance between a grab bar and the wall to which it is attached. Here follows the proposed change and below that is the experiment that was painfully executed in the course of addressing this matter empirically. The clearance in the photo sequence that follows was exactly 1.5 inches yet an older male adult’s hand could pass through, sustaining bruising to the back of the hand. Surely this issue of adding one word, “minimum” will be accepted as a similar change has been accepted on related topics.

**609.3 Spacing.** The space between the wall and the grab bar or stanchion shall be 1 1/2 inches (38 mm) minimum. The space between the grab bar or stanchion and projecting objects below and at the ends of the grab bar or stanchion shall be 1 1/2 inches (38 mm) minimum. The space between the grab bar or stanchion and projecting objects above the grab bar or stanchion shall be 12 inches (305 mm) minimum.



Finally, just a brief introduction to the next page which includes a tiny portion Appendix A which is a separate, stand-alone document being provided with this proposal. There is a very strong case, based on injury evidence that there is a major distortion in the use of bathing and showering facilities by older adults who can give up frequent bathing and showering because of the real or feared dangers at worst, and hassles at best, with poorly designed and manufactured plumbing products of bathing and showering. It appears that the main reason, older adults have a reduced number of injuries associated with bathtubs and showers is not that they are reasonably safe but that people choose not to use them. This behavior differs drastically from how older adults use water closets. They have no choice but to use them and this exposure, combined with the lack of suitable points of control result in a major expansion in the number of injuries.

The page that follows, incorporating two of the slides in the PowerPoint presentation that is Appendix A, provides a preliminary examination and beginnings of an analysis which requires some further demographic study which will be done before the A117 Committee meets to discuss this and other proposals. In the meantime, you (the reader) can ponder the next page on your own.

Bottom line, understanding the impact of exposure—i.e., use—is a huge factor that A117.1 can, and must address sooner rather than later. We have to enhance all bathroom activities. ***This is an issue within the scope of A117.1 as the National Standard on Accessibility and Usability.***

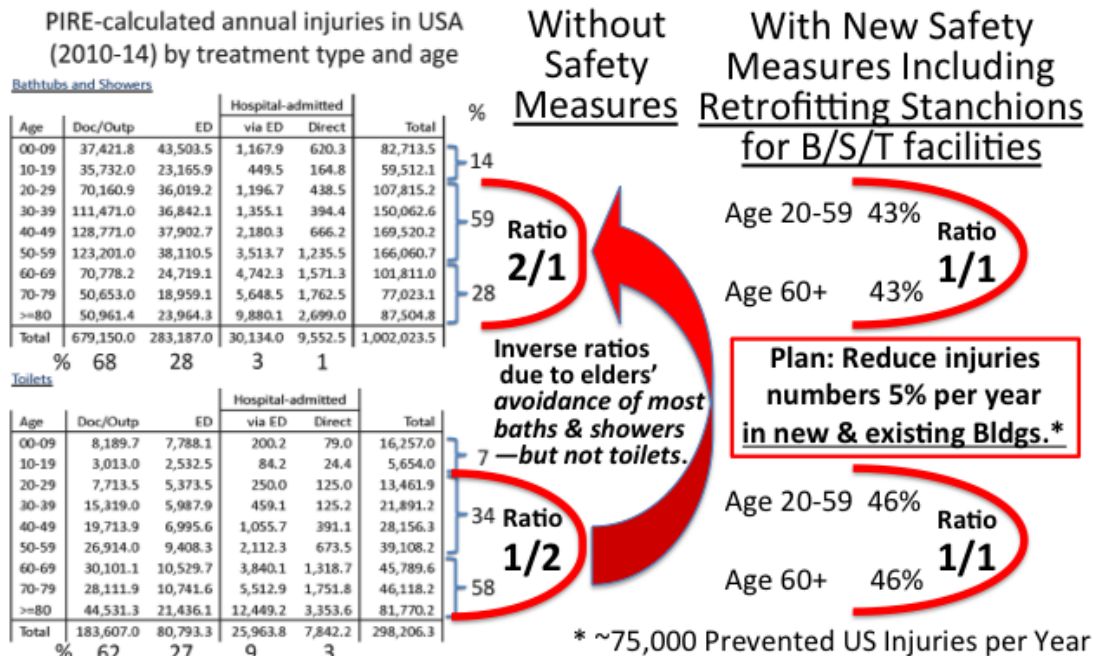
the next slide provides another important insight into the role played by elderly people's exposure to another very serious fall risk—toilets—in bathrooms, especially in homes.

People increasingly want to “age in place” but this is needlessly more difficult and dangerous than should be the case with the hazardous trio of:

- ◆ home stairs
- ◆ Bathtubs
- ◆ toilets (water closets or commodes).

The following is more speculative than other relatively-tested ideas on bathroom usability and safety in this presentation. It is intended to further appreciate the need to study some issues and to be more proactive with improving usability and safety at very minimal cost (as illustrated in the largest section of this presentation—examples from actual bathrooms in Canada and beyond).





#### Staff Note 8-9-2022 and 8-25-2022: Question divided:

- 604 – AS 5-22-2/D 24-6-2
- 607 – AS 7-18-4/Motion to Disapprove;
- Motion to table 17-9-2 till 8/25/2022 call
- Motion to untable passed.
- Motion to table part 2 to end of chapter 6 carries with 3 votes in opposition.
- 608 –
- Modification to 608.9.1 and 608.9.3 passed 19-1-3
- Motion to table parts 3 to end of chapter 6 carries with 1 vote in opposition
- 609 – Motion to table parts 4 to end of chapter 6 carries with 1 vote in opposition

## 06-13 – 2021 Replacement

604.2, 604.3.1, 604.5, 604.9.6, 604.10.1, 604.11.5, 604.12(New), 607.1, 607.2, 607.9(New), 607.9.1(New), 607.9.2(New), 608.1, 608.9(New), 608.9.1(New), 608.9.2(New), 608.9.3(New), 609, 609.1, 609.2.1, 609.2.2, 609.3, 609.4, 609.4.1, 609.4.2, 609.5, 609.6, 609.7, 609.8, 609.9(New)

**Proponent:** Jake Pauls, Jake Pauls Consulting Service, representing self

**Replace and revise as follows:**

### CHAPTER 1

### SECTION 107 DEFINITIONS

**Stanchion.** A vertical, horizontal or otherwise configured bar that provides for a power grip by one or both hands, to facilitate user ambulation and postural transitions involving sitting, standing, walking, plus stepping over obstacles and on wet underfoot surfaces. Unlike grab bars, stanchions are generally fixed between surfaces or other bars.

## CHAPTER 6 SECTION 603 TOILET AND BATHING ROOMS

**603.1 General.** Wheelchair accessible toilet and bathing rooms shall comply with Section 603.

**603.2 through 603.6** [unchanged]

## SECTION 604 WATER CLOSETS AND TOILET COMPARTMENTS

**604.1 General.** Wheelchair accessible water closets and toilet compartments shall comply with Section 604. Compartments containing more than one plumbing fixture shall comply with Section 603. Wheelchair accessible compartments shall comply with Section 604.9. Ambulatory accessible compartments shall comply with Section ~~604.10~~ 612.

**Exception:** Water closets and toilet compartments primarily for children's use shall be permitted to comply with Section 604.11 as applicable.

**Note:** Consideration of additional Editorial changes, for example to Sections 607 and 608, designating these as dealing with "wheelchair accessible" facilities is recommended, to the Editorial Subcommittee, by this proponent to differentiate such sections from the newly proposed Section 612 on "Ambulatory Accessible" facilities. The Editorial Subcommittee should also decide where it is necessary to add, after certain references to "grab bars," the new option (for other comparable points of control), "and stanchions."

## SECTION 609 GRAB BARS AND STANCHIONS

**609.1 General.** Grab bars and stanchions in toilet or bathing facilities shall comply with Section 609.

**609.2 Cross section.** Grab bars and stanchions shall have a cross section complying with Section 609.2.1 or 609.2.2.

**609.2.1 Circular cross section.** Grab bars and stanchions with a circular cross section shall have an outside diameter of 1 1/4 inches (32 mm) minimum and 2 inches (51 mm) maximum.

**609.2.2 Noncircular cross section.** Grab bars and stanchions with a noncircular cross section shall have a cross section dimension of 2 inches (51 mm) maximum, and a perimeter dimension of 4 inches (100 mm) minimum and 4.8 ~~6.3~~ inches (~~120~~ 160 mm) maximum. Corner radius shall be 1/4 inch (6 mm) minimum.

**609.3 Spacing.** The space between the wall and the grab bar or stanchion shall be 1 1/2 inches (38 mm) minimum. The space between the grab bar or stanchion and projecting objects below and at the ends of the grab bar or stanchion shall be 1 1/2 inches (38 mm) minimum. The space between the grab bar or stanchion and projecting objects above the grab bar or stanchion shall be 12 inches (305 mm) minimum.

**Exceptions:**

1. The space between the grab bars or stanchions and shower controls, shower fittings, and other grab bars or stanchions above the grab bar or stanchion shall be permitted to be 1 1/2 inches (38 mm) minimum.
2. Recessed dispensers projecting from the wall 1/4 inch (6.4 mm) maximum measured from the face of the dispenser and complying with Section 604.7 shall be permitted within the 12-inch (305 mm) space above and the 1 1/2-inch (38 mm) spaces below and at the ends of the grab bar or stanchion.

#### **609.4 Position of grab bars and stanchions.**

**609.4.1 General.** Grab bars shall be installed in a horizontal position, 33 inches (840 mm) minimum and 36 inches (915 mm) maximum above the floor measured to the top of the gripping surface or shall be installed as required by Items 1 through ~~3~~4.

1. The lower grab bar on the back wall of a bathtub shall comply with Section 607.4.1.1 or 607.4.2.1.
2. Vertical grab bars shall comply with Sections 604.5.1.2, 607.4.1.2.2, 607.4.2.2, 607.9, and 608.3.1.2.
3. Grab bars at water closets primarily for children's use shall comply with Section 609.4.2.
4. Grab bars and stanchions for ambulatory accessible toilets not in compartments, ambulatory accessible bathtubs, and ambulatory accessible shower compartments shall comply with Section 612.

**609.4.2 Position of children's grab bars.** *(No change proposed at this time.)*

**609.5 Surface hazards.** Grab bars and stanchions and any wall or other surfaces adjacent to grab bars and stanchions shall be free of sharp or abrasive elements. Edges shall be rounded with a corner radius of 1/4 inch (6 mm) minimum.

**609.6 Fittings.** Grab bars and stanchions shall not rotate within their fittings.

**609.7 Installation and configuration.** Grab bars and stanchions shall be installed in any manner that provides a gripping surface at the locations specified in this standard and does not obstruct the clear floor space. Horizontal and vertical grab bars and stanchions shall be permitted to be separate bars, a single-piece bar, or combination thereof.

**Exception:** Ambulatory accessible bathtubs and toilets complying with Section 612.3 and 612.4.1.1.

**609.8 Structural strength.** Allowable stresses shall not be exceeded for materials used where a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the grab bar, stanchion, fastener mounting device, or supporting structure.

**609.9 Durability in presence of water.** Grab bars and stanchions, including mountings, shall be installed and sealed, or provided with permanent drainage for components subject to water intrusion.

Possible further modification

**609.9 Durability in presence of water.** Grab bars and stanchions, including mountings, shall be installed ~~and sealed, to protect structural elements from or provided with permanent drainage for components subject to water intrusion~~ and moisture.

\* \* \* \* \*

## **SECTION 612**

### **AMBULATORY ACCESSIBLE TOILETS, BATHTUBS AND SHOWER COMPARTMENTS**

**612.1 Scope.** Ambulatory accessible toilets, bathtubs and shower compartments shall comply with Section 612.

**612.1. General.** Grab bars and stanchions, including clearances around them, shall comply with Section 609.

**612.2. Installation Height Standards.** Installation heights for grab bars or stanchions shall comply with Section 612.2.1 for horizontal installations and Section 612.2.2 for vertical installations.

**612.2.1 Horizontal grab bars and stanchions.** For bathtubs, horizontal grab bars or stanchions shall be installed with their centerline 24 inches (610 mm) minimum and 28 inches (710 mm) maximum above the floor. In showers, horizontal grab bars and stanchions shall be installed with their centerlines located 48 inches (1220 mm) minimum and 52 inches (1320 mm) maximum above the floor.

**Exception:** Where the rim height of a bathtub exceeds 25 inches (635 mm) above the floor, the stanchion or horizontal grab bar centerline shall be 3 inches (76 mm) minimum and 6 inches (152 mm) maximum above either the bathtub rim or the top of the deck.

**612.2.2 Vertical grab bars and stanchions.** Vertical grab bars and stanchions shall be installed so as to be graspable at a height of 36 inches (915 mm) minimum and 60 inches (1525 mm) maximum above the floor.

**612.3 Water closets grab bars or stanchions.** The vertical stanchion or grab bar shall be located within an area that is both to the side of the bowl and in front of the bowl within an arc measured 24 inches (610 mm) from the front and center of the bowl.

**612.4 Bathtub grab bars or stanchions.** Grab bars or stanchions shall be provided at bathtubs on the access side complying with Sections 612.4.1 and at the non-access side complying with Section 612.4.2.

**612.4.1 Access side of bathtubs.** A clearance shall be provided adjacent to the bathtub extending 30 inches (762 mm) minimum in length and 30 inches (762 mm) in depth. A vertical grab bar or stanchion shall be provided on the access side of the bathtub, adjacent to the clearance and complying with Section 612.4.1.1, 612.4.1.2 or 612.4.1.3.

**612.4.1.1 Vertical stanchion.** A vertical stanchion shall be installed on the rim or the bathtub or on the outside of the bathtub within 4 inches (102 mm) measured horizontally from the centerline of the stanchion to the outside face of the bathtub at the stanchion.

**612.4.1.2 End wall grab bar interior of bathtub.** A vertical grab bar shall be installed on an end wall 9 inches (229 mm) minimum and 12 inches (305 mm) maximum measured horizontally from the centerline of the grab bar to the outside face of the bathtub below the grab bar.

**612.4.1.3 End wall grab bar exterior of bathtub.** A vertical grab bar shall be installed on an end wall 4 inches (102 mm) maximum measured horizontally from the centerline of the grab bar to the outside face of the bathtub below the grab bar.

**612.4.2 Non-access Side of Bathtubs.** A grab bar or stanchion shall be provided on the non-access side of the tub complying with Section 612.4.2.1, 612.4.2.2 or 612.4.2.3.



**612.4.2.1. Horizontal Grab Bar.** A horizontal grab bar shall be installed on the back wall and shall be of 36 (915 mm) minimum in length with the ends located 12 inches (305 mm) maximum from the from the head and control ends of the bathtub.

**612.4.2.2 Horizontal Stanchion.** A horizontal stanchion shall be installed between the head and control end walls.

**612.4.2.3 Diagonal Grab Bar.** The diagonal grab bar shall be installed on the back wall and shall be 36 inches (305 mm) minimum in length. Its slope shall be 30 degrees minimum to 60 degrees maximum to horizontal. The upper end shall extend to 12 inches (305 mm) maximum from the control end wall. The lower end of the diagonal grab bar shall be 3 inches (76 mm) minimum and 6 inches (152 mm) maximum above the bathtub rim.

**612.5. Shower Compartment Grab Bars and Stanchions.** For shower compartments having a diagonal dimension of 51 inches (1295 mm) maximum, a grab bar or stanchion shall be provided in accordance with Section 612.5.1, 612.5.2 or 612.5.3. For shower compartments having a diagonal dimension of greater than 51 inches (1295 mm), two grab bars or stanchions shall be provided with one in accordance with Section 612.5.1, 612.5.2 or 612.5.3 and a second grab bar or stanchion in accordance with Section 612.5.4 or 612.5.5.

**612.5.1 Horizontal Grab Bar Option.** A horizontal grab bar shall be installed with a minimum length of 24 inches (610 mm) and located inside the compartment with one end within 4 inches (100 mm) of the shower entrance opening.

**612.5.2 Vertical Grab Bar Option.** A vertical grab bar shall be installed with the grab bar centerline located within 3 inches (75 mm) of the shower entrance opening, either inside or outside the compartment.

**612.5.3 Vertical Stanchion.** A vertical stanchion shall be installed with the stanchion centerline located within 3 inches (75 mm) of the shower entrance opening, either inside or outside the compartment.

**612.5.4. Second grab bar.** A horizontal grab bar shall be provided on the back wall of the shower. The grab bar shall have its ends extending to within 12 inches (305 mm) of each end of the side walls.

**612.5.5. Second stanchion** A horizontal stanchion shall be provided on the back wall of the shower. The stanchion shall extend the full length of the back wall mounted between side walls.

## **Reason statement:**

### **General Background to A117.1 Proposal 06-13 Now Being Replaced and Selected Details**

A very large portion of the population, needing to use toilets, bathtubs and showers, have disabilities that still permit ambulation that ranges from fully capable to highly compromised. This is most marked with increasing age and is also manifested in missteps and falls through the entire lifespan.

Countermeasures for the injuries and further disabilities that result from falls and other incidents, are addressed in a preventative or mitigation fashion by other ANSI standards besides A117.1. However, it

should be stressed that ICC ANSI A117.1 focuses on the architectural or general design and installation implications for use of essential facilities more generally. It addresses an important set of user needs.

Further use of toilets, bathtubs and showers is impacted as individual user experience with the facilities becomes increasingly problematic, difficult and consequential with time and exposure. Use and usability generally are the focus of A117.1. Maintaining and enhancing regular use of bathing and showering facilities should, for example, be as important as is regular toilet use.

With application of an expanded A117.1, all of these facilities can be made more usable, without sacrificing or complicating both voluntary and essential user exposure to the facilities by the entire population. The provisions set out in this proposal advance this objective, using comparable ergonomic expertise to that applied for decades, improving the lives of people with physical disabilities whose ambulation has been affected in the most consequential ways. The scope of affecting people's lives generally, by addressing ambulation more comprehensively, is now being expanded significantly with these initial recommendations on ambulatory accessible facilities. A comprehensive re-examination of children's use of facilities is outside of scope here.

One specific change from the original submission is that, as just noted (in the end of the prior paragraph), there was originally a minor change proposed to the first part of **609.4.2 Position of children's grab bars and stanchions**. These involved adding a few references to "stanchions" as options to grab bars, but in the revised proposal draft provided above, it was noted, "**609.4.2 Position of children's grab bars**. (*No change proposed at this time.*)" Although my personal library includes detailed anthropometric data for children as well as a copy of the landmark book, "*Ergonomics for Children*," for which I was the author invited to write the chapter on children and stairs which has some relevant information on children development and anthropometrics on matters such as capabilities with points of control, including reach, grasp height preferences, and hand grip capabilities, I was simply too busy to do further research with and beyond the *Ergonomics for Children* book which is in my Toronto office library.

Another change from the original submission was to reference tub grab bar heights relative to the floor rather than to the top of the tub rim. However, there remains, in the currently proposed text, one reference to height measured to the bathtub rim and that is for diagonal grab bars on the back wall. For these, given the option of using any grab bar slope from 30 to 60 degrees, there are some complications to the bar's height that might be further clarified at public comment stage. Diagonal bars on tub back walls are, apparently, a newer configuration in the US than they are in Canada.

Other matters where there were changes from the original proposal relate, for example, to adding exceptions for stanchions in Sections for toilets, bathtubs and showers. These did not get much support in the Work Group and the issue was better resolved by clarifying, with new (editorial) text that those few Sections could, editorially, be fixed by adding "Wheelchair Accessible" to their title headings. That would improve the Standard considerably in my opinion.

In terms of possible new requirements being added between my original submission of the Proposal and now, the addition, in my Proposal, to make the rule that grab bar edges be rounded should be improved by requiring a quarter-inch radius of rounding was made in only one of the sections of 609 where this was to be required. The second of the references to this topic occurs in 609.5, "Surface hazards" section, which I had misread to apply not to the grab bar's bar/tubing element but to the surrounding surfaces. I was told that the somewhat ambiguous wording meant both the grab and its surroundings had to meet the rounding rule which I had dealt with in 609.2.2, Noncircular cross section. During deliberations so far, there has been no objection to adding the minimum quarter inch rounding to both sections and it is clearly my hope that both sections get full public review as proper proposals and are accepted.

Related to these issues with Section 609, it would help if, *editorially*, the order of subsections be made a bit more rational keeping similar issues together. With the need to address my sweeping change in Chapter 6, including editorial cleanup, this might be appropriate for Editorial Subcommittee work later. Having already served my time on the Editorial Subcommittee, I hope to stay clear of its very important work load at this time. Other members of the A117 Committee should appreciate how valuable an education it is to serve on the editing task for the Standard.

**For much more, see the accompanying, full Reason Statement which includes highlights of pre-2022 justification materials considered by the A117 Committee, especially its Work Group on Proposal 06-13, during 2022. The Work Group on Proposal 06-13, met several times during 2022 and the work by a few of its participants, such a Kim Paarlberg and Marsha Mazz, were notable.**

**Staff note: “The accompanying, full Reason Statement” is included below.**

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**Justification for Revised Proposal  
on Ambulatory Accessible Toilets, Bathtubs and Showers  
Submitted by Jake Pauls, BArch, CPE, HonDSc  
[bldguse@aol.com](mailto:bldguse@aol.com) & [www.bldguse.com](http://www.bldguse.com)  
December 12, 2022**

**Foundations.** Connecting both wheeled and bipedal ambulation-based access to bathing, showering and toileting is the science and technology of ergonomics and, in a secondary way, public health. As a Certified Professional Ergonomist (like a few others on the A117 Committee) and now the longest serving representative on several ICC and NFPA committee formally representing the American Public Health Association, the proponent brings important perspectives to our (now virtual) deliberation table. This has taken a major group effort and more perspectives.

**Work Group Formed.** The proponent’s first recommendation, made in 2021, was that a task/work group be formed of a small number of interested, informed members of the Committee (and a few experts from outside the Committee) to address the change proposal and, to a lesser extent, the justification or reason statement.

This niche, on bathing, showering and toileting, already is mostly addressed by another ANSI standard—one with a safety motivation and scope (i.e., NFPA 101). Now we need to address such facilities with a usability focus in the most widely respected ANSI standard on facility usability—A117.1. NFPA adopted requirements for safety of bathtubs and showers in its 2018 editions of NFPA 101 and 5000, updating the terminology to include “stanchions” in their 2021 editions. NFPA and the ANSI A117 Committee share a concern for ambulation of facility users, the latter recognizing that a large proportion of people with disabilities are, indeed, ambulatory and the former recognizing, decades ago, that a significant number of people requiring safety in buildings are not ambulatory.

**An Option If A117 Committee Does Nothing.** Unless ICC wishes to reference NFPA 101 in ICC A117.1 for requirements on grab bars and stanchions for usability as well as safety, the A117 Committee needs to develop its own requirements covering ambulatory accessible water closets, bathtubs and showers. (It did this for stairs decades ago.)

**Basic Tools (Including Visual Aids).** Fortunately, the tools we will employ in this task are largely identified. They build upon basic ergonomic concepts such as attention to anthropometry, including reach capabilities,

plus balance (as affected by location of ones Center of Mass— COM), and points of control, especially upper body ones, etc.

**Related but Disparate Efforts.** Note that this topic, at least of bathing and showering, is being currently addressed—or *barely addressed*—in disparate ways, by three North American organizations in relation to several documents, that will be published in the 2020s. They are:

- *International Code Council* (for the *International Building Code* and the *International Residential Code*)
- *National Fire Protection Association* (for the *Life Safety Code* and the *NFPA Building Construction and Safety Code*)
- *Canadian Commission on Building and Fire Codes*, replaced on November 22, 2022 by the recently formed *Canadian Board for Harmonized Construction Codes* (CBHCC) to oversee development and adoption of the *National Building Code of Canada* (NBCC) but, apparently, with far less attention given to usability and safety of homes as well as human factors or ergonomics and public health principles generally in all new buildings.

**Borrowing from Other Deliberations.** The proponent of the A117.1 changes is (or recently has been) also a leading proponent of changes to all these documents affecting the technical requirements and scoping for all occupancies (with a very few exceptions for some institutional settings healthcare and detention/correction). Thus this proposal for A117.1 is an amalgam of several other proposals (dating back to 2007 in the case of one co-proponent's— Dr. Nancy Edwards'—early proposal for the NBCC in Canada).

**Terminology and Implementation Criteria.** We start with terminology in case the ANSI A117 Committee feels we should define what stanchions are (and perhaps what *Points of Control* are, including especially upper body points of control making use of stanchions). For the following, the proponent borrows freely from proposals and explanatory presentations prepared not only for other codes/standards- developing bodies in North America, but for world conferences on state-of-the-art ergonomics plus applications where usability is currently poorly provided. Before addressing stanchions (as well as grab bars), we need to understand “points of control.”

**Point of Control** (not being proposed as a definition for A117.1 as this requires more work and more expert input). The securely maintained contacts, including with a power grip by ones hand, on a stanchion, grab bar or handrail and the placing of ones foot on a slip-resistant, underfoot surface that permits efficient, comfortable and safe ambulation on a (near) level surface, climbing over an obstacle (e.g., a bathtub rim), and ascending or descending to a higher or lower stair tread.

Although I am not able to provide an official definition of the term “Point of Control” (which is likely in one of the reference handbooks in my Toronto office library), there is a definition for “power grip”— which is what we hope to achieve for a “point of control.” The definition “**Power Grip**” is a “prehensile grasp by either hand, with the thumb opposing the fingers, of an object to control or manipulate it.” (Thompson, D.A. *et al.* 2005. A guide to forensic human factors terminology. In: Noy, Y.I. and Karwowski, W. (Eds.) *Handbook of Human Factors in Litigation*. New York: CRC Press, 38-1 – 38-46.) It is reported, by this same source, to be the most powerful manual gripping method, with a 50<sup>th</sup> percentile grip strength of approximately 500 Newtons, 112 pound force, for males and 270 Newtons, 60 pound force, for females. Thus there are relatively few men who, with such a one-handed grip on a grab bar or stanchion, could exceed its required 250 pound load strength.

See the previously provided table, below, for some examples of various extents of available or utilized points of control in several contexts. Those achieved with the implementation of the proposed new

requirements for use of toilets, bathtubs and shower exist, *at a minimum*, in the 3 central red box—with *two points of control*—of the table of options.

Number of Points of Control Via Hands or Feet	≤1	1	2	3	3-4
Standard walker for older adult with altered gait.					✓
Occupational settings with risk of worker falls from heights. Also, stairs where users can use two handrails simultaneously, one on each side.				✓	
<u>Stairs where users have only a single handrail.</u> <b><i>Grab bar(s) usable for bathtub/shower entry/egress.</i></b>			✓ ★		
Bathtubs/showers with slip resistant underfoot surfaces when wet.		✓			
Bathtubs/showers without slip resistant underfoot surfaces when wet, the common condition currently.	✓				

Where underfoot conditions, or capabilities of lower limbs do not provide a reliable point of control, the required two minimum points of control would be a secure handhold for both of ones arms. In some situations a single stanchion could provide two points of control, for example with a bathtub rim-mounted, vertical stanchion which both arms can effectively lock onto, with effective power grips of the hands; this permits pivoting during a sidestep over the rim and onto, or from, a relatively dangerous smooth, wet, curved bottom of a bathtub. Such an approach, which could be from any direction, cannot be achieved with a standard grab bar that is very close to a large wall surface.

For a more detailed discussion of points of control, see the video (one of about 30) available for free streaming at my Website, <http://www.bldguse.com/VideoPage.html>, specifically <https://vimeo.com/channels/866600/117572176> which addresses “points of control” with participation from a few members of the A117 Committee in a 2014 meeting at my Toronto office. Some of the discussion dealt with a related term, “point of contact.”

Stanchions are, like grab bars and handrails, examples of points of control for which the following definition was developed by the Proposal 6-13 Work Group, with discussion of— *and later addition of the second (last) sentence which differentiates stanchions from grab bars.*

**Stanchion** (as defined in the Public Comment Modification Form). A vertical, horizontal or otherwise configured bar that provides for a power grip by one or both hands, to facilitate user ambulation and postural transitions involving sitting, standing, walking, plus stepping over obstacles and on wet underfoot surfaces. Unlike grab bars, stanchions are generally fixed between surfaces or other bars.

Photographs below represent about two centuries of development of stanchions in the field of transportation vehicle design and their use by ordinary people without formal background in ergonomics, standards development, etc. They also illustrate how stanchions can be attached to other bars as well as being positioned between floor and ceiling (bars or other surfaces).

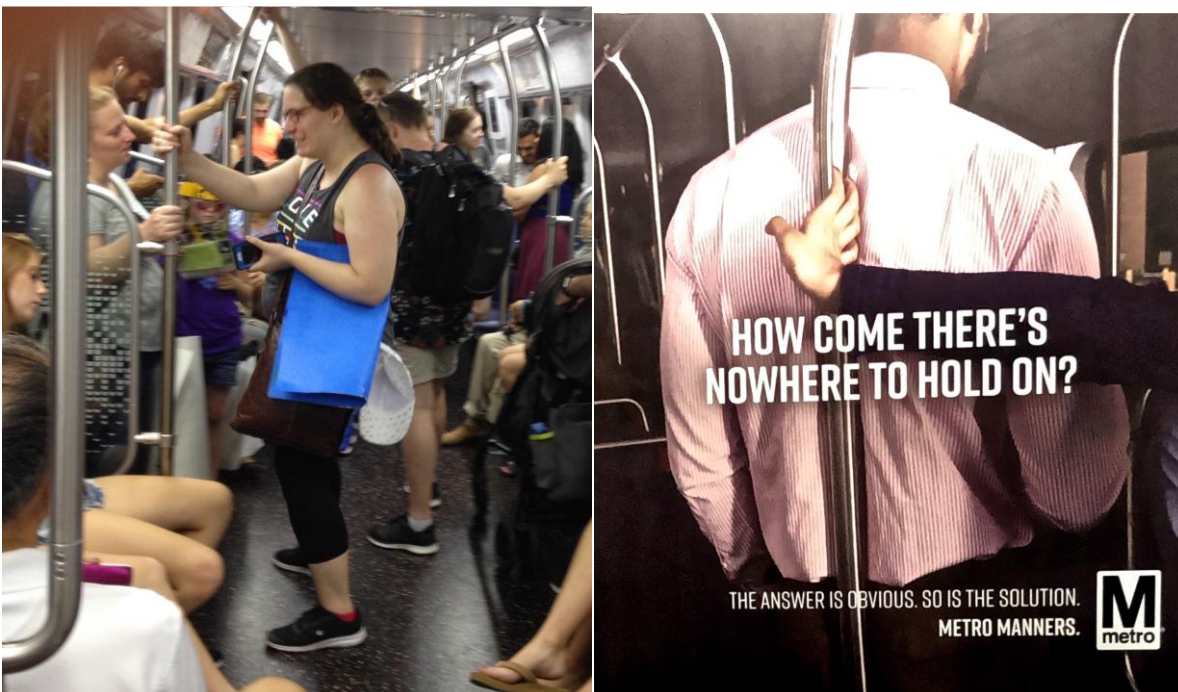
While on the topic of transportation vehicles, pertinent ADA Guidelines refer to stanchions, e.g., 1192—*Americans With Disabilities Act (ADA) Accessibility Guidelines For Transportation Vehicles* refers repeatedly to “Interior circulation, handrails and stanchions.”





The photos below depict the importance of such stanchions to riders as well as to transportation authorities, in this case in the Washington, DC region Metro system. They provided the poster, at the right, depicting one use of stanchions that is rarely seen, but represents an example of “point of contact” which prevents stanchion use as a “point of control” Also note, at the left, the height at which most standing users of the transportation system hold onto stanchions, namely at shoulder to head height, a height that all ages appear to favor—including toddlers’ early use of handholds (discussed in the book chapter I authored, by invitation, years ago [Pauls, J., 2007]. “Stairways for Children.” In *Ergonomics for Children: Designing products and places for toddlers to teens*, Lueder, R and Rice, V. [Eds.], CRC Press, Taylor and Francis, Boca Raton, FL, pp. 543-571.)

Note also the ubiquity of the provision of stanchions; one is generally within reach of every seated or standing passenger in the latest generation of Metro Subway cars (as well as buses).



**Stanchions and Toilets.** For toilet use-related (stand-to-sit and sit-to-stand) transfers, both ergonomics and scientifically-established personal preferences are for points of control for each of our two arms/hands to be available. (See the 2015 paper, *Toilet Grab-Bar Preference and Center of Pressure Deviation During Toilet Transfers in Healthy Seniors, Seniors With Hip Replacements, and Seniors Having Suffered a Stroke*, by



The leading preference, identified in this study, was for two handholds on vertical points of control—e.g., stanchions or grab bars—one on each side, and at the front of the toilet; second preference was for only one such point of control (out of five options including also horizontal, “swing-away” and diagonal options.) This is why the revised proposal has the following requirements applying generally (in the case of the first item) and to toilets (in the second item quoted here). Note that the height range specified for vertical stanchions and grab bars, 36 to 60 inches, includes over 95 percent of the US adult population’s range of stature or shoulder height as well as including—at the 36-inch minimum, stature of children in the 3.5 to 4.5-year age range.

**“612.2.2. Vertical grab bars and stanchions shall be installed so as to be graspable at a height of 36 inches (915 mm) minimum and 60 inches (1525 mm) maximum above the floor.**

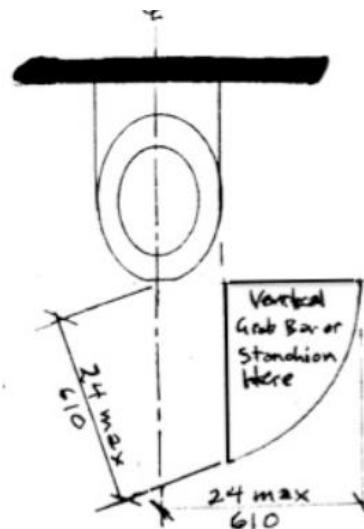
Note that, in addition to taking care to utilize good sources of anthropometric data for heights of required vertical points of control, the proponent of Proposal 06-13 also provided a first draft of a plan view figure to help clarify the position of vertical grab bars or stanchions serving toilets.

Here follows the proposed text as well as the first-draft sketch

**612.3 Water closets grab bars or stanchions.** The vertical stanchion or grab bar shall be located within an area that is both to the side of the bowl and in front of the bowl within an arc measured 24” from the front and center of the bowl.”

**FIGURE 612.2  
AMBULATORY ACCESSIBLE WATER  
CLOSET IN RELATION TO VERTICAL  
GRAB BAR OR STANCHION LOCATION**

The Figure shows the grab bar or stanchion at the user’s left side but it could be on either side or both sides. Note 24 inches is the radius of the curved portion of the boundary within which stanchion or grab bar centerline is located.



The whole point of the major changes submitted for the A117.1 standard, especially in Section 612 of the plumbing chapter is to add one or two upper body points of control to the single weight-bearing foot, for example, (1) in entry to, using, and exiting from a bathtub or shower enclosure and (2) sitting down on or arising from a water closet. An increasing proportion of the population is in need of such aids if ambulatory people are to remain independently capable, as long as possible, of common activities of daily living without avoidable risks of injury-created disabilities, either temporary or permanent. As well as being a reasonable advance in public health in terms of injury prevention, it is a major quality of life benefit, the value of which greatly exceeds the cost of installing the stanchions and grab bars.

Moreover, as was pointed out in the first dozen or so slides of a very large slide set presentation provided to Committee members of A117 as well as other codes/standards bodies, people reduce their use of relatively

dangerous facilities such as stairs, bathtubs, and even showers at an age well below normal retirement age because of the sad state of not just the safety risks but the lack of reasonable *usability* of the facilities. They can do this with stairs, bathtubs and showers, but they cannot do so with toilets. The results of this situation are clear in the statistics on the relatively rapid growth of toilet related injuries but not so with the stairs, bathtubs and showers. See the analyses provided with the original proposal for quantitative data on the extent of this disproportionate growth.

The information below sums up the situation as it can be understood from the injury data in the NEISS system of emergency department treatments augmented by colleagues of the Proponent (at the Pacific Institute for Research and Evaluation (PIRE), in Calverton, Maryland) who provided their expert estimates of how many more treatments were delivered, not in hospitals, but doctors' offices and clinics. The information below comes from the proponent's 144-slide, PowerPoint presentation for the A117 Committee Proposal 06-13-2021 Work Group meeting held 14 March 2022 with slight modifications in August 2022.

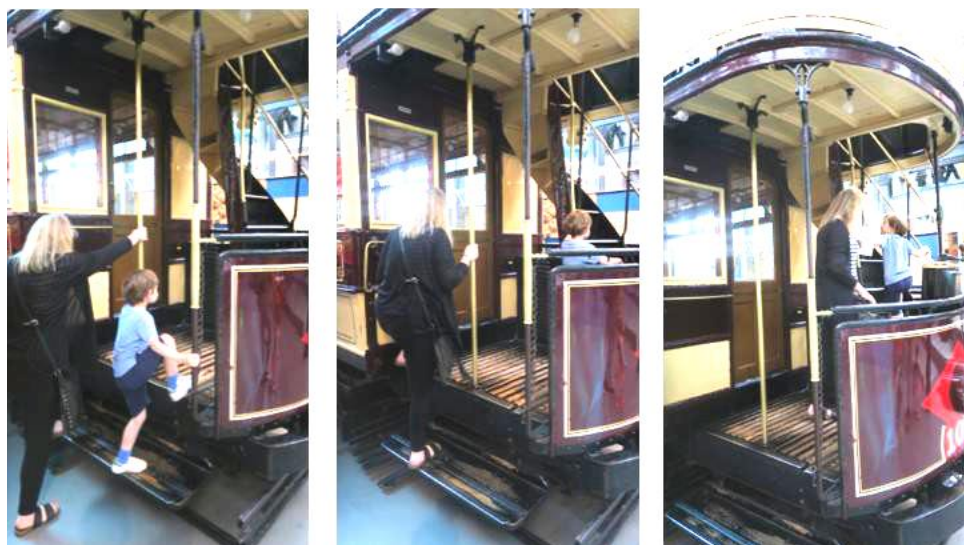
As only two slides (numbers 17 and 27 of 144 are extracted here, much is lost of the development of the proponent's realization that bathtubs, showers and toilets pose not only serious injury dangers to all ages but they also pose significant disincentives to use of these facilities as they do with (especially home) stair use also. This shows up in a reduced or only slightly increased relative population-corrected risk of professionally treated injuries for all users of stairs and bathtubs. However, for toilets, whose use cannot be reduced by any age group, the relative population corrected risk increases by a factor of 4.8 for older (age 60+) people relative to 1.00 for middle age (20-59) people. For bathtubs the older (age 60+) people have a population corrected risk of 1.27 relative to 1.0 for middle age (20-59) people.

PIRE-calculated annual injuries in USA (2010-14) by treatment type and age					
Analysis of Treated Injury Risk of Facility Use — 90% in Homes					
% (by age)					
<b>Stairs</b>					
Age	Doc/Outpt	ED	Hospital-admitted via ED	Direct	Total
00-09	149,389.0	132,344.0	4,313.0	1,515.6	287,561.6
10-19	240,131.0	122,449.0	2,380.5	824.6	365,694.1
20-29	422,114.0	398,838.0	4,634.7	1,531.7	827,204.4
30-39	560,978.0	344,438.0	5,628.9	1,930.3	912,952.2
40-49	634,787.0	373,156.0	9,241.0	1,090.3	1,018,274.3
50-59	502,896.0	348,100.0	14,928.3	5,133.4	871,057.7
60-69	286,908.0	94,429.1	16,556.9	5,644.9	403,538.9
70-79	173,515.0	66,176.8	17,891.0	6,021.7	263,604.5
≥80	196,489.0	55,907.0	13,771.4	6,396.7	312,564.1
Total	3,077,207.0	1,775,439.0	98,754.8	33,993.4	4,985,393.2
<b>Bathtubs and Showers</b>					
Age	Doc/Outpt	ED	Hospital-admitted via ED	Direct	Total
00-09	37,421.8	43,503.5	1,367.9	620.3	82,713.5
10-19	35,732.0	23,165.9	449.5	164.8	59,512.2
20-29	70,160.9	36,019.2	1,196.7	438.5	107,815.3
30-39	111,471.0	36,842.1	1,355.1	394.4	150,062.6
40-49	128,771.0	37,902.7	2,180.3	666.2	169,520.2
50-59	123,201.0	38,110.5	3,513.7	1,235.5	166,060.7
60-69	70,778.2	24,719.1	4,742.3	1,571.3	101,811.0
70-79	50,653.0	18,959.1	5,648.5	1,762.5	77,023.1
≥80	50,961.4	23,964.3	9,880.1	2,699.0	87,504.8
Total	679,150.0	283,187.0	30,134.0	9,552.5	1,002,023.5
% 68 28 3 1					
<b>Toilets</b>					
Age	Doc/Outpt	ED	Hospital-admitted via ED	Direct	Total
00-09	8,189.7	7,788.1	200.2	79.0	16,257.0
10-19	3,013.0	2,532.5	84.2	24.4	5,654.0
20-29	7,713.5	5,373.5	250.0	125.0	13,461.9
30-39	15,319.0	9,987.9	459.1	125.2	25,891.2
40-49	19,713.9	6,995.6	1,055.7	391.1	28,156.3
50-59	26,914.0	9,408.3	2,112.3	673.5	39,108.2
60-69	30,101.1	10,529.7	3,840.1	1,318.7	45,789.6
70-79	28,111.9	10,741.6	5,512.9	1,751.8	46,118.2
≥80	44,531.3	21,436.1	12,449.2	3,353.6	81,770.2
Total	183,607.0	80,793.3	25,963.8	7,842.2	298,206.3
% 62 27 9 3					

17

		Analysis of Treated Injury Risk of Facility Use — 90% in Homes				
		% (by age)	Rate/1000	Relative Risk	Use?	Facility
Stairs	So what? Use of the three S/B/T facilities has hedonic <i>motivation drivers</i> including <i>risk, discomfort or pain</i> with stair use as one ages.	15 (00-19)	7.93	0.46	Yes	Stairs
		66 (20-59)	17.2	Ref. 1.00	Yes	
		20 (60 +)	14.6	0.85	Can Limit and Do	
Bathtubs Showers	Use of baths and, especially, showers is motivated by <i>pleasure &amp; revitalization along with growing dread re. falls</i> as one ages.	14 (00-19)	1.73	0.49	Yes	Bathtub Shower
		59 (20-59)	3.55	Ref. 1.00	Yes	
		27 (60 +)	4.51	1.27	Can Limit and Do	
Toilets	While there is <i>some relief as wastes are voided</i> , with age one faces <i>more difficulties with transfers (e.g. sit-to-stand)</i> and a greatly increased risk of falls.	7 (00-19)	0.27	0.43	Yes	Toilet
		34 (20-59)	0.61	Ref. 1.00	Yes	
		58 (60 +)	2.94	4.82	Cannot Limit It is a major health issue.	
				*US-2012		
				27		

The photographic series, below with a century-old trolley, provides a brief story of how effective stanchions are, even for young children encountering steps comparable in height to what is needed to surmount the wall of a typical bathtub; the height depicted here is about 16 inches (400 mm), comparable to what is found in minimum standard (e.g., *International Residential Code*) permitted stairways for dwelling units—except there is no intermediate step to use as many older people need to do when using stairs (with both feet using every step). Note also the relatively puny grab bar to the woman’s left; it lacks the usefulness of the two (platform to ceiling) stanchions, marked in yellow, better serving the formidable two-riser stair in terms of both length and location.



An important lesson, from the photo sequence above, is that stanchions provide more options for placement and more options for users to choose the points of control they perceive as important to their task and safety. In other words ordinary people, even of young age, are displaying skill in ergonomics (the science and technology of how people utilize things, systems, etc. available to them to perform tasks effectively, comfortably, and safely).

For purposes of this A117.1 proposal, along with grab bars, it should be clear that stanchions are reliable, indeed superior, time-tested means of providing for “points of control” and they provide options for location and length that greatly exceed what conventional grab bars can provide—as they do not rely on walls from which they cantilever. (The can be *between walls, between floor and ceiling, etc.*)

#### **Section 612.4. Bathtub Grab Bars or Stanchions**

The graphic on the next page combines all of the stanchion and conventional grab bar options set out in the partial re-write of A117.1 Chapter 6, “Plumbing Elements and Facilities,” specifically for bathtubs.

All of the eight options are illustrated in the graphic below. The options are in two groups, three options for the one stanchion or grab bar on the non-access side or back wall and five options for the one required grab bar or stanchion on the access side (front). At the front, the vertical stanchion has options for placement anywhere along the length of the bathtub (depending on fixture layout in the bathroom and where the clear, half bathtub length area (required by **Section 612.4.1 Access side of bathtub**) is located—here in front of the water closet (WC).

On the next page the stanchion is shown mid-tub length (where it is *surface---mounted* (with Automotive Grade RTV adhesive) on the *steel* tub rim, but could also be floor mounted for other tubs with less strength or rigidity) so it also serves the WC per proposed new section quoted above.

**612.4.1 Access side of bathtubs.** A clearance shall be provided adjacent to the bathtub extending 30 inches minimum in length and 30 inches minimum in depth. A vertical grab bar or stanchion shall be provided on the access side of the bathtub, adjacent to the clearance and complying with Section 612.4.1.1, 612.4.1.2 or 612.4.1.3.

**612.4.1.1 Vertical stanchion.** A vertical stanchion shall be installed on the rim or the bathtub or on the outside of the bathtub within 4 inches measure horizontally from the centerline of the stanchion to the outside face of the bathtub at the stanchion.

**612.4.1.2 End wall grab bar interior of bathtub.** A vertical grab bar shall be installed on an end wall 9 inches minimum and 12 inches maximum measured horizontally from the centerline of the grab bar to the outside face of the bathtub below the grab bar.

**612.4.1.3 End wall grab bar exterior of bathtub.** A vertical grab bar shall be installed on an end wall 4 inches maximum measured horizontally from the centerline of the grab bar to the outside face of the bathtub below the grab bar.





Note the options for the access side, end wall-mounted grab bar do not permit placing this grab bar where it would interfere with the installed shower curtain rod (or track) or installation of an enclosure system of sliding glass panels for example. Several inches of horizontal dimension are reserved on the end walls for such water control barriers, e.g., a shower curtain, to seal to the end walls.

The most common defect with grab bar placement the author saw repeatedly in his many stays in hotels around the world was having both the shower curtain and the vertical grab bar competing for the same region of the end wall. The result: during a shower, water ended up leaking to the bathroom floor, in some cases getting into end walls with moldy results.

Here follow the proposed texts for the bathtub grab bars or stanchions with the graphic on the prior and next page illustrating the full range of options. *However, note that the illustration of the diagonal grab bars has incorrect lower end heights above the bathtub rim (based on another, early design) which must be corrected here to a 3 to 6-inch range above the tub rim.*

*Again, disregard the dimension of 8" min to 10" max above the bathtub rim for the bottom of 10 the diagonal grab bar examples; the distance in the current A117 proposal is 3 to 6 inches above the bathtub rim. The illustration was from an earlier draft proposal.*



**612.4.2 Non-access Side of Bathtubs.** A grab bar or stanchion shall be provided on the nonaccess side of the tub complying with Section 612.4.2.1, 612.4.2.2 or 612.4.2.3.

**612.4.2.1. Horizontal Grab Bar.** A horizontal grab bar shall be installed on the back wall and shall be of 36" minimum in length with the ends located 12 inches maximum from the from the head and control ends of the bathtub.

**612.4.2.2 Horizontal Stanchion.** A horizontal stanchion shall be installed between the head and control end walls.

**612.4.2.3 Diagonal Grab Bar.** The diagonal grab bar shall be installed on the back wall and shall be 36 inches minimum in length. Its slope shall be 30 degrees minimum to 60 degrees maximum to horizontal. The upper end shall extend to 12 inches (305 mm) maximum from the control end wall. The lower end of the diagonal grab bar shall be 3 inches minimum and 6 inches maximum above the bathtub rim.

**612.5. Shower Compartment Grab Bars and Stanchions.** For shower compartments having a diagonal dimension of 51 inches (1295 mm) maximum, a grab bar or stanchion shall be provided in accordance with Section 612.5.1, 612.5.2 or 612.5.3. For shower compartments having a diagonal dimension of greater than 51 inches (1295 mm), two grab bars or stanchions shall be provided with one in accordance with Section 612.5.1, 612.5.2 or 612.5.3 and a second grab bar or stanchion in accordance with Section 612.5.4 or 612.5.5.

**612.5.1 Horizontal Grab Bar Option.** A horizontal grab bar shall be installed with a minimum length of 24 inches (610 mm) and located inside the compartment with one end within 4 inches (100 mm) of the shower entrance opening.

**612.5.2 Vertical Grab Bar Option.** A vertical grab bar shall be installed with the grab bar centerline located within 3 inches (75 mm) of the shower entrance opening, either inside or outside the compartment.

**612.5.3 Vertical Stanchion.** A vertical stanchion shall be installed with the stanchion centerline located within 3 inches (75 mm) of the shower entrance opening, either inside or outside the compartment.

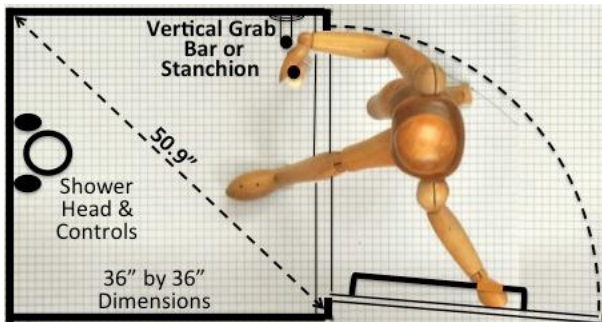


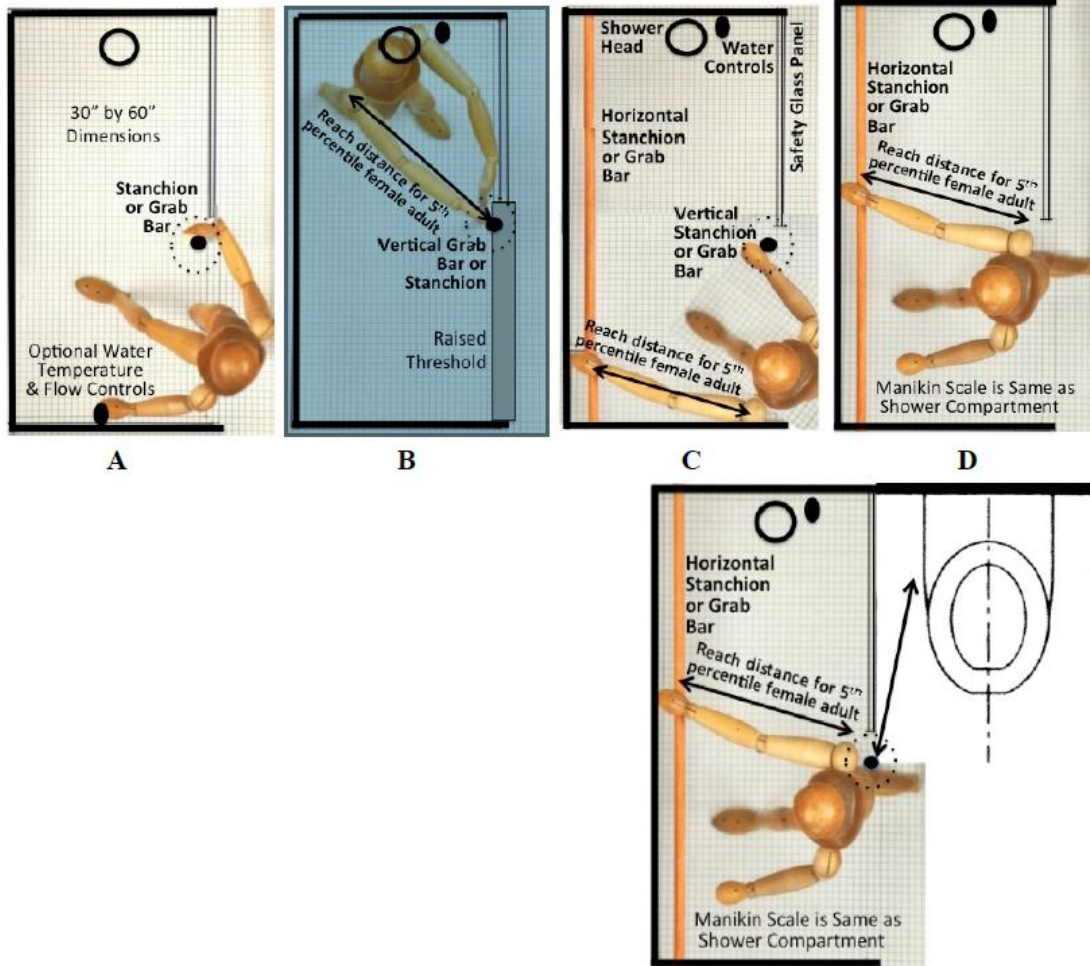
**612.5.4. Second grab bar.** A horizontal grab bar shall be provided on the back wall of the shower. The grab bar shall have its ends extending to within 12 inches of each end of the side walls.

**612.5.5. Second stanchion** A horizontal stanchion shall be provided on the back wall of the shower. The stanchion shall extend the full length of the back wall mounted between side walls.

To help understanding of these conditions and grab bar plus stanchion options, the proponent initiated a different form of illustration of options for two increasingly standard shower compartment plans differing by the maximum horizontal, diagonal dimension being no greater than 59 inches or being greater than 59 inches. The latter include showers replacing, in approximately the same space a fairly standard, roughly 30-inches by 60-inches bathtub area.

The different form of illustration of options involved use of 1/4-size plans and 1/4-size artists manikins photographed, with a (faint) 1-inch grid, from an overhead position, using a mirror to get a longer shot and better perspective (as the manikins were about 16 inches high). Here are the options explored starting with plan view of 36-inch by 36-inch (915 mm by 915 mm) in plan size, addressed in 612.5.2 and 612.5. (612.5.1, with the horizontal GB or stanchion option is not shown for this smaller size of shower, although it is a permitted option).





Option C Augmented to show vertical stanchion also serving adjacent WC.  
See accompanying illustration below.

**Options for Using Vertical Stanchions or Grab Bars  
At Shower Entrance With And Without Full Length  
Horizontal Stanchion or Grab Bar Per 612.5.4.**



Pending discussion with the A117 Committee and its Chair on suitability of invoking an option to restrict larger showers to Option C based on an individual case assessment of adequate slip resistance underfoot in the shower, only a two grab bar or stanchion combination should be accepted for the larger showers. This is due to much greater consequences of slipping in the larger plan showers. Committee views on this matter are requested before or during the December 15<sup>th</sup> meeting. A simple pass/fail test of onsite, wet, shower pan slip

resistance, performable *without* a tribometer (or other specialized equipment) and skilled operator, will be presented to the entire committee.

**Appendix of Some Expanded Consideration of Certain Topics that are prominent in this Proposal:**  
**Consumer acceptance of stanchions and the proposal (within 06-13) on changing the 1.5 inch clearance between a grab bar (or stanchion) surface to a minimum requirement.**

**Stanchion Acceptance.** A significant aspect of the proposal for A117.1 is the introduction of stanchions, the history and ubiquity—*outside of bathrooms*—has already been addressed above. In the photos below, they are seen in three of the contexts at the heart of A117.1 Chapter 6, as it will be amended with the acceptance of this proposal which deals, typically with new construction.

All of the examples below represent retrofit installations. Moreover, they are all retrofits in rental contexts where damage to walls is frowned upon by owners. Thus all of the examples shown of stanchions in this proposal narrative, include stanchions that can be removed (followed with the usual repainting between tenancies) without any screw holes in floors, ceilings and, most important (usually) walls.

Modern RTV (Room Temperature Vulcanizing) adhesives hold these stanchions in place with holding capability easily meeting the 250-pound strength requirement. This adds new usefulness to A117.1 and, more importantly, to many people who develop disabilities of all types as they age and who want to “age in place” where they feel most at home.

Stanchions also avoid any grab bar stigma issues as, evident especially in the two photos at the center and right sides below, the stanchions appear totally integrated with the décor, even serving as a much needed lighting pole to enhance bathroom lighting while saving energy. These stanchions all comply with the proposed requirements, completely for the contexts illustrated, from left to right: bathtub access side vertical stanchion (with a no-cost bonus of also serving as the newly required vertical stanchion for the WC).

At the center is another stanchion, this one color coordinated with its surrounds and the structural supports—to the vanity—color coordinated with it (while giving extra structural support to the stanchion). At the right, the satin stainless steel stanchion matches the décor of the shower enclosure and is discretely tucked into a recess while being accessible for both entering and exiting, stepping over the 4-inch sill below the shower door. Both of the stanchions at the center and right occupy the same bathroom and both contend with the 8-foot ceiling there (which has been tested to the 250-pound criterion—without any plastic deformation)



The photo at the left side demonstrates two options for a center tub-length stanchion, one affixed with RTV adhesive to a 60-year old enamel steel bathtub that has no problem with a test 330-pound, lateral load held for three hours. For newer, less rigid bathtub materials such as acrylic or fiberglass, manufacturers have raised a huge fuss over rim mounting of stanchions. They are easily appeased with the option of mounting on the adjacent floor—which is far more sturdy than the newer tubs are and has no issues with the RTV adhesive. Again, with many solid, well performing steel bathtubs currently installed, there is much scope for both the rim- and floor mounting options for securing stanchions in both new and existing bathrooms.

There was also some opposition—*quickly addressed*—from those concerned with the stanchion being in the way of some people with disabilities not being able to swing their fully extended legs over the tub rim when seated on a bathtub seat. Note that in the photo above, left side, there is barely room for such legs at the closely positioned WC which effectively blocks almost half the length of the tub. Notably the proposed language for A117 allows the vertical, access-side stanchion to be placed anywhere on or immediately adjacent to the entire length of the bathtub. Thus the stanchion can be placed where it suits a bather who desires to use a bathtub seat, etc. (BTW, the bathroom is totally inaccessible to a standard wheelchair and the 60-year old apartment building is not very accessible as well as being difficult to evacuate for those unable to use stairs.)



This augmented photo illustrates the possible dilemma over such vertical stanchion placement. Is it too close to the seat; is it too far from the seat (like the water controls are), or is it just right? The proposal is open to all options on this matter (keeping in mind the value of the stanchion also serving the water closet as set out in proposed new Section 604.12 in which the performance requirement of a 28-inch reach distance is utilized.) The 28 inches is based on a reachability analysis as well as being explained and illustrated in Appendix A to this proposal; a very large (200-plus) slide presentation. Note there is also a second vertical stanchion digitally added at the vanity side serving the water closet.

Finally—*almost*— at least for this supplementary “REASON” section of the proposal, a critical detail that, I hope will be accepted to no longer specify a fixed 1.5- inch clearance between a grab bar and the wall to which it is attached. Here follows the proposed change and below that is the experiment that was painfully executed in the course of addressing this matter empirically. The clearance in the photo sequence that follows was exactly 1.5 inches yet an older male adult’s hand could pass through, sustaining bruising to the back of the hand. Surely this issue of adding one word, “minimum” will be accepted as a similar change has been accepted on related topics. Moreover (recognizing Figures do not govern over requirements in text), A117-2017 has a Figure (609.3 on page 88) showing the 1.5-inch spacing as a minimum for a horizontal grab bar.

**609.3 Spacing.** The space between the wall and the grab bar or stanchion shall be 1 1/2 inches (38 mm) minimum. The space between the grab bar or stanchion and projecting objects below and at the ends of

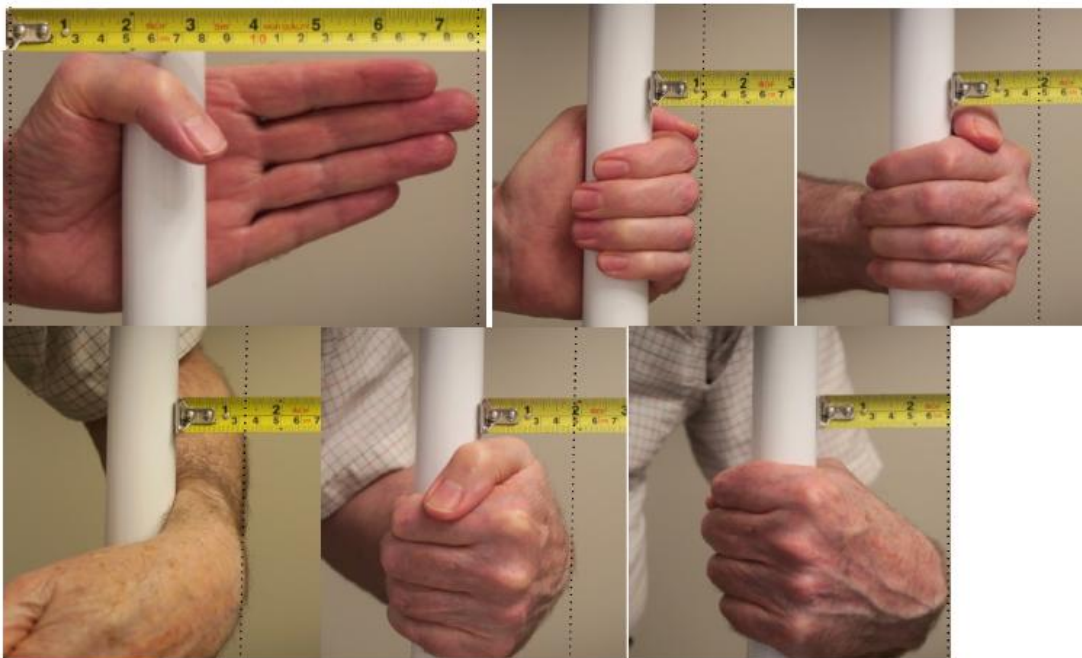


the grab bar or stanchion shall be 1 1/2 inches (38 mm) minimum. The space between the grab bar or stanchion and projecting objects above the grab bar or stanchion shall be 12 inches (305 mm) minimum.



Finally, for more insights into the 1.5-inch clearance in 609.3, there is not just the risk of difficult- to-heal internal hand injuries with the current absolute 1.5-inch spacing, but also bruising and abrasions to ones knuckles. See the photos below.

Here follows a sequence of photographs taken of the proponent's hand size (of 7 1/2- inch, 190 mm length) and grasping a 1.3-inch (33 mm) diameter stanchion complete with a scale showing how much of the hand projects into the space that would be available with a wall surface nearby.



Clearly for hand sizes such as for an 80-year old US male (depicted here), the absolute spacing of 1.5 inches (38 mm), currently in the ANSI A117.1 standard needs to be reassessed if knuckle damage is to be prevented along with injuries to the thickest part—and very complex part—of the hand, at the base of the thumb. *For these areas of a large adult male hand, 1 3/4 inches (45 mm) would be an improved minimum and 2 inches would be even more prudent.* The most preferred option would consist of revising the (minimum) clearance, throughout 609.3 and 609.5 to 2 inches (51 mm) in which case it could be left as an absolute clearance—if that was still desired for some reason—for horizontal grab bars as well as the stipulated minimum clearance everywhere else.]

Thank you all.

Jake Pauls, BArch, CPE, HonDSc, PROPONENT OF PROPOSAL 06-13-2021

Web: [www.bldguse.com](http://www.bldguse.com)

Mobile: 301-706-8830

**Committee Action:** Tabled

**Notes 8-9-2022 and 8-25-2022:** Motion is AS

**Question divided:**

604 – AS 5-22-2/D 24-6-2

607 – AS 7-18-4/Motion to Disapprove;

Motion to table 17-9-2 till 8/25/2022 call

Motion to untable passed.

Motion to table part 2 to end of chapter 6 carries with 3 votes in opposition.

608 –

Modification to 608.9.1 and 608.9.3 passed 19-1-3

Motion to table parts 3 to end of chapter 6 carries with 1 vote in opposition

609 – Motion to table parts 4 to end of chapter 6 carries with 1 vote in opposition

**Modification (if any):**

**Divided question Item 3: *Modification passed 19-1-3***

**Further modify as follows:**

**608.9.1 At shower exterior.** A vertical grab bar or stanchion shall be provided outside of the shower compartment, adjacent to the access opening within ~~28 inches (710 mm)~~ 24 inches (610 mm) of the center of the shower entrance opening width. The grab bar or stanchion shall extend from 24 inches (610 mm) maximum to 60 inches (1524 mm) minimum, measured vertically above the finished floor.

**608.9.3 For larger shower interior.** For showers with any interior plan dimensions exceeding 51 inches (1295 mm), including diagonally between corners, a grab bar or stanchion located interior to the shower compartment shall be ~~28 inches (710 mm)~~ 24 inches (610 mm) maximum, measured horizontally to the access to the shower. If oriented vertically, the grab bar or stanchion shall extend from 24 inches (610 mm) maximum to 60 inches (1524 mm) minimum, measured vertically above the finished floor outside the shower. If oriented horizontally, the grab bar or stanchion shall have a length 36 inches (915mm) minimum at a height, measured vertically above the finished floor outside the shower, of 48 inches (1220 mm) minimum and 60 inches (1524 mm) maximum.

**Notes 8-25-2022:**

**Reason for modification:** The modification is based on anthropometric data for reach. The 28" is arm length, and the 24" would be to the center of the hand. This is a bar that is intended to be graspable and needs to be closer for stability reasons.

**Notes 12-15-2022:**

This proposal was split and tabled during the 8-25-2022 meeting. The proponent submitted a replacement proposal that was substantially different from the original proposal. Therefore, the actions taken on 8-25-2022 are void and the discussion will start over.

- 06-13-2021 Replacement: AM based on replacement modification; divided question



- Discussion begun on 12-15-2022
- Part 1 - Definition for 'stanchion' – AM 5-21-2; D 23-3-3
- Part 2 - Section 603 and 604; The chair ruled that the revision of Section 604.10 to 612 is out of order. This change is not included. AM 11-13-1; D 25-4-2

## SECTION 604 WATER CLOSETS AND TOILET COMPARTMENTS

**604.1 General.** Wheelchair accessible water closets and toilet compartments shall comply with Section 604. Compartments containing more than one plumbing fixture shall comply with Section 603. Wheelchair accessible compartments shall comply with Section 604.9. Ambulatory accessible compartments shall comply with Section ~~604.10~~ **612**.

**Exception:** Water closets and toilet compartments primarily for children's use shall be permitted to comply with Section 604.11 as applicable.

- Part 3 – Section 609 –
  - The chair ruled that 609.2.2 change from 4.8 to 6.3 for grab bars is out of order and is therefore only applicable to stanchions.

**609.2.2 Noncircular cross section.** Grab bars and stanchions with a noncircular cross section shall have a cross section dimension of 2 inches (51 mm) maximum, and a perimeter dimension of 4 inches (100 mm) minimum and ~~4.8~~ **6.3 inches (120 160 mm)** maximum. Corner radius shall be 1/4 inch (6 mm) minimum.

- Part 4 – Motion to hear Section 609.9 separated out from 609
- The item was tabled due to the discussion extending 45 minutes past the scheduled meeting time. Tabled 12-9-0

### Notes 1-5-2023:

- Removed from table at start of 1/5/2023 meeting - unanimous
- Part 3 – 609.1 through 609.8
  - Jake requested to remove from Section 609.2.2 change from 4.8 to 6.3. The chair ruled that this will be included as part of proposed modification.
  - Question was called at 1:28 p.m. – 6 against, motion passes
  - Part 3 – Section 609.1 through 609.8 - AM 4-26-3; D 24-6-2
- Part 4 – Section 609.9
  - Modification – strike 'and sealed' 24-0-1
  - Modification – see report for complete mod 22-2-3
  - Part 4 AM with 2 modifications - 26-1-4
- Part 5 – Section 612 –
  - Divided to consider conceptual vote of 612 and 612.1 (1<sup>st</sup> of 2 sections with this number) separately – AM 14-14-2; The chair votes in support to break tie
  - Discussed remainder by parts, 612.2, 612.3, 612.4 – no votes taken
  - Discussion will start again at the 1/19/2023 call with Section 612.5

### Notes 1-19-2023:

- Removed from table at start of 1/19/2023 meeting
- Part 6 –
  - Discussion of Section 612.5

- Two documents from Larry Schneider were sent out with the email for the general meeting reminder on Tuesday, Jan. 17.
  - Stanchions for A117.1\_LMS
  - Conflict between Grab bars NFPA vs Accessibility Model\_LMS
- Section 612.1 (2<sup>nd</sup> of 2 sections with this number) through 612.5.5 – AM 1-21-2; D 25-1-2

**Committee Action:** The committee voted on the replacement proposal, so the standing motion was AM

- Part 1 - Definition for ‘stanchion’ – AM 5-21-2; D 23-3-3
- Part 2 - Section 603 and 604 - AM 11-13-1; D 25-4-2
- Part 3 – Section 609.1 through 609.8 - AM 4-26-3; D 24-6-2
- Part 4 – Section 609.9 - AM with 2 modifications - 26-1-4
- Part 5 – Section 612 and 612.1 (Scope) –AM 15-14-2
- Section 612.1 (General) through 612.5.5 – AM 1-21-2; D 25-1-2

## REPORT OF HEARING:

### Modification (if any):

Part 4 - Further modify as follows:

**609.9 Durability in presence of water.** Grab bars and stanchions, including mountings, shall be installed ~~and sealed, to protect structural elements from or provided with permanent drainage for components subject to~~ water intrusion and moisture.

### Committee Reason:

#### Part 1 – definition of stanchion

The new definition was disapproved for the following reasons. The description is more about the purpose of the stanchion rather than a definition of what a stanchion is. The proposed language does not clearly define a difference between a grab bar and a stanchion – this could be read to apply to both.

#### Part 2 - Section 603 and 604

The chair ruled that the revision of the reference in Section 604.1 from Section 604.10 to 612 is out of order. This change is not included.

Part 2 was disapproved for the following reasons. The proposal to add ‘wheelchair accessible’ is incomplete – it revised only two sections. This is not an editorial change as indicated in notes in the proposal. This revision does not add clarity to the confusion between the new requirements proposed for ‘ambulatory accessible bathrooms’ and the current ‘ambulatory accessible compartments.’

#### Part 3 – Section 609.1 through 609.8

The chair ruled that 609.2.2 change from 4.8 to 6.3 for grab bars is out of order and is therefore only applicable to stanchions.

Jake requested to remove from Section 609.2.2 the change from 4.8 to 6.3. The chair ruled that this will be included as part of proposed modification.

Part 3 was disapproved for the following reasons. In Section 609.2.2, the ¼” edge for a grab bar or stanchion is greater than the 0.01” edge for handrails currently in the IBC that is based on studies provided by the Stairway Manufacturer’s Association. There was no justification provided for the significant difference. In Section 609.3, the ½” minimum gap proposed for behind the grab bar would be a conflict with the ADA. There is also a safety concern for persons that rest their forearm on top of the grab bar if the gap was larger.

In Section 609.5 the ¼” edge for surfaces would be confusing for wall surfaces such as tile. The justification provided for grasping of a bar does not translate to edges on surfaces behind a grab bar or stanchion. In Section 609.7, it is not clear what the exception is attempting to exempt you from in the main text.

#### **Part 4 – Section 609.9**

The intent of the modification was to provide performance language instead of prescriptive language to protect connections from failing. The second modification to remove “and sealed” was to coordinate with that intent, since ‘and sealed’ could be read to not allow drainage holes. There were concerns that adding “structural elements” could be read to apply only to the walls or floors and not the screws in the connections. Common failure is a mis-match of metal types between the screws and the grab bars, or the rusting of the screws holding the grab bars in place. If the proposal to add stanchions is disapproved, the removal of “and stanchions” would be referred to the editorial committee. The committee agreed with the original intent of the proposal – to reduce failure of the grab bar connections over time.

#### **Part 5 – Section 612 and 612.1 (Scope)**

Section 612.1 was acted on separately in order to determine the committee's desired direction on the remainder of the section. If disapproved, the proponent indicated the intent to move for disapproval of the remainder. The vote on the motion to approve 612 and 612.1 Scope was tied with the chair voting in favor of the motion to allow for complete discussion of the topic.

#### **Part 6 – 612.1 (General) through 612.5**

The proposal was disapproved.

While this proposal does not include scoping, the committee was reluctant to adopt these requirements without knowing where they would be scoped due to concerns that if this applied to units that are required to meet other accessibility standards, these grab bar locations would conflict with the requirements in other standards.

While specific methods of attachment of vertical stanchions are not specified, there were concerns that the attachment of the vertical stanchion to the edge of the bathtub could cause damage and/or affect the fixture's warranty. Regarding use of adhesives, it is not clear how one would document compliance with loading requirements and suitable adhesive type.

612.3 – There were concerns that the vertical stanchions at water closets would be an obstruction for persons trying to get to the water closet with a walker, cane or crutches. Swing up grab bars should also be considered as a possible option.

612.4 – There were concerns that vertical stanchion at bathtubs that comply with these location requirements could be an obstruction for persons who wanted to transfer to a bathing seat and/or parents trying to bath their children in the tub.

There were concerns that with a vertical stanchion on the edge of a tub, a shower curtain would not adequately contain water and may contribute to a slip and fall hazard on a wet floor.

The diagonal grab bars on the rear wall, if located with the front edge close to the wall, would place the diagonal bar close to the front of the tub. This is not consistent with the intent expressed in the examples in the reason statement.

612.5 – The requirements for the vertical grab bars and stanchions are stated in relation to the shower opening, but do not address fixtures with swinging or sliding doors.

**604 et al-PAULS.doc**

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## **06-13 – 2021 Ballot Comments**

### **BALLOT COMMENT 1- FIRST DRAFT:**

Proponent: *Sharon Toji, HLAA*

Desired Action: Negative with comment- <b>Part 1</b>
Modification:
Reason: These well-researched proposals are vital for people to wish to age in place. They should be given further considered and modification as necessary.
<b>BALLOT COMMENT 2- FIRST DRAFT:</b>
Proponent: <i>Jake Pauls</i>
Desired Action: Negative with comment- <b>Part 1</b>
Modification:
Reason: It was ICC staff that wanted the general language whereas I, as proponent, wanted to clearly separate the two types of “points of control” while also—for the benefit of those who do not know what “point of control” includes—providing such background. The definition could benefit from some more discussion within the Committee.
<b>BALLOT COMMENT 3- FIRST DRAFT:</b>
Proponent: <i>Sharon Toji, HLAA</i>
Desired Action: Negative with comment- <b>Part 2</b>
Modification:
Reason: These well-researched proposals are vital for people to wish to age in place. They should be given further considered and modification as necessary.
<b>BALLOT COMMENT 4- FIRST DRAFT:</b>
Proponent: <i>Jake Pauls</i>
Desired Action: Negative with comment- <b>Part 2</b>
Modification:
Reason: I agree with the criticism that the proposal was flawed by the lack of completeness in my effort to differentiate “wheelchair (non-ambulatory)” and “ambulatory” use. Perhaps in another lifetime this can be better handled.
<b>BALLOT COMMENT 5- FIRST DRAFT:</b>
Proponent: <i>Sharon Toji, HLAA</i>
Desired Action: Negative with comment- <b>Part 3</b>
Modification:
Reason: These well-researched proposals are vital for people to wish to age in place. They should be given further considered and modification as necessary.
<b>BALLOT COMMENT 6- FIRST DRAFT:</b>
Proponent: <i>Jake Pauls</i>
Desired Action: Negative with comment- <b>Part 3</b>
Modification:
Reason: If the A117 Committee really believes that A117 should follow a blatantly stupid criterion in only in the IBC, based on what industry (SMA) wanted, then I will deal with the danger to ones graspability elsewhere. The 100 <sup>th</sup> of an inch is increasingly sharp to older persons hands. Some knives have a less sharp edge. The committee should revisit this if it is really serious about graspability. Also, there is a typo in the disapproval reason; the “1/2” should be 1 ½ inch. Moreover, the grab bar spacing to a wall should not be based so strongly on one Committee Member’s justification based on resting ones arm on the grab bar. Most of ones arm will slip between a grab bar and a wall.

**BALLOT COMMENT 7- FIRST DRAFT:**Proponent: *Jake Pauls*Desired Action: Affirmative with comment-**Part 4**

Modification:

Reason: I am OK with the Modification, but disagree with some of the claims made in the Committee justification re. “Common failure is a mis-match of metal types....”

**BALLOT COMMENT 8 FIRST DRAFT:**Proponent: *Daniel Dain, AIA*Desired Action: Affirmative with comment-**Part 4**

Modification:

Reason: Acceptable with editorial removal of “and stanchions.”

**BALLOT COMMENT 9- FIRST DRAFT:**Proponent: *Doug Anderson, AHFA*Desired Action: Negative with comment-**Part 4**

Modification:

Reason: Not applicable as other parts were disapproved.

**BALLOT COMMENT 10- FIRST DRAFT:**Proponent: *Kimberly Paarlberg, ICC*Desired Action: Negative with comment-**Part 4**

Modification: See Ballot Comment 10

**BALLOT COMMENT 11- FIRST DRAFT:**Proponent: *Brad Gaskins, NACS*Desired Action: Negative with comment-**Part 4**

Modification:

Reason: Getting too complicated and not necessary.

**BALLOT COMMENT 12- FIRST DRAFT:**Proponent: *Daniel Buuck, NAHB*Desired Action: Affirmative with comment-**Part 4**

Modification:

Reason: See the Public Comment from NAHB.

**BALLOT COMMENT 13- FIRST DRAFT:**Proponent: *Jake Pauls*Desired Action: Affirmative with comment-**Part 5**

Modification:

Reason: With my modification of the original proposal—or at least what is left of it with the “Approval”—the topic is more prepared for “primetime” by referring to existing, well-established criteria for provision of “points of control” (stanchions and grab bars) for most bathtubs and showers in the ANSI-approved standard, NFPA 101 which, now, has three editions addressing this topic.

**BALLOT COMMENT 14- FIRST DRAFT:**Proponent: *Daniel Dain, AIA*Desired Action: Negative with comment-**Part 5**

Modification:
Reason: Does not seem appropriate to introduce a new section plus a new undefined word “stanchion” without the balance of the requirements. Need to resolve the entirety of the section.
<b>BALLOT COMMENT 15- FIRST DRAFT:</b>
Proponent: <i>Rex Pace, HUD</i>
Desired Action: Negative with comment- <b>Part 5</b>
Modification:
Reason: As none of the related proposal in regard to “stanchions” was passed, this change is not necessary and could be confusing. Recommend that editorial committee address.
<b>BALLOT COMMENT 16- FIRST DRAFT:</b>
Proponent: <i>Kimberly Paarlberg, ICC</i>
Desired Action: Negative with comment- <b>Part 5</b>
Modification: See Ballot Comment 16
<b>BALLOT COMMENT 17- FIRST DRAFT:</b>
Proponent: <i>Daniel Buuck, NAHB</i>
Desired Action: Affirmative with comment- <b>Part 5</b>
Modification:
Reason: Creating a section for ambulatory accessible features only makes sense if the applicable requirements are located there. If that does not happen, the new section should be removed.
<b>BALLOT COMMENT 18- FIRST DRAFT:</b>
Proponent: <i>Kyle Thompson, PMI</i>
Desired Action: Negative with comment- <b>Part 5</b>
Modification:
Reason: The scope that was approved by the committee under Part 5 no longer has any place in the A117.1 standard. Part 5 was presented as an idea. To determine if the committee members approved of the idea of including text for Ambulatory accessible fixtures. However, the substance of the proposals which were in Parts 1-3 and 6 were disapproved.
<b>BALLOT COMMENT 19- FIRST DRAFT:</b>
Proponent: <i>Doug Anderson, AHFA</i>
Desired Action: Negative with comment- <b>Part 5</b>
Modification:
Reason: Not applicable as other parts were disapproved..
<b>BALLOT COMMENT 20- FIRST DRAFT:</b>
Proponent: <i>Brad Gaskins, NACS</i>
Desired Action: Negative with comment- <b>Part 5</b>
Modification:
Reason: Getting too complicated and not necessary..
<b>BALLOT COMMENT 21- FIRST DRAFT:</b>
Proponent: <i>Sharon Toji, HLAA</i>
Desired Action: Negative with comment- <b>Part 6</b>
Modification:



Reason: These well-researched proposals are vital for people to wish to age in place. They should be given further considered and modification as necessary.

#### **BALLOT COMMENT 22- FIRST DRAFT:**

Proponent: *Jake Pauls*

Desired Action: Negative with comment-**Part 6**

Modification:

Reason: With my modification proposed, my disapproval of what the Committee failed to do is less serious. Referencing a pertinent ANSI-approved standard for the details on bathtubs and showers fixes a big deficit in A117.1 now, IF the committee acts reasonably on my accompanying Public Comment to add the reference to NFPA 101 for bathtubs and showers as well as adopting the details I provide for a modest package of new detailed requirements for toilets within A117.1. If the Committee fails to adopt the modest requirements I propose for toilets in my Public Comment; I will work on deleting the new requirement I had proposed (with adoption, for the NFPA 101-2024 edition) by the NFPA 101 Committee that we should refer the subject of toilets to new A117.1 requirements. The A117 Committee can beef up the requirements in my Public Comment if that will help to complete action within ANSI-approved documents. Right now, I have emphasized stanchions as the best way of serving ambulatory users of toilets. Vertical and horizontal grab bars at toilets have implementation and use issues “above my pay grade” to solve.

Generally, I urge the Committee to put some effort into addressing my Public Comment accompanying these Ballot comments. Otherwise the whole matter of ambulatory accessible features needed for bathroom facilities will be addressed in other ANSI-approved standards even to a greater extent than is now the case (paralleling what has happened with stairway requirements where A117.1 followed the precedents in NFPA 101).

## **06-13 – 2021 Public Comment 1**

### **All Parts**

#### **106.2.14 (New), 612 (New)**

**Proponent:** Jake Pauls, Jake Pauls Consulting Service, representing self

**Replace entire proposal and revise follows:**

#### **SECTION 612.**

#### **AMBULATORY ACCESSIBLE TOILETS, BATHTUBS AND SHOWER COMPARTMENTS**

**612.1 Scope.** Ambulatory accessible toilets, bathtubs and shower compartments shall comply with Section 612.

**612.2 Ambulatory accessible toilets not in compartments complying with Section 604.10. Ambulatory accessible toilets shall be provided with grab bars or stanchions complying with Section 612.2, where all location dimensions are to the centerline of the grab bar or stanchion, and with Section 609 for dimensions and other requirements.**

**Exception.** Clearances between stanchion grasp surfaces and other surfaces shall be 1 1/2 inches (38 mm) minimum.

**612.2.1 Number and location of vertical grab bars and stanchions.** Each side of the toilet shall have a vertical stanchion or vertical grab bar within a 24-inch (610 mm) horizontal distance from, and in front of, the center of the front lip of the toilet bowl. Each vertical stanchion and vertical grab bar shall provide for hand graspability at the minimum length and minimum height above the floor specified in Section 604.5.1.2 or 604.2.3.

**612.2.2 Shared use of a stanchion or grab bar also serving a bathtub or shower.** A grab bar or stanchion complying with Section 612.3, shall be permitted to also serve a toilet if it is suitably adjacent by virtue of also complying with Section 612.2.1.

**612.3. Ambulatory accessible bathtubs and shower compartments.** Ambulatory accessible bathtubs and shower compartments shall comply with NFPA 101, Chapter 24 requirements for “Grab Bars and Stanchions for Bathtubs, Bathtub-Shower Combinations, and Showers.”

## **SECTION 106 REFERENCED DOCUMENTS**

**106.2.14 Life Safety Code.** NFPA 101-2024 Life Safety Code (National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-9101).

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**REASON:** Other ANSI standards (e.g., from NFPA) have permitted stanchions where, formerly (before 2018) only conventional grab bars would have been permitted to meet requirements of an ANSI standard covering bathroom facility usability and/or safety. Also, the 2024 edition of NFPA 101, a longstanding ANSI standard, addresses usability and safety of bathtubs and showers completely enough to serve as a reference standard for A117.1 in relation to ambulatory accessibility uses. For toilet usability and safety for ambulatory users, the 2024 edition of NFPA 101 (and NFPA 5000) references A117.1 for toilets. Thus, while it is good ANSI protocol for NFPA 101 to reference A117.1 for toilets, this also means that A117.1 must provide a suitable set of requirements for ambulatory accessibility (and usability) of toilets anticipated with NFPA’s referral to A117.1 in its 2024 editions of NFPA 101 and NFPA 5000. If A117.1 does not provide a satisfactory set of requirements for ambulatory accessible toilets, including those not in compartments currently addressed by A117.1, NFPA’s edition after 2024 will need some work to provide what A117.1 does not address.

Regarding substantiation, there has been very ample substantiation already provided with my proposal **06-13-21** and, if A117 Committee members wish to see even more substantiation now, the official NFPA representative on the A117 Committee can be approached to see if, and how, the copyright proposals, Committee actions, and NFPA 101/5000 requirements plus related Annex information, can be shared with the A117 Committee. The copyright issues this involves are “above my pay grade” although this might allow me to provide at least a listing of the relevant section numbers of the NFPA documents including those having extensive, related Annex notes.

All I will add at this time is that, over a period of a few decades—even longer than my role on the A117 Committee, NFPA 101 committees have increasingly addressed safety and usability issues that arise in the course of nonemergency occupant movement within buildings and facilities. In the case of bathroom-related injury incidents, fire service personnel are often called on to provide first responses to the injury scene which, in the case of modest home bathrooms, can involve injured persons falling in such a way as to block—*significantly*—the opening, to a compact bathroom, of its usually single, in-swinging, access door. Thus it is not surprising that NFPA 101 and 5000 have taken a lead on the subject of bathroom facility usability as well as safety of ambulatory users who fall and sustain serious injuries in all conditions of use.

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**Committee Action of Public comment 1:**

PC1 - Split question between toilets – 612.2 thru 612.2.2 and tubs/showers – 612.3

PC1 Part 1 – AS – 6-21-3

PC1 Part 2 – D 4-16-1

**REPORT OF HEARING:****Replace with the following:****Committee Reason:**

PC1 Part 1 – AS – 6-21-3

The committee discussed the sections one at a time.

Mr. Pauls proposed a modification for Section 612.2.1 with an exception. The chair ruled this out of order as too extensive.

- While safety is an important issue for people with disabilities, this is addressing a safety issue for people with and without disabilities, which is not appropriate as a minimum accessibility standard. Because this far exceeds the scope of A117.1, it would be more appropriate as a mainstreamed requirement in building codes.
- It is not clear what is meant by the term ‘ambulatory accessible toilet’ and where this is intended to be applied. This will be an important consideration not only for any future scoping requirements but also for understanding the intended application of the technical requirements.
- The measurements for the grab bars to be to the center of the bar is in conflict with the top of the bar specified in Section 609.4.1.
- A requirement for 2 vertical stanchions at a water closet could block access to the toilet by persons using a cane or walker, or would be obstruct a care giver needing to stand next to the toilet.
- The ideal location of stanchions vary based on a person's individual needs, strength and mobility. A set location will not be useful for some users.
- The requirement in Section 609.4 for protection against water intrusion would not apply to stanchions and may be a problem with structural deterioration of floor-mounted stanchion connections. There is also concern over the effect on the waterproofing and fire resistance rating characteristics of floor assemblies that will be penetrated by stanchion fasteners.
- Measurement from the front of the bowl for the vertical stanchion placement is a construction sequence issue for the installation of blocking before the toilet is installed. The location of the front of the bowl will vary based on the type of bowl installed. The specific toilet to be installed is sometimes selected after the plumbing and blocking is installed. It would not be appropriate to use a highly variable point of measurement for this requirement.
- There is a concern for the attachment to a bathtub – both from strength of the surround and possibly voiding warranty if you penetrate the tub.
- The proposed phrase in Section 612.2.2 “if it is suitably adjacent by virtue of compliance with” is not good code language.

**PC1 Part 2 – D 4-16-1**

- The provisions in NFPA 101 are requirements for ‘means of escape’. They are not listed as an accessibility issue. This is clearly a mainstreamed safety issue for all users, not just for people with disabilities, which is appropriate in building codes, not in A117.1.
- This may be a subject more appropriate as recommendations in a design guide or similar resource rather than as a minimum requirement.

- The grab bar and stanchion requirements are in conflict with the blocking for Type A and Type B dwelling units and the grab bar locations in Accessible units.
- The proposal is not sufficiently clear since it makes a generic reference to Chapter 24 and only attempts to pinpoint the specific provisions with the title of the NFPA section instead of a specific reference to Section 24.2.8.
- The proposed text is worded as a scoping requirement, which is not appropriate here. Regardless, this would introduce a set of technical requirements that are not yet scoped. The suitability of the requirements as a package is difficult to evaluate with knowing the intended scope of their application.
- There are technical issues with requirements in Section 24.2.8 of NFPA 101:
  - The requirements are assuming a 60” wide tub and shower with a set 36”/24” length for horizontal and diagonal grab bars. The requirements are for centering or length from end with no tolerances for movement, so this does not address the variety of tubs and showers on the market.
  - The concept of requiring compliance of all accessibility requirements, including these, is appropriate in a scoping document, not in the technical standards. It is not something that can be enforced at the time of initial design and construction.

**06-13 Pauls.doc**

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## **06-13 – 2021 Ballot Comment 10**

### **Part 4**

#### **609.9**

**Proponent:** Kimberly Paarlberg, ICC

**Further revise as follows:**

**609.9 Durability in presence of water.** Grab ~~bar bars and stanchions, including~~ mountings, shall be installed to protect structural elements from water intrusion and moisture.

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**REASON:** Requirements for stanchions did not get approved, so they should not be in a section for grab bars. The language to ‘protect structural elements’ would be consistent with IBC 1201.2.1.2.

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**Committee Action for Ballot Comment 10:** NA

### **REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

**06-13 Paarlberg.doc**

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## **06-13 – 2021 Public Comment 2**

### **Part 4**

#### **609.9**

**Proponent:** Dan Buuck, National Association of Home Builders (NAHB)

Further revise as follows:

## SECTION 609 GRAB BARS

**609.9 Durability in presence of water.** ~~Grab bars and stanchions, including mountings, shall be installed to protect structural elements from water intrusion and moisture. All components of grab bars shall be designed and installed to not collect or hold moisture, and the mounting shall be designed and installed to protect against water intrusion into the grab bars, fasteners, mounting components and building cavities. Fasteners shall be of a material compatible with the grab bar mounting components.~~

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**REASON:** As written this section could allow the ends of grab bar mountings to be sealed to the wall in a way that could then collect and hold moisture, causing corrosion to the grab bar mounting hardware or sanitation concerns. This change is intended to provide guidance while mounting a grab bar so it doesn't allow water into the wall structure. It also shouldn't create a situation where water can be captured, such as under an escutcheon, where corrosion could occur or issues with sanitation are possible. The second sentence is intended to prohibit the use of fasteners of dissimilar metals which can cause corrosion.

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**Committee Action for Public Comment 2:** AS 22-3

### REPORT OF HEARING:

#### Modification (if any):

**Committee Reason:** The proposal clarifies the requirements to protect grab bars from failure due to moisture intrusion. This removes 'stanchions' which are not required in the A117.1.

06-13 Buuck.doc

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## 06-13 – 2021 Ballot Comment 16

### Part 5

### 612, 612.1

**Proponent:** Kimberly Paarlberg, ICC

Further revise as follows:

## SECTION 612

### ~~AMBULATORY ACCESSIBLE TOILETS, BATHTUBS AND SHOWER COMPARTMENTS~~

~~612.1 Scope. Ambulatory accessible toilets, bathtubs and shower compartments shall comply with Section 612.~~

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**REASON:** The proposal as a whole was disapproved, so a general section does not include requirements, would be confusing and should be deleted.

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:** The deletion of the title and scope section is editorial sin 06-13 PC1 was disapproved, therefore there are no requirements in this section.

**06-13 Paarlberg.doc**

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**06-13 – 2021 1<sup>st</sup> draft Committee Action**

**Committee Action for First Ballot:**

Disapproval with the exception of Section 609.9 as modified by PC2

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

PC2 – Section 609.9 - The proposal clarifies the requirements to protect grab bars from failure due to moisture intrusion. This removes ‘stanchions’ which are not required in the A117.1.

PC1 - was disapproved; see comment for reason

BC16 - The deletion of the title and scope section is editorial sin 06-13 PC1 was disapproved, therefore there are no requirements in this section.

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**06-13 – 2021 2<sup>nd</sup> draft Ballot Comment 1**  
**609.9, 609.20(New)**

**Proponent:** Jake Pauls, self

**Vote:** negative with comment, AM

**Further revise as follows:**

**609.9 Durability in presence of water.** All components of grab bars, stanchions, and other related “point of control” devices, shall be designed and installed to not collect or hold moisture, ~~and the~~. The mounting shall be designed and installed to protect against water intrusion into ~~the grab bars~~ all device voids, fasteners, mounting components and building cavities. Fasteners shall be of a material compatible with the ~~grab bar device~~ mounting components.

**609.10 Use by ambulatory persons with disabilities affecting the usability plus safety of bathtubs, showers and toilets.** For safety and usability requirements for bathtubs, showers and toilets beyond the scope of accessibility and usability requirements of this Standard, the requirements of NFPA 101 or NFPA 5000 shall be utilized in design, installation and retrofit for uses by ambulatory persons.

**106.2.8 Life Safety Code.** NFPA 101-2024 (National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-9101).



**Staff note:** The submitted language was as follows. What is show is in the ICC A117.1 format for referenced documents.

**609.10 Use by ambulatory persons with disabilities affecting the usability plus safety of bathtubs, showers and toilets.** For safety and usability requirements for bathtubs, showers and toilets beyond the scope of accessibility and usability requirements of this Standard, the requirements of ANSI/NFPA 101 or ANSI/NFPA 5000 editions, beginning in 2024, (within the chapters for one- and two-family dwellings) shall be utilized in design, installation and retrofit for uses by ambulatory persons.

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**REASON:**

- Here I note that NFPA 101 and NFPA 5000 are way ahead of ICC products in dealing with the usability and safety of residential settings, notably in the case of 1- and 2-family dwellings where the requirements for stairs and handrails, for example, are far more responsive and realistic than the industry-dominated ICC codes for dwelling units. NFPA is, thus, a world leader in addressing usability and safety of the leading injury-associated aspects of homes—stairways and bathrooms—as was presented in detail in my proposal 06-13 to ICC-ANSI A117.1.
- Both NFPA 101 and NFPA 5000 editions, beginning in 2018, started requiring grab bars for usability and safety of bathtubs and showers. After the 2021 editions (which first started referring to “stanchions” for what were termed “poles” in the 2018 NFPA edition), toilets were addressed as proposals for the 2027 editions, first to scope what I had also proposed in an ICC/ANSI A117.1 proposal (06-13), for toilets, using a reference to toilet requirement proposals I had proposed for A117.1. Except for a small minority, the A117 Committee did not favor any of the usability and safety requirements for A117.1 with the exception of what is in **Proposal 06-13-2021 AM Part 4/AM PC2** (also part of this November 2024 ballot for A117.1).
- This explains the position, (**609.10**), being used to follow the accepted changes to 609.9 with this relatively modest progress, based on far more comprehensive efforts on my part, designated as (my original) **Proposal 06-13-2021 AM Part 4/AM PC2**. It is the only thing I can hang on to (as a modest achievement) at this point in the A117 revision process—*likely the last I will be working on in my 84<sup>th</sup> year of life and as the longest-serving Individual Member of the A117 Committee* (a position I held *after* I accepted an invitation to serve on the Editorial Task Group of the Committee decades ago—during the CABO days).
- The addition of toilets to the scope of my effort to get grab bars and stanchions for bathtubs and showers in the first (unsuccessful) public comment draft of A117 was the major impetus for this final public comment on my proposal 06-13. This was tied to a parallel effort to get the NFPA Residential TC to adopt a reference to A117 specifically for toilets to be equipped with grab bars and/or stanchions—*in accordance with A117.1 requirements*. This was not successful (because the A117 Committee rejected such a requirement) and this ballot opportunity is the first formal chance to follow up on that rejection.
- The strategy now is **not** to have NFPA 101 and 5000 reference A117.1 for toilet-related grab bars for ambulatory accessibility, usability and safety, but to have NFPA take the lead and scope its own requirements for toilets as it did for showers and bathtubs, starting in the 2015 editions of NFPA 101 and NFPA 5000. That is planned for completion in the next two years, for the 2027 editions of NFPA

101 and 5000. The A117 Committee had the opportunity to get a “piece of the pie” on ambulatory usability and safety of bathrooms; it chose not to and this public comment makes clear what should/could have been included in A117’s next edition based on proposal 06-13 which has, effectively, become part of two ANSI standards, but not ANSI A117.1.

- (The following sentence could be an Annex Note or at least as part of the Reason Statement.) Such persons’ disabilities include altered balance, strength, vision, and other conditions that are not within the explicit scope of this Standard, A117.1, but which accompany aging, injury recovery, among many other conditions especially common in residential settings.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-13 – 2021 2<sup>nd</sup> draft Committee Action**

**Committee Action for First Ballot:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Further modify as follows:**

**Committee Reason:**

<b>Report for 06-13– 2021</b>		
<b>Committee decision:</b> The committee voted on the replacement proposal, so the standing motion was AM <ul style="list-style-type: none"> <li>• Part 1 - Definition for ‘stanchion’ D 23-3-3</li> <li>• Part 2 - Section 603 and 604 - D 25-4-2</li> <li>• Part 3 – Section 609.1 through 609.8 - D 24-6-2</li> <li>• Part 4 – Section 609.9 - AM with 2 modifications - 26-1-4</li> <li>• Part 5 – Section 612 and 612.1 (Scope) –AM 15-14-2</li> <li>• Section 612.1 (General) through 612.5.5 –D 25-1-2</li> </ul>	<b>Committee Vote at Meeting:</b> See notes in first column	<b>Committee Vote on Ballot:</b> 33-10-2
<b>REPORT OF HEARING:</b> Modification (if any): Part 4 - Further modify as follows:  <b>609.9 Durability in presence of water.</b> Grab bars and stanchions, including mountings, shall be installed and sealed, to protect structural elements from or provided with permanent drainage for components subject to water intrusion and moisture.		
<b>Committee Reason:</b> <b>Part 1</b> – definition of stanchion The new definition was disapproved for the following reasons. The description is more about the purpose of the stanchion rather than a definition of what a stanchion is. The proposed language does not clearly define a difference between a grab bar and a stanchion – this could be read to apply to both.  <b>Part 2</b> - Section 603 and 604		

## Report for 06-13– 2021

The chair ruled that the revision of the reference in Section 604.1 from Section 604.10 to 612 is out of order. This change is not included.

Part 2 was disapproved for the following reasons. The proposal to add 'wheelchair accessible' is incomplete – it revised only two sections. This is not an editorial change as indicated in notes in the proposal. This revision does not add clarity to the confusion between the new requirements proposed for 'ambulatory accessible bathrooms' and the current 'ambulatory accessible compartments.'

### Part 3 – Section 609.1 through 609.8

The chair ruled that 609.2.2 change from 4.8 to 6.3 for grab bars is out of order and is therefore only applicable to stanchions. Jake requested to remove from Section 609.2.2 the change from 4.8 to 6.3. The chair ruled that this will be included as part of proposed modification.

Part 3 was disapproved for the following reasons. In Section 609.2.2, the ¼" edge for a grab bar or stanchion is greater than the 0.01" edge for handrails currently in the IBC that is based on studies provided by the Stairway Manufacturer's Association. There was no justification provided for the significant difference. In Section 609.3, the ½" minimum gap proposed for behind the grab bar would be a conflict with the ADA. There is also a safety concern for persons that rest their forearm on top of the grab bar if the gap was larger. In Section 609.5 the ¼" edge for surfaces would be confusing for wall surfaces such as tile. The justification provided for grasping of a bar does not translate to edges on surfaces behind a grab bar or stanchion. In Section 609.7, it is not clear what the exception is attempting to exempt you from in the main text.

### Part 4 – Section 609.9

The intent of the modification was to provide performance language instead of prescriptive language to protect connections from failing. The second modification to remove "and sealed" was to coordinate with that intent, since 'and sealed' could be read to not allow drainage holes. There were concerns that adding "structural elements" could be read to apply only to the walls or floors and not the screws in the connections. Common failure is a mis-match of metal types between the screws and the grab bars, or the rusting of the screws holding the grab bars in place. If the proposal to add stanchions is disapproved, the removal of "and stanchions" would be referred to the editorial committee. The committee agreed with the original intent of the proposal – to reduce failure of the grab bar connections over time.

### Part 5 – Section 612 and 612.1 (Scope)

Section 612.1 was acted on separately in order to determine the committee's desired direction on the remainder of the section. If disapproved, the proponent indicated the intent to move for disapproval of the remainder. The vote on the motion to approve 612 and 612.1 Scope was tied with the chair voting in favor of the motion to allow for complete discussion of the topic.

### Part 6 – 612.1 (General) through 612.5

The proposal was disapproved.

While this proposal does not include scoping, the committee was reluctant to adopt these requirements without knowing where they would be scoped due to concerns that if this applied to units that are required to meet other accessibility standards, these grab bar locations would conflict with the requirements in other standards.

While specific methods of attachment of vertical stanchions are not specified, there were concerns that the attachment of the vertical stanchion to the edge of the bathtub could cause damage and/or affect the fixture's warranty. Regarding use of adhesives, it is not clear how one would document compliance with loading requirements and suitable adhesive type.

612.3 – There were concerns that the vertical stanchions at water closets would be an obstruction for persons trying to get to the water closet with a walker, cane or crutches. Swing up grab bars should also be considered as a possible option.

612.4 – There were concerns that vertical stanchion at bathtubs that comply with these location requirements could be an obstruction for persons who wanted to transfer to a bathing seat and/or parents trying to bath their children in the tub.

There were concerns that with a vertical stanchion on the edge of a tub, a shower curtain would not adequately contain water and may contribute to a slip and fall hazard on a wet floor.

The diagonal grab bars on the rear wall, if located with the front edge close to the wall, would place the diagonal bar close to the front of the tub. This is not consistent with the intent expressed in the examples in the reason statement.

612.5 – The requirements for the vertical grab bars and stanchions are stated in relation to the shower opening, but do not address fixtures with swinging or sliding doors.

**Committee decision: AFM PC2;  
AS BC16**

**Committee Vote at Meeting: 22-3;  
24-1**

**Committee Vote on Ballot:**

### REPORT OF HEARING – FIRST DRAFT

Modification (if any):

Committee Reason:

PC2 – Section 609.9 - The proposal clarifies the requirements to protect grab bars from failure due to moisture intrusion. This removes 'stanchions' which are not required in the A117.1.

PC1 - was disapproved; see comment for reason

BC16 - The deletion of the title and scope section is editorial sin 06-13 PC1 was disapproved, therefore there are no requirements in this section.

**Committee decision: AS/AM/D**

**Committee Vote at Meeting:**

**Committee Vote on Ballot:**

### FINAL ACTION:

Modification (if any):

Committee Reason:

## 06-15 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-15	Mazz	604.3.3	AM 29-3-1	9-8-2022 2-29-2024	Final action is AFM BC1 and PC1

Comment 1 <sup>st</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Dain, AIA	Affirmative	AM 20-2	2-15-2024	
PC1	Terminology	AM	AS 29-0	2-29-2024	Editorial

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Mazz, USA	AM			See also 06-84-2021

## 06-15 – 2021

### 604.3.3

**Proponent:** Marsha Mazz, representing United Spinal Association

**Revise as follows:**

#### SECTION 604 WATER CLOSETS AND TOILET COMPARTMENTS

##### 604.3 Clearance.

**604.3.3 Clearance overlap.** The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, ~~paper dispensers, sanitary napkin receptacles, coat hooks, shelves,~~ accessible routes, clear floor space at other fixtures and the turning space. In addition, paper dispensers, trash receptacles, coat hooks, and shelves shall be permitted to overlap 4 inches (100 mm) maximum into the water closet clearance. No other fixtures or obstructions shall be located within the required water closet clearance.

**REASON:** In our inspections, Accessibility Services has observed that very large paper dispensers, trash receptacles, coat hooks, and shelves often obstruct access to the water closet and also can interfere with the legs of a person seated on the water closet. We believe that if these elements are to be permitted in the clearance, a 4-inch overlap should be sufficient to accommodate them – anything more is a potential obstruction limiting access to the water closet and reducing the maneuvering space around it.

We replace the term “sanitary napkin receptacles” with “trash receptacles” so that they are not prohibited in the water closet clearance in toilet rooms for men.

**Committee Action:** As Modified 29-3-1

##### REPORT OF HEARING:

**Modification (if any):**

**Further modify as follows:**

**604.3.3 Clearance overlap.** The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, accessible routes, clear floor space at other fixtures and the turning space. In addition, paper dispensers, trash receptacles, coat hooks, and shelves shall be permitted to overlap ~~4~~6 inches (~~100-150~~ mm) maximum into the water closet clearance. No other fixtures or obstructions shall be located within the required water closet clearance.

**Committee Reason:** The modification from 4” to 6” was to allow for standard paper rolls and their dispensers – 4” would be too tight. The proposal will provide a limit on the possible obstructions caused by these elements within the clear floor space for a water closet.

604.3.3-MAZZ.doc

## 06-15 – 2021 Ballot Comments

<b>BALLOT COMMENT 1- FIRST DRAFT:</b>
Proponent: <i>Daniel Dain, AIA</i>
Desired Action: Affirmative with comment
Modification: See Ballot Comment 1

### 06-15 – 2021 Ballot Comment 1 604.3.3

**Proponent:** Daniel Dain, AIA

**Further modify the proposal:**

**604.3.3 Clearance overlap.** ~~The required clearance around the water closet shall be permitted to overlap~~ The water closet, associated grab bars, accessible routes, clear floor space at other fixtures and the turning space ~~shall be permitted to overlap the water closet clearance. . In addition,~~ Paper dispensers, trash receptacles, coat hooks, ~~and open or closed~~ shelves, medical and security alert devices shall be permitted to overlap 6 inches (150 mm) maximum into the water closet clearance. No other fixtures or obstructions shall be permitted to overlap the required water closet clearance.

**REASON:** None

**Committee Action for Ballot Comment 1:**

Divide question –

Part 1 ‘medical and security alert devices’ ; modified to ‘emergency’ - 20-2

Part 2 first sentence and “In addition” - 10-11

Part 3 “open and closed” - 2-20

**REPORT OF HEARING:**



**Modification (if any):**  
**Replace with the following:**

**604.3.3 Clearance overlap.** The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, accessible routes, clear floor space at other fixtures and the turning space. In addition, Paper dispensers, trash receptacles, coat hooks, ~~and~~ shelves, **and emergency alert devices** shall be permitted to overlap 6 inches (150 mm) maximum into the water closet clearance. No other fixtures or obstructions shall be permitted to overlap the required water closet clearance.

**Committee Reason:**

Part 1 – Important to allow “medical and security alert devices” for life safety concerns.

Change ‘medical and security’ changed to ‘and emergency’ so that the intent is clear that this is a button or cord, not some other type of medical device. Approved 20-2

Part 2 - Change to first sentences lost ‘required’ with the water closet clearance. Fails 10-11

Part 3 - There is a concern about ‘closed shelves’ being interpreted as a cabinet of any size. This could be a much larger obstruction vertical obstruction than an open shelf. The doors opening on a cabinet could add an additional obstruction. The committee did not object to a cabinet for storage over a toilet tank or a shelf for medical pass thru. The current text would allow interpretation for intent. Fails 2-20

05-16 Dain.doc

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## 06-15 – 2021 Public Comment 1

### 602.4.3.3

**Proponent:** Marsha Mazz, representing the Terminology Task Group

**Further revise as follows:**

#### SECTION 604 WATER CLOSETS AND TOILET COMPARTMENTS

**604.3.3 Maneuvering Clearance overlap.** The required maneuvering clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, accessible routes, clear floor space at other fixtures and the turning space. In addition, paper dispensers, trash receptacles, coat hooks, and shelves shall be permitted to overlap 6 inches (150 mm) maximum into the ~~water-closet maneuvering clearance around the water closet~~. No other fixtures or obstructions shall be located within the required ~~water-closet maneuvering~~ clearance around the water closets.

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**REASON:** This is part of a proposal from the Terminology task group to define the building blocks so that a reference is not required. This public comment is included here because it was part of new text. Please see the complete proposal for additional information.

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**Committee Action for Public Comment 1:**

AS 29-0

### REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:** This is a clarification for application of clearances at plumbing fixtures by consistently calling them maneuvering clearance.

06-15 Terminology.doc

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## 06-15 – 2021 1<sup>st</sup> draft Committee Action

Committee Action for First Ballot:

AFM by BC1 and PC1

### REPORT OF HEARING:

**Modification (if any):**

**Further modify:**

**604.3.3 Clearance overlap.** The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, accessible routes, clear floor space at other fixtures and the turning space. In addition, paper dispensers, trash receptacles, coat hooks, ~~and~~ shelves, and emergency alert devices shall be permitted to overlap 6 inches (150 mm) maximum into the water closet clearance. No other fixtures or obstructions shall be permitted to overlap the required water closet clearance.

**Committee Reason:**

BC1– Important to allow “medical and security alert devices” for life safety concerns. Change ‘medical and security’ changed to ‘and emergency’ so that the intent is clear that this is a button or cord, not some other type of medical device.

PC1 - This is a clarification for application of clearances at plumbing fixtures by consistently calling them maneuvering clearance.

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## 06-15 – 2021 2<sup>nd</sup> draft Ballot Comment 1

### 604.3.3

**Proponent:** Marsha Mazz USA

**Vote:** negative with comment, AM

**Further revise as follows:**

**604.3.3 Maneuvering clearance overlap.** The required maneuvering clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, accessible routes, clear floor space or maneuvering clearances at other fixtures and the turning space. In addition, paper dispensers, trash receptacles, coat hooks, shelves, and emergency alert devices shall be permitted to overlap 6 inches (150 mm) maximum into the maneuvering clearance around the water closet provided that the protrusions are necessary for the space to function as intended. No other fixtures or obstructions shall be located within the required maneuvering clearance around the water closet.

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**REASON:** Just as with the turning space, there must be a limit on the space taken-up by overlapping elements. I am particularly concerned by the thought that multiple 6-inch projections could significantly decrease the

space to the point where it is unusable. The proposal below puts the burden on the designer to ensure that added features, such as shelves, are necessary before installed. Although it would be better to quantify protrusion allowances and to specify locations where their impact on usability are minimized, we are unable to offer a revision that would accomplish this objective at this time. Note that this Section, unlike the nearly identical Section 611.5.3 for assisted toileting contains a 6-inch limitation on overlap. These two Sections should be correlated.

NOTE to STAFF: This same proposal is also applicable to Proposal 06-84-2021 for Section 611.5.1 Maneuvering clearance width for assisted toileting. Please include both of these in this proposal, otherwise they will not be correlated.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-15 – 2021 2<sup>nd</sup> draft Committee Action**

**Committee Action for First Ballot:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Further modify as follows:**

**Committee Reason:**

<b>Report for 06-15– 2021</b>		
<b>Committee decision:</b> AM	<b>Committee Vote at Meeting:</b> 29-3-1	<b>Committee Vote on Ballot:</b> 39-1-1
<b>REPORT OF HEARING:</b> Modification (if any): <b>Further modify as follows:</b> <b>604.3.3 Clearance overlap.</b> The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, accessible routes, clear floor space at other fixtures and the turning space. In addition, paper dispensers, trash receptacles, coat hooks, and shelves shall be permitted to overlap 4-6 inches (100 150 mm) maximum into the water closet clearance. No other fixtures or obstructions shall be located within the required water closet clearance.		
Committee Reason: The modification from 4" to 6" was to allow for standard paper rolls and their dispensers – 4" would be too tight. The proposal will provide a limit on the possible obstructions caused by these elements within the clear floor space for a water closet.		
<b>Committee decision:</b> AM by BC1 and AS PC1	<b>Committee Vote at Meeting:</b> BC1 – 20-2; PC1 – 29-0	<b>Committee Vote on Ballot:</b>
<b>REPORT OF HEARING – FIRST DRAFT</b>		
Modification (if any): <b>Further modify BC1:</b>  <b>604.3.3 Clearance overlap.</b> The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, accessible routes, clear floor space at other fixtures and the turning space. In addition, paper dispensers, trash receptacles, coat hooks, and shelves, and emergency alert devices shall be permitted to overlap 6 inches (150 mm) maximum into the water closet clearance. No other fixtures or obstructions shall be permitted to overlap the required water closet clearance.		
Committee Reason: BC1– Important to allow “medical and security alert devices” for life safety concerns. Change ‘medical and security’ changed to ‘and emergency’ so that the intent is clear that this is a button or cord, not some other type of medical device. PC1 - This is a clarification for application of clearances at plumbing fixtures by consistently calling them maneuvering clearance.		

**Report for 06-15– 2021***Committee decision: AS/AM/D**Committee Vote at Meeting:**Committee Vote on Ballot:***FINAL ACTION:**

Modification (if any):

Committee Reason:

## 06-18 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-18	Steinfeld	604.4, Figure 604.4	AM 24-2-3	9-8-2022 2-15-2024 6-20-2024	Final Action D Reconsideration - Final Action AM

Comment 1 <sup>st</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Pace, HUD	Negative	NA	2-15-2024	
BC2	Paarlberg, ICC	Affirmative	D 22-3	2-15-2024	Chair ruled comment out of scope
Reconsideration 1	Steinfeld	AM	AS 27-2-2	6-20-2024	
Reconsideration 2	Steinfeld	AM	AM 22-3-2;16-1-4	6-20-2024	

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Mazz, USA	AM			See also 06-82-2021

## 06-18 – 2021 604.4, Figure 604.4

**Proponent:** Edward Steinfeld, IDEA Center, School of Architecture and Planning, University at Buffalo, State University of New York, representing RESNA

Revise as follows:

### SECTION 604 WATER CLOSETS AND TOILET COMPARTMENTS

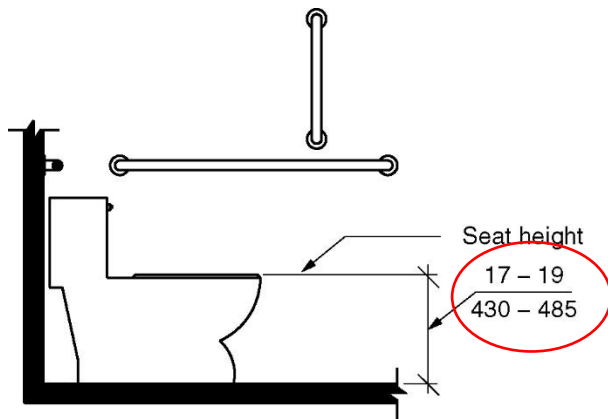
**604.4 Height.** The height of water closet seats shall be 17 inches (430 mm) minimum ~~and to 19~~ 20 inches (485 510 mm) maximum above the floor, measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

#### EXCEPTIONS:

1. An accessible water closet which is adjustable in height ~~by the user is permitted or which provides multiple hinged seats shall be permitted to provide adjustability within a range of 17 inches (430 mm) minimum to 25 inches (635 mm) maximum,~~ provided that at least one adjustment setting provides a seat within the range specified in Section 604.4.
2. A water closet in a toilet room for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with this section.

(Note: Revise figure 604.4 to show 17-20)





Note: For children's dimensions see Fig. 604.11.4

**FIGURE 604.4  
WATER CLOSET SEAT HEIGHT**

**REASON:** The current standard does not reflect the findings of recent research. The existing dimensions are based on 1970's data. Since that time, new wheelchair technology, particularly the common use of cushions and other seating supports designed to reduce pressure ulcers and position people for improved social interaction and use of equipment, have led to increased seat heights. See Design Resources: Analysis of Seat Height for Wheeled Mobility Devices at <http://idea.ap.buffalo.edu/wp-content/uploads/sites/110/2019/08/23.pdf> The above proposed revision is consistent with this research. The findings indicate that a range of 17-25 in. (430-635 mm) will accommodate almost all of the wheeled mobility population. This exception will provide guidance to manufacturers who are developing adjustable height toilets. Without this guidance, they may not address the full range of needs in the population.

**Staff Note:** Question was split between Section 604.4 and Exception 2

**Committee Action:**

Part 1- Section 604.4 As submitted 24-2-3

Part 2 – Exception 1 Disapproval 32-0-1

**REPORT OF HEARING:**

**Modification (if any):**

**Replace the proposal as follows:**

**604.4 Height.** The height of water closet seats shall be 17 inches (430 mm) minimum ~~and to 19~~ to 20 inches (485 ~~510~~ mm) maximum above the floor, measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

**EXCEPTIONS:**

1. An accessible water closet which is adjustable in height by the user is permitted provided that at least one adjustment setting provides a seat within the range specified in Section 604.4.
2. A water closet in a toilet room for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with this section.

**Committee Reason:** The committee split the proposal; with the change to 604.4 main paragraph approved and the change to the exception disapproved. The end result is a modified proposal that just change the maximum seat height to 20". This is appropriate as it is based on Dr. Steinfeld's research showing that the seat height for different mobility devices is higher. The specifics for the hinged seating proposed to be added in the exception was not needed as this option is already permitted in the current exception.

604.4-STEINFELD.doc

## 06-18 – 2021 Ballot Comments

### BALLOT COMMENT 1- FIRST DRAFT:

Proponent: *Rex Pace, HUD*

Desired Action: Negative with comment

Modification:

Reason: The vote against modification of exception 1 does not dispute the legitimacy of the suggested range for an adjustable seat height. Rather it is simply that a fix height seat height for toilets is permitted to begin with and the proposed range significantly exceeds the fixed range. Therefore, the current exception is appropriate mandate for a fixture of this nature. The proposed adjustable height range is encouraged as a best practice that, hopefully, future technology will readily permit.

### BALLOT COMMENT 2- FIRST DRAFT:

Proponent: *Kimberly Paarlberg, ICC*

Desired Action: Affirmative with comment

Modification: See Ballot Comment 2

## 06-18 – 2021 Ballot Comment 2 610.2

**Proponent:** Kimberly Paarlberg, ICC

**Further modify as follows:**

**610.2 Bathtub seats.** The height of bathtub seats shall be 17 inches (430 mm) minimum ~~and to 19 20 inches (485 510 mm)~~ maximum above the bathroom floor, measured to the top of the seat. Removable in-tub seats shall be 15 inches (380 mm) minimum and 16 inches (405 mm) maximum in depth. Removable in-tub seats shall be capable of secure placement. Permanent seats shall be 15 inches (380 mm) minimum in depth and shall extend from the back wall to or beyond the outer edge of the bathtub. Permanent seats shall be positioned at the head end of the bathtub.

**903.5 Height.** The top of the bench seat shall be 17 inches (430 mm) minimum ~~and to 19 20 inches (485 510 mm)~~ maximum above the floor, measured to the top of the seat.

**Exception:** Benches primarily for children's use shall be permitted to be 11 inches (280 mm) minimum and 17 inches (430 mm) maximum above the floor, measured to the top of the seat.

**REASON:** 06-18-2021 Section 604.4 changes toilet seats and 06-82-21 Section 601.3 changed the height of shower seats to a top range of 20" based on Dr. Steinfeld's study. This should also be applied to bathtub seats and bench seats.

What is approved so far is -

06-41-21 AM; 06-42-21 AM; 06-45-21 AM

**610.2 Bathtub seats.** The height of bathtub seats shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the bathroom floor, measured to the top of the seat. Bathtub seats shall be rectangular in shape. Removable in-tub seats shall be 15 inches (380 mm) minimum and 16 inches (405 mm) maximum in depth. Removable in-tub seats shall be capable of secure placement. Permanent seats shall be 15 inches (380 mm) minimum in depth and shall extend from the back wall to or beyond the outer edge of the bathtub. Permanent seats shall be positioned at the head end of the bathtub.

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**Committee Action for Ballot Comment 2:** Chair ruled BC2 out of order – overturned 9-15, so ruling stands

## REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:**

06-18 Paarlberg.doc

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## 06-18 – 2021 Reconsideration 1

604.4, 610.2, 903.5

**Proponent:** Edward Steinfeld, IDEA Center, School of Architecture and Planning, University at Buffalo, State University of New York, representing RESNA

**Replace with the following:**

**604.4 Height.** The height of water closet seats shall be 17 inches (430 mm) minimum and 19 20 inches (485 510 mm) maximum above the floor, measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

### EXCEPTIONS:

1. An accessible water closet which is adjustable in height by the user is permitted provided that at least one adjustment setting provides a seat within the range specified in Section 604.4.
2. A water closet in a toilet room for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with this section.

**610.2 Bathtub seats.** The height of bathtub seats shall be 17 inches (430 mm) minimum and 19 20 inches (485 510 mm) maximum above the bathroom floor, measured to the top of the seat. Removable in-tub seats shall be 15 inches (380 mm) minimum and 16 inches (405 mm) maximum in depth. Removable in-tub seats shall be capable of secure placement. Permanent seats shall be 15 inches (380 mm) minimum in depth and shall extend from the back wall to or beyond the outer edge of the bathtub. Permanent seats shall be positioned at the head end of the bathtub.

**903.5 Height.** The top of the bench seat shall be 17 inches (430 mm) minimum and ~~19~~ 20 inches (~~485~~ 510 mm) maximum above the floor, measured to the top of the seat.

**Exception:** Benches primarily for children's use shall be permitted to be 11 inches (280 mm) minimum and 17 inches (430 mm) maximum above the floor, measured to the top of the seat.

---

**REASON:** This proposal has been split into two items – maximum height and an exception for adjustable seats. Reconsideration is requested for 06-18 and 6-82 because in review of these proposals, the A117.1 felt the information in the anthropometric study should be the basis to revise the standard. Further, discussion indicated that committee members were unhappy with differences in seat height range. They desired consistency across all instances where seat height was specified for bathroom fixtures. Approving all these proposals would add consistency in the document.

**What is approved so far is -**

**06-41-21 AM; 06-42-21 AM; 06-45-21 AM**

**610.2 Bathtub seats.** The height of bathtub seats shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the bathroom floor, measured to the top of the seat. Bathtub seats shall be rectangular in shape. ~~Removable in-tub seats shall be 15 inches (380 mm) minimum and 16 inches (405 mm) maximum in depth. Removable in-tub seats shall be capable of secure placement. Permanent seats shall be 15 inches (380 mm) minimum in depth and shall extend from the back wall to or beyond the outer edge of the bathtub. Permanent seats shall be positioned at the head end of the bathtub.~~

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**Committee Action for Reconsideration 1:** AS 27-2-2

## **REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:** While the 20" height does differ from the 2010 ADA Accessibility Standard, Dr. Steinfeld's research does show that the seats of mobility devices are higher. We agree with the technical justification.

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## **06-18 – 2021 Reconsideration 2**

**604.4, 610.2, 903.5**

**Proponent:** Edward Steinfeld, IDEA Center, School of Architecture and Planning, University at Buffalo, State University of New York, representing RESNA

**Replace with the following:**

**604.4 Height.** The height of water closet seats shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the floor, measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

**EXCEPTIONS:**

1. An accessible water closet which is adjustable in height ~~by the user is permitted provided that at least one adjustment setting provides a seat or which provides multiple seat height options~~ within the range specified in Section 604.4.

2. A water closet in a toilet room for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with this section.

**610.2 Bathtub seats.** The height of bathtub seats shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the bathroom floor, measured to the top of the seat. Removable in-tub seats shall be 15 inches (380 mm) minimum and 16 inches (405 mm) maximum in depth. Removable in-tub seats shall be capable of secure placement. Permanent seats shall be 15 inches (380 mm) minimum in depth and shall extend from the back wall to or beyond the outer edge of the bathtub. Permanent seats shall be positioned at the head end of the bathtub.

**Exception:** An accessible bathtub seat which is adjustable in height or which provides multiple seat height options within the range specified in Section 610.2.

**903.5 Height.** The top of the bench seat shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the floor, measured to the top of the seat.

**Exception Exceptions:**

1. Benches primarily for children's use shall be permitted to be 11 inches (280 mm) minimum and 17 inches (430 mm) maximum above the floor, measured to the top of the seat.
2. An accessible bench seat which is adjustable in height or which provides multiple seat height options within the range specified in Section 903.5.

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**REASON:** This proposal has been split into two items – maximum height and an exception for adjustable seats. Approving all these proposals would add consistency in the document while also insuring that new technology providing adjustable height seating would address the range of needs in the wheelchair user population.

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#### **Committee Action for Reconsideration 2:**

Part 1-toilet; AM 22-3-1;

Mod 1 "at least three seat heights throughout" AS 12-14-3 fails

Mod 2 restore "by the user" and remove "or which provides multiple seat height options"- AS 19-1-3

Part 2- bathtubs; AM 16-1-4

Modification to match exception in Part 1 – AS 17-2-2

Part 3 – Bench; AM 16-1-4 (with Part 2)

Modification to match exception in Part 1 – AS 19-0-4

#### **REPORT OF HEARING:**

**Modification (if any):**

**Replace with the following:**

**604.4 Height.** The height of water closet seats shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the floor, measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

#### **EXCEPTIONS:**

1. An accessible water closet which is adjustable in height ~~by the user is permitted provided that at least one adjustment setting provides a seat~~ within the range specified in Section 604.4.
2. A water closet in a toilet room for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with this section.

**610.2 Bathtub seats.** The height of bathtub seats shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the bathroom floor, measured to the top of the seat. Removable in-tub seats shall be 15 inches (380 mm) minimum and 16 inches (405 mm) maximum in depth. Removable in-tub seats shall be capable of



secure placement. Permanent seats shall be 15 inches (380 mm) minimum in depth and shall extend from the back wall to or beyond the outer edge of the bathtub. Permanent seats shall be positioned at the head end of the bathtub.

**Exception** An accessible bathtub seat which is adjustable in height by the user within the range specified in Section 610.2.

**903.5 Height.** The top of the bench seat shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the floor, measured to the top of the seat.

**Exception Exceptions:**

1. Benches primarily for children's use shall be permitted to be 11 inches (280 mm) minimum and 17 inches (430 mm) maximum above the floor, measured to the top of the seat.
2. An accessible bench seat which is adjustable in height by the user within the range specified in Section 903.5.

**Committee Reason:** The exceptions will reinforce that the new technologies that allow for adjustable seating should be permitted.

It is the intent of the committee that the seats can be adjusted to outside of the specified range as well – this will exceed requirements.

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## 06-18 – 2021 1<sup>st</sup> draft Committee Action

**Committee Action for First Ballot:** Disapproval 22-3

**Committee Action for Reconsideration:**

Reconsideration 1 – AS 27-2-2

Reconsideration 2 – Three parts – toilets AM 22-3-1; bathtubs and benches AM 16-1-4

### REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:** Water closet seats and shower seats were raised to 20", but there were not similar changes to tub seats and bench heights. This needs to be consistent throughout the standard. In addition, the 20" height might be more difficult for persons who are shorter than normal. Standing persons were not addressed in Dr. Steinfeld's study for persons in mobility devices.

**Committee Reason for Reconsideration:**

**Reconsideration 1** - While the 20" height does differ from the 2010 ADA Accessibility Standard, Dr. Steinfeld's research does show that the seats of mobility devices are higher. We agree with the technical justification.

**Reconsideration 2** - The exceptions will reinforce that the new technologies that allow for adjustable seating should be permitted.

It is the intent of the committee that the seats can be adjusted to outside of the specified range as well – this will exceed requirements.

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## 06-18 – 2021 2<sup>nd</sup> draft Ballot Comment 1

### 604.4, 610.2, 903.5

**Proponent:** Marsha Mazz USA

**Vote:** negative with comment, AM

**Further revise as follows:**

**604.4 Height.** The height of water closet seats shall be 17 inches (430 mm) minimum and 20 inches (510 mm) maximum above the floor, measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

**Exceptions Exception:**

- ~~1. A water closet which is adjustable in height by the user within the range specified in Section 604.4.~~
- ~~2. A water closet in a toilet room for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with Section 604.4.~~

**610.2 Bathtub seats.** The height of bathtub seats shall be 17 inches (430 mm) minimum and 20 inches (510 mm) maximum above the bathroom floor, measured to the top of the seat. Bathtub seats shall be rectangular in shape.

~~**Exception:** A bathtub seat which is adjustable in height by the user within the range specified in Section 610.2.~~

**903.5 Height.** The top of the bench seat shall be 17 inches (430 mm) minimum and 20 inches (510 mm) maximum above the floor, measured to the top of the seat.

**Exceptions Exception:**

- ~~1. Benches primarily for children's use shall be permitted to be 11 inches (280 mm) minimum and 17 inches (430 mm) maximum above the floor, measured to the top of the seat.~~
- ~~2. A bench seat which is adjustable in height by the user within the range specified in Section 903.5.~~

Staff note: See 06-82-2021

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**REASON:** Delete the exception because it is not needed. If the seat meets the specified height, it complies whether it is adjustable outside these heights.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-18 – 2021 2<sup>nd</sup> draft Committee Action**

**Committee Action for First Ballot:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Further modify as follows:**

**Committee Reason:**

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**Report for 06-18– 2021****Committee decision: AM****Committee Vote at Meeting: 24-2-3****Committee Vote on Ballot: 38-2-1****REPORT OF HEARING:**

Modification (if any):

**Replace the proposal as follows:**

**604.4 Height.** The height of water closet seats shall be 17 inches (430 mm) minimum and ~~to 19 20~~ inches (485 ~~510~~ mm) maximum above the floor, measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

**EXCEPTIONS:**

1. An accessible water closet which is adjustable in height by the user is permitted provided that at least one adjustment setting provides a seat within the range specified in Section 604.4.
2. A water closet in a toilet room for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with this section.

Committee Reason: The committee split the proposal; with the change to 604.4 main paragraph approved and the change to the exception disapproved. The end result is a modified proposal that just change the maximum seat height to 20". This is appropriate as it is based on Dr. Steinfeld's research showing that the seat height for different mobility devices is higher. The specifics for the hinged seating proposed to be added in the exception was not needed as this option is already permitted in the current exception.

**Committee decision: D****Committee Vote at Meeting: 22-3****Committee Vote on Ballot:****REPORT OF HEARING – FIRST DRAFT**

Modification (if any):

Committee Reason: Water closet seats and shower seats were raised to 20", but there were not similar changes to tub seats and bench heights. This needs to be consistent throughout the standard. In addition, the 20" height might be more difficult for persons who are shorter than normal. Standing persons were not addressed in Dr. Steinfeld's study for persons in mobility devices.

**Committee decision for reconsideration: AM****Committee Vote at Meeting: Rec. 1 27-2-2; Rec 2. Part 1 22-3-1, Parts 2 and 3 16-1-4****Committee Vote on Ballot:****REPORT OF HEARING – FIRST DRAFT RECONSIDERATION**

Modification (if any):

**Replace with the following:**

**604.4 Height.** The height of water closet seats shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the floor, measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

**EXCEPTIONS:**

1. An accessible water closet which is adjustable in height ~~by the user is permitted provided that at least one adjustment setting provides a seat~~ within the range specified in Section 604.4.
2. A water closet in a toilet room for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with this section.

**610.2 Bathtub seats.** The height of bathtub seats shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the bathroom floor, measured to the top of the seat. Removable in-tub seats shall be 15 inches (380 mm) minimum and 16 inches (405 mm) maximum in depth Removable in-tub seats shall be capable of secure placement. Permanent seats shall be 15 inches (380 mm) minimum in depth and shall extend from the back wall to or beyond the outer edge of the bathtub. Permanent seats shall be positioned at the head end of the bathtub.

**Exception** An accessible bathtub seat which is adjustable in height by the user within the range specified in Section 610.2.

**903.5 Height.** The top of the bench seat shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the floor, measured to the top of the seat.

**Exception Exceptions:**

1. Benches primarily for children's use shall be permitted to be 11 inches (280 mm) minimum and 17 inches (430 mm) maximum above the floor, measured to the top of the seat.
2. An accessible bench seat which is adjustable in height by the user within the range specified in Section 903.5.

Committee Reason:

**Reconsideration 1** - While the 20" height does differ from the 2010 ADA Accessibility Standard, Dr. Steinfeld's research does show that the seats of mobility devices are higher. We agree with the technical justification.

**Reconsideration 2** - The exceptions will reinforce that the new technologies that allow for adjustable seating should be permitted. It is the intent of the committee that the seats can be adjusted to outside of the specified range as well – this will exceed requirements.

**Committee decision: AS/AM/D****Committee Vote at Meeting:****Committee Vote on Ballot:****FINAL ACTION:**

Modification (if any):

Committee Reason:

## 06-20 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-20	Mazz	604.6	AS 24-0-1	9-8-2022 2-15-2024	Final Action AS

Comment	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Paarlberg, ICC	Affirmative	D 5-20 failed	2-15-2024	

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Reed, NGCD	AM			

## 06-20 – 2021

### 604.6

**Proponent:** Marsha Mazz, representing United Spinal Association

Revise as follows:

#### SECTION 604 WATER CLOSETS AND TOILET COMPARTMENTS

**604.6 Flush controls.** Flush controls shall be hand-operated or automatic. Where only hand ~~Hand~~ operated flush controls are provided, they shall comply with Section 309. Hand-operated flush controls shall be located on the open side of the centerline of the water closet.

**~~Exception~~ Exceptions:**

1. In ambulatory accessible toilet compartments complying with Section 604.10, flush controls shall be permitted to be located on either side of the water closet.
2. Hand-operated flush controls shall be permitted to cross the centerline of the water closet, provided that the portion of the control that is located to the open side of the centerline independently complies with Section 309.4.

**REASON:** This proposal accomplishes two things. First, it clarifies that where automatic flush controls are provided, the override button, sometimes called a courtesy button, near not be accessible. While this seems picayune, the inspectors in at least one large city have interpreted the requirement, as written, to apply to these small buttons which typically are not accessible.

Second, the proposal clarifies that a type of control that is common for dual flush toilets is compliant if a portion of the control is located to the open side of the water closet and is operable in compliance with the force requirements of Section 309.4.

**Committee Action:** 24-0-1 As Submitted

### REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:** The proposal allows for the types of controls that are on the top of tanks or on the wall over the water closet. This also clarifies that the automatic controls can be centered since they do not require activation by the user.

604.6-MAZZ.doc

## 06-20 – 2021 Ballot Comments

<b>BALLOT COMMENT 1- FIRST DRAFT:</b>
Proponent: <i>Kimberly Paarlberg, ICC</i>
Desired Action: Affirmative with comment
Modification: See Ballot Comment 1

## 06-20 – 2021 Ballot Comment 1

### 604.6

**Proponent:** Kimberly Paarlberg, ICC

**Further modify as follows:**

**604.6 Flush controls.** Flush controls shall be hand-operated or automatic. Where only hand operated flush controls are provided, they shall comply with Section 309. Hand-operated flush controls shall be located on the open side of the ~~centerline of the~~ water closet clearance.

**Exceptions:**

1. In ambulatory accessible **toilet** compartments complying with Section 604.10, flush controls shall be permitted to be located on either side of the water closet.
2. Hand-operated flush controls shall be permitted ~~to cross the centerline of the water closet, provided that the portion of the control that is located to the open side of the centerline independently complies with Section 309.4.~~ on the wall over the back of the water closet or on top of the water closet tank where the flush controls is within obstructed high reach in Section 308.3.2.

**REASON:** While I agree with the intent, I believe the language could be misinterpreted. For the main text, adding the ‘centerline of the water closet’ is not clear – just use the clearance. Exception 2 was to allow for a dual control on the back wall or top of the water closet. The proposed text is unclear. Allowing for this would support many water saving options.

### Committee Action on Ballot Comment 1: D 5-20

### REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:** The committee did not believe the proposed language was a clarification.



## 06-20 – 2021 1<sup>st</sup> draft Committee Action

Committee Action for First Ballot: AS

### REPORT OF HEARING:

#### Modification (if any):

**Committee Reason:** The committee did not believe the proposed language in BC1 was a clarification. Maintain original committee action. See original reason.

## 06-20 – 2021 2<sup>nd</sup> draft Ballot Comment 1

### 604.6

**Proponent:** Hope Reed NGCD

**Vote:** negative with comment, AM

#### Further revise as follows:

**604.6 Flush controls.** Flush controls shall be hand-operated or automatic. Where only hand operated flush controls are provided, they shall comply with *operable parts*. Hand-operated flush controls shall be located on the open side of the centerline of the water closet.

#### Exceptions:

1. In ambulatory *accessible* toilet compartments complying with Section 604.10, flush controls shall be permitted to be located on either side of the water closet.
2. Hand-operated flush controls shall be permitted to ~~cross the centerline of the water closet, provided that the portion of the control that is located to the open side of the centerline independently complies with the operable parts requirements in Section 309.4~~ to be centered on the wall over the back of the water closet or centered on top of the water closet tank where the flush controls is within obstructed high reach in Section 308.3.2.

**REASON:** I cannot understand the meaning of this ORIGINAL PROPOSAL. What does “open side of the centerline” mean, and Exception 2 is a complete mystery to interpret. We prefer the language of BC1 because it is more descriptive.

BC1 gives me language I can understand and enforce. Stating “the open side of the water closet clearance” makes sense, and Exception 2 identifies the additional controls we need to keep within reach from the open side clearance.

Further modification of BC1 Exception 2 may be needed as shown

Committee Action on 2<sup>nd</sup> draft Ballot Comment 1: AS/AM/D

### REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:**

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## **06-20 – 2021 2<sup>nd</sup> draft Committee Action**

**Committee Action for First Ballot:** AS/AM/D

### **REPORT OF HEARING:**

**Modification (if any):**

**Further modify as follows:**

**Committee Reason:**

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<b>Report for 06-20– 2021</b>		
<b>Committee decision: AS</b>	<b>Committee Vote at Meeting: 24-0-1</b>	<b>Committee Vote on Ballot:39-1-1</b>
<b>REPORT OF HEARING:</b>		
Modification (if any):		
Committee Reason: The proposal allows for the types of controls that are on the top of tanks or on the wall over the water closet. This also clarifies that the automatic controls can be centered since they do not require activation by the user.		
<b>Committee decision: D</b>	<b>Committee Vote at Meeting: 5-20 failed</b>	<b>Committee Vote on Ballot:</b>
<b>REPORT OF HEARING – FIRST DRAFT</b>		
Modification (if any):		
Committee Reason: The committee did not believe the proposed language in BC1 was a clarification. Maintain original committee action. See original reason.		
<b>Committee decision: AS/AM/D</b>	<b>Committee Vote at Meeting:</b>	<b>Committee Vote on Ballot:</b>
<b>FINAL ACTION:</b>		
Modification (if any):		
Committee Reason:		

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## 06-25 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-25	Paarlberg	604.9.3, 604.9.3.1, 604.10.3	AM 18-3-2	9-22-2022 2-15-2024	Final Action AM BC2

Comment	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Dain, AIA	Negative	NA	2-15-2024	
<b>BC2</b>	Paarlberg, ICC	Affirmative	AS 22-1	2-15-2024	

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Schorr ATBCB	AM			See 06-33-2021

## 06-25 – 2021

### 604.9.3, 604.9.3.1, 604.10.3

**Proponent:** Kimberly Paarlberg, International Code Council

Revise text as follows:

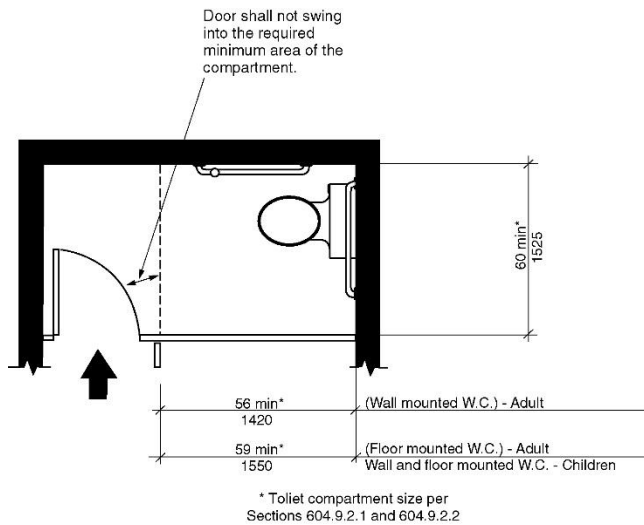
### SECTION 604 WATER CLOSETS AND TOILET COMPARTMENTS

#### 604.9 Wheelchair accessible toilet compartments.

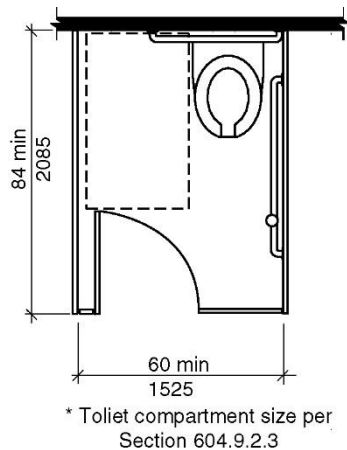
**604.9.3 Doors.** Doors for Wheelchair accessible toilet compartments ~~compartment doors, including door hardware,~~ shall comply with ~~Section 404~~ Sections 404.2.2, 404.2.3.2, 404.2.4 and 404.2.9. The door shall be self-closing with a balanced door or spring hinges. ~~Door hardware shall comply with Section 404.2.6.~~ In addition a A door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch. Wheelchair accessible toilet compartment doors shall not swing into the required minimum area of the compartment.

#### Exceptions:

1. Outside of the compartment; the door shall not be required to comply with Section 404.2.3.2 where the approach is to the latch side of the wheelchair accessible toilet compartment, door clearance between the door side of the compartment and any obstruction ~~shall be~~ is 42 inches (1065 mm) minimum.
2. Within the wheelchair accessible toilet compartment, maneuvering clearances at the door shall not be required to comply with Section ~~404~~ 404.2.3.2.
3. ~~In an alternate~~ Within wheelchair accessible toilet compartment, the door shall be permitted to swing into the stall where a clear floor space complying with Section 305.3 is provided within the stall beyond the arc of the door swing.

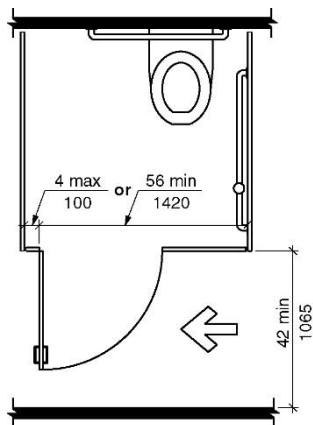


**FIGURE 604.9.3(A)**  
**WHEELCHAIR TOILET COMPARTMENT DOORS**  
**DOOR SWINGING INTO THE WHEELCHAIR TOILET COMPARTMENT**



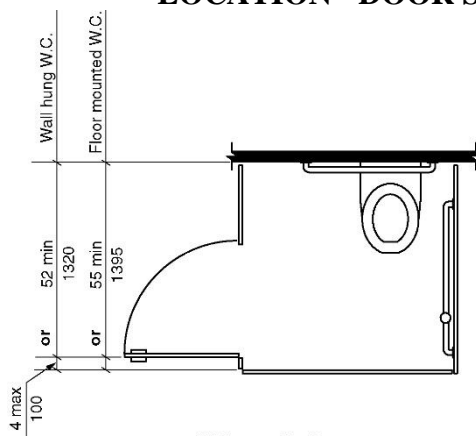
**FIGURE 604.9.3(B)**  
**WHEELCHAIR TOILET COMPARTMENT DOORS**  
**EXCEPTION 3 - ALTERNATE WHEELCHAIR COMPARTMENT**

**604.9.3.1 Door opening location.** The farthest edge of the wheelchair accessible toilet compartment door opening shall be located in the front wall or partition or in the side wall or partition as required by Table 604.9.3.1. Hinge and latch side of the doors are permitted to be oriented so that the door opens in the direction of the approach.



(a) Door swing in on  
Front wall of partition

**FIGURE 604.9.3.1(A)**  
**WHEELCHAIR TOILET COMPARTMENT DOOR OPENING**  
**LOCATION - DOOR SWINGING IN ON FRONT WALL OF PARTITION**



(b) Door swing in on  
Side wall of partition

**FIGURE 604.9.3.1(B)**  
**WHEELCHAIR TOILET COMPARTMENT DOOR OPENING LOCATION**  
**DOOR SWINGING IN ON SIDE WALL OF PARTITIONS**

## 604.10 Ambulatory accessible toilet compartments.

**604.10.3 Doors.** Doors for Ambulatory accessible toilet compartments ~~compartment doors, including door hardware,~~ shall comply with ~~Section 404~~ Sections 404.2.2, 404.2.3.2, 404.2.4 and 404.2.9. The door shall be self-closing with a balanced door or spring hinges. Door hardware shall comply with Section 404.2.6. In addition a A door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch. Compartment doors shall not swing into the required minimum area of the compartment. Hinge and latch side of the doors are permitted to be oriented so that the door opens in the direction of the approach.

### Exceptions:

1. Outside of the ambulatory accessible toilet compartment, the door shall not be required to comply with Section 404.2.3.2 where the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction ~~shall be~~ is 42 inches (1065 mm) minimum.

2. Within the ambulatory accessible toilet compartment, maneuvering clearances at the door shall not be required to comply with Section 404 404.2.3.2.
- 

**REASON:** The intent of this proposal is to clarify what is required for stall partition doors – wheelchair and ambulatory. The reference to Section 404 for door in toilet stall appears to be too broad. The change will pick up door clear width, thresholds and surface (if the stall has full height doors). The requirements for the door hardware are clarified. Items that are not for stall doors that will not be referenced are doors without doorways, recessed doors, two doors in a series, closing speed (closing is addressed in 2<sup>nd</sup> sentence), vision lights, and all of automatic doors. The added text for the 2<sup>nd</sup> sentence is intended to indicate that the door is not required to close to latch, but can remain slightly open so you can see if the stall is occupied. The change to exception 1 is to indicate that this is an exception to the maneuvering clearances. The additional sentence is to allow for the door to switch the latch and hinge side shown in the pictures to improve access into the stall. The change to exception 2 is allow the exception to apply to the new option for accessible stalls. The change to exception 3 is to allow the single occupant toilet room option to apply to wheelchair and alternation wheelchair accessible compartments.

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**Committee Action:** 18-3-2 Approved as Modified

## **REPORT OF HEARING:**

**Modification (if any):** Mod approved 23-0-2

## **Further modify as follows:**

**604.9.3 Doors.** Doors for wheelchair accessible toilet compartments shall comply with Sections 404.2.2, 404.2.3.2, 404.2.4 and 404.2.9. The door shall be self-closing with a balanced door or spring hinges. Door hardware shall comply with Section 404.2.6. In addition, a door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch. Wheelchair accessible toilet compartment doors shall not swing into the required minimum area of the compartment.

### **Exceptions:**

1. Outside of the compartment the door ~~is shall~~ not ~~be~~ required to comply with Section 404.2.3.2 where the approach is to the latch side of the wheelchair accessible toilet compartment, door clearance between the door side of the compartment and any obstruction is 42 inches (1065 mm) minimum.
2. Within the wheelchair accessible toilet compartment, maneuvering clearances at the door shall not be required to comply with Section 404.2.3.2.
3. ~~In an alternate Within~~ wheelchair accessible toilet compartment, the door shall be permitted to swing into the stall where a clear floor space complying with Section 305.3 is provided within the stall beyond the arc of the door swing.

**604.10.3 Doors.** Doors for Ambulatory accessible toilet compartments shall comply with Sections 404.2.2, 404.2.3.2, 404.2.4 and 404.2.9. The door shall be self-closing with a balanced door or spring hinges. Door hardware shall comply with Section 404.2.6. In addition a door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch. Compartment doors shall not swing into the required minimum area of the compartment. Hinge and latch side of the doors are permitted to be oriented so that the door opens in the direction of the approach.

### **Exceptions:**



1. Outside of the ambulatory accessible toilet compartment, the door ~~is shall~~ not ~~be~~ required to comply with Section 404.2.3.2 where the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction is 42 inches (1065 mm) minimum.
2. Within the ambulatory accessible toilet compartment, maneuvering clearances at the door shall not be required to comply with Section 404.2.3.2.

**Committee Reason:** The modifications to Section 604.9.3 Exception 1 and 604.10.3 Exception 1 are editorial. The committee preferred ‘is’ instead of ‘shall’. The modification to Section 604.9.3 Exception 3 was to put the exception back the way it was. There was concern that the door swinging into a stall would be an obstruction. The proposal clarifies what is required for stall partition doors – wheelchair and ambulatory. Additional clarification of ‘self-closing’ may be needed.

Staff note: This proposal was in the draft and the Sept. 22, 2022 report, but was not included in the Committee Action Report 1-19-2023. This will be included in the ballot due July 31, 2023 to allow for committee members to see the complete record to vote.

## 06-25 – 2021 Ballot Comments

### BALLOT COMMENT 1- FIRST DRAFT:

Proponent: Dan Dain, AIA

Desired Action: Negative with comment

Modification:

Reason: 604.9.3 purple highlight lists sections “404.2.2, 404.2.3.2, 404.2.4, and 404.2.9.” Appears to be missing 404.2.3.1. Section 404.2.9 would not apply for areas 10” and below since toe clearance requires bottom of door and Page 13 ICC (ASC A117) Ballot on Committee Action – August 5, 2022 partitions to be 12”. Assume 404.2.7 and 404.2.8 were discussed and purposely excepted.

### BALLOT COMMENT 2- FIRST DRAFT:

Proponent: Kimberly Paarlberg, ICC

Desired Action: Affirmative with comment

Modification: See Ballot Comment 2

## 06-25 – 2021 Ballot Comment 2

### 604.9.3

**Proponent:** Kimberly Paarlberg, ICC

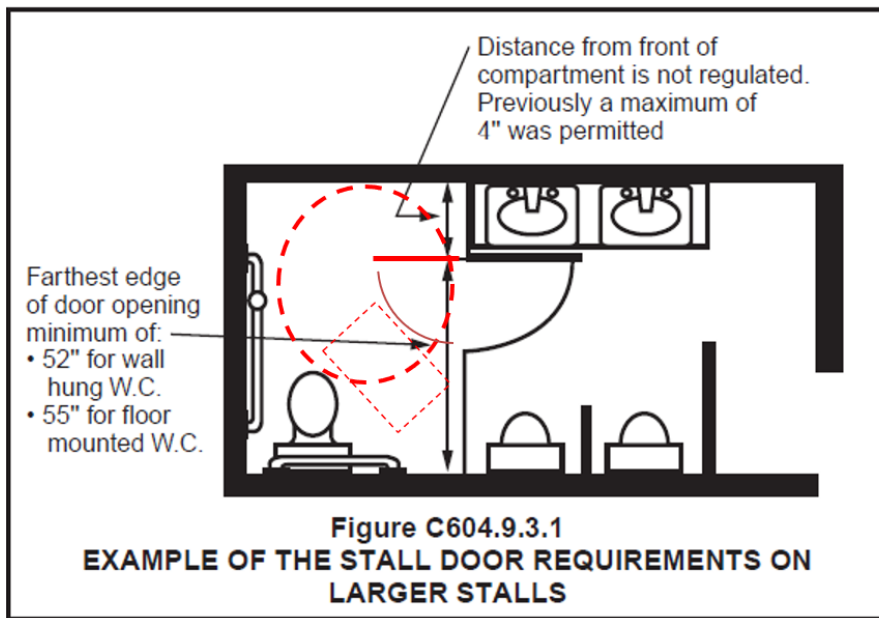
**Further modify as follows:**

**604.9.3 Doors.** Doors for wheelchair accessible toilet compartments shall comply with Sections 404.2.2, 404.2.3.2, 404.2.4 and 404.2.9. The door shall be self-closing with a balanced door or spring hinges. Door hardware shall comply with Section 404.2.6. In addition, a door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch. Wheelchair accessible toilet compartment doors shall not swing into the required minimum area of the compartment.

**Exceptions:**

1. Outside of the compartment the door is not required to comply with Section 404.2.3.2 where the approach is to the latch side of the wheelchair accessible toilet compartment, door clearance between the door side of the compartment and any obstruction is 42 inches (1065 mm) minimum.
2. Within the wheelchair accessible toilet compartment, maneuvering clearances at the door shall not be required to comply with Section 404.2.3.2.
3. In an alternate wheelchair accessible toilet compartment, the door shall be permitted to swing into the stall where a clear floor space complying with Section 305.3 is provided within the stall beyond the arc of the door swing.
4. In wheelchair accessible toilet compartment, the door shall be permitted to swing into the minimum area of the compartment where a clear floor space is provided past the swing of the door and a turning space is provided within the compartment.

**REASON:** The modification to Exception 3 to put it back the way it was took out the clarification for a wheelchair compartment to have the door swing into the wheelchair compartment. This would coordinate with the changes for the compartment size options for door location. This would let the compartment meet the same requirements as a toilet room.



**Committee Action for Ballot comment 2:**

AS 22-1

## **REPORT OF HEARING:**

### **Modification (if any):**

**Committee Reason:** This allows for the door to swing into the compartment, the same as a single occupant toilet room.

**06-25 Paarlberg.doc**

## 06-25 – 2021 1<sup>st</sup> draft Committee Action

Committee Action for First Ballot:

AFM BC2

### REPORT OF HEARING:

#### Modification (if any):

**Committee Reason:** This allows for the door to swing into the compartment, the same as a single occupant toilet room.

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## 06-25-09 – 2021 2<sup>nd</sup> draft Ballot Comment 1

### 604.9.2

**Proponent:** Josh Schorr ATBCB

**Vote:** negative with comment, AM

#### Further revise as follows:

**604.9.2 Doors.** Doors for wheelchair *accessible* toilet compartments shall comply with Sections 404.2.2, 404.2.3.2, 404.2.4 and 404.2.9. The door shall be self-closing with a balanced door, gravity hinges or spring hinges. Door hardware shall comply with Section 404.2.6. In addition a door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch. Wheelchair *accessible* toilet compartment doors shall not swing into the required minimum area of the compartment.

#### Exceptions:

1. Outside of the compartment, the door is not required to comply with Section 404.2.3.2 where the approach is to the latch side of the wheelchair *accessible* toilet compartment door, clearance between the door side of the compartment and any obstruction is 42 inches (1065 mm) minimum.
2. Within the wheelchair *accessible* toilet compartment, *maneuvering clearances* at the door shall not be required to comply with Section 404.2.3.2.
3. In an alternate wheelchair *accessible* toilet compartment, complying with Section 604.9.1.3, a door located in the front wall or partition shall be permitted to swing into the compartment where the compartment is 90 inches (2286 mm) minimum in depth.
4. In wheelchair *accessible* toilet compartment, the door shall be permitted to swing into the minimum area of the compartment where a *clear floor space* is provided past the swing of the door and a *turning space* is provided within the compartment.

**Staff note:** See 06-33-2021. This was entered as a comment to 06-23, but this change is related to 06-25 revised text.

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**REASON:** Gravity hinges are a common method of providing a self-closing door. We don't want that omitted as an option.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:**

AS/AM/D

### REPORT OF HEARING:

#### Modification (if any):

Committee Reason:

## 06-25 – 2021 2<sup>nd</sup> draft Committee Action

Committee Action for First Ballot: AS/AM/D

### REPORT OF HEARING:

Modification (if any):

Further modify as follows:

Committee Reason:

Report for 06-25– 2021		
Committee decision: AM	Committee Vote at Meeting: 18-3-2	Committee Vote on Ballot: 38-2-1
<b>REPORT OF HEARING:</b> Modification (if any): Further modify as follows:  <b>604.9.3 Doors.</b> Doors for wheelchair accessible toilet compartments shall comply with Sections 404.2.2, 404.2.3.2, 404.2.4 and 404.2.9. The door shall be self-closing with a balanced door or spring hinges. Door hardware shall comply with Section 404.2.6. In addition, a door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch. Wheelchair accessible toilet compartment doors shall not swing into the required minimum area of the compartment. <b>Exceptions:</b> <ol style="list-style-type: none"><li>1. Outside of the compartment the door <b>is shall</b> not <b>be</b> required to comply with Section 404.2.3.2 where the approach is to the latch side of the wheelchair accessible toilet compartment, door clearance between the door side of the compartment and any obstruction is 42 inches (1065 mm) minimum.</li><li>2. Within the wheelchair accessible toilet compartment, maneuvering clearances at the door shall not be required to comply with Section 404.2.3.2.</li><li>3. <b>In an alternate Within</b> wheelchair accessible toilet compartment, the door shall be permitted to swing into the stall where a clear floor space complying with Section 305.3 is provided within the stall beyond the arc of the door swing.</li></ol> <b>604.10.3 Doors.</b> Doors for Ambulatory accessible toilet compartments shall comply with Sections 404.2.2, 404.2.3.2, 404.2.4 and 404.2.9. The door shall be self-closing with a balanced door or spring hinges. Door hardware shall comply with Section 404.2.6. In addition a door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch. Compartment doors shall not swing into the required minimum area of the compartment. Hinge and latch side of the doors are permitted to be oriented so that the door opens in the direction of the approach. <b>Exceptions:</b> <ol style="list-style-type: none"><li>1. Outside of the ambulatory accessible toilet compartment, the door <b>is shall</b> not <b>be</b> required to comply with Section 404.2.3.2 where the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction is 42 inches (1065 mm) minimum.</li><li>2. Within the ambulatory accessible toilet compartment, maneuvering clearances at the door shall not be required to comply with Section 404.2.3.2.</li></ol> Committee Reason: The modifications to Section 604.9.3 Exception 1 and 604.10.3 Exception 1 are editorial. The committee preferred 'is' instead of 'shall'. The modification to Section 604.9.3 Exception 3 was to put the exception back the way it was. There was concern that the door swinging into a stall would be an obstruction. The proposal clarifies what is required for stall partition doors – wheelchair and ambulatory. Additional clarification of 'self-closing' may be needed.		
Committee decision: AFM BC2	Committee Vote at Meeting: 22-1	Committee Vote on Ballot:
<b>REPORT OF HEARING – FIRST DRAFT</b> Modification (if any): Committee Reason: This allows for the door to swing into the compartment, the same as a single occupant toilet room.		
Committee decision: AS/AM/D	Committee Vote at Meeting:	Committee Vote on Ballot:
<b>FINAL ACTION:</b> Modification (if any): Committee Reason:		

## 06-28 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-28	Boecker	604.9.7 (New)	D 25-2-2	12-1-2022 2-15-2024	Final Action AM PC1

Comment 1 <sup>st</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Dain, AIA	Negative	NA	2-15-2024	
PC1	Toji	AS	AS 13-5	2-15-2024	

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Gilliland WABO	AM			See 6-30-2021
BC2	Toji, HLAA	AM			

## 06-28 – 2021 604.9.7 (New)

**Proponent:** Gene Boecker, Code Consultants, Inc.

Add new text as follows:

### SECTION 604 WATER CLOSETS AND TOILET COMPARTMENTS

#### 604.9 Wheelchair accessible toilet compartments.

**604.9.7 Identification.** The wheelchair accessible compartment shall be identified with the International Symbol for Accessibility complying with Section 703.6.3.1.

**REASON:** In a typical toilet room, the accessible compartment was usually identified by the wide door and extra wide blank panel next to it. However, recent design changes with full height panels or walls with standard doors and lever set hardware have created the condition where it is a game of hide and seek to find behind which door is the large compartment with grab bars. The trend toward gender neutral toilet rooms has led to designs with common lavatory areas and toilet compartments which are enclosed by walls and doors.

This is a similar provision to that for checkout aisles. Where not all the accessible, something needs to be done to identify the accessible element without trying to open all the doors.

Notes 9-22-2022: Committee discussed if the compartments should be identified. Moved to end of Chapter 6 or until the Communications task group has a symbol suggestion, whichever comes first.

**Committee Action:** Disapprove 25-2-2

#### REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:** The committee was split on if this is designating a room or space, so it was not clear if this would have to meet all the signage requirements including raised, braille and placement next to the compartment door. Putting this identification on the compartment could be read to be wheelchairs only, like parking. There are no clear requirements for size or location. Is this really a problem? The wheelchair stall is already easily identifiable by the wider door.

**604.9-BOECKER.doc**

## 06-28 – 2021 Ballot Comments

<b>BALLOT COMMENT 1- FIRST DRAFT:</b>
Proponent: <i>Daniel Dain, AIA</i>
Desired Action: Negative with comment
Modification:
Reason: Agree in concept with identifying accessible compartments, especially ambulatory which often have same door sizes as non-accessible compartments and with flush and uniform panel and door designs it can be a game of hide and seek, and they're not always the one next to the wheelchair accessible compartment.

## 06-28 – 2021 Public Comment 1

**604.9.7**

**Proponent:** Sharon Toji

**Request As Submitted.**

**REASON:** Refer to Communications Task Group for recommendation.

**Committee Action for Public comment 1:** AS 13-5

### REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:** A wheelchairs symbol on the door as an additional identification aid is appropriate – similar to designated aisle seats, dining at tables. This should not be held to the full room designation requirements.

**06-28 Toji.doc**



## 06-28 – 2021 1<sup>st</sup> draft Committee Action

Committee Action for First Ballot:

Final Action AS PC1

### REPORT OF HEARING:

#### Modification (if any):

**Committee Reason:** A wheelchairs symbol on the door as an additional identification aid is appropriate – similar to designated aisle seats, dining at tables. This should not be held to the full room designation requirements.

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## 06-28 – 2021 2<sup>nd</sup> draft Ballot Comment 1

604.9.7

**Proponent:** Jenifer Gilliland WABO

**Vote:** negative with comment, AM

#### Further revise as follows:

**604.9.7 Identification.** ~~In gender neutral toilet rooms, the~~ **The** wheelchair *accessible* compartment shall be identified with the International Symbol for Accessibility complying with Section 703.6.2.1.

Staff note: See also 06-30-2021.

The submitted text was as follows. This was revised to match the proponents reason statement.

**604.9.7 Identification.** ~~The w~~Wheelchair accessible gender neutral toilet compartments shall be identified with the International Symbol for Accessibility complying with Section 703.6.3.1.

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**REASON:** According to the proponents, some configurations of gender neutral toilet rooms and the move towards full height partitions and walls for privacy make it difficult for users to identify the accessible compartment. This proposal narrows the scope of the original proposal to better align with its original stated intent by limiting the signage requirement to gender neutral toilet compartments only. Requiring the marking of every accessible toilet compartment is excessive.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:**

AS/AM/D

### REPORT OF HEARING:

#### Modification (if any):

#### Committee Reason:

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## 06-28 – 2021 2<sup>nd</sup> draft Ballot Comment 2

505.10.1

**Proponent:** Sharon Toji, HLAA

**Vote:** negative with comment, Disapproval

Further revise as follows:

~~604.9.6 Identification. The wheelchair accessible compartment shall be identified with the International Symbol for Accessibility complying with Section 703.6.2.1.~~

**REASON:** Although there are times when it might be helpful to identify the accessible stall, often it is easy to identify because they are much larger. If this is not the case, it would be helpful to identify the stall, but the sign should also indicate that the stall should be used last, and not imply that it can only be used by someone in a wheelchair.

The solution might be to confine the symbol to a smaller size, and required a message like “Please use this stall last if you do not require a wheelchair accessible compartment.”

**Committee Action on 2<sup>nd</sup> draft Ballot Comment 2:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

## 06-28 – 2021 2<sup>nd</sup> draft Committee Action

**Committee Action for First Ballot:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Further modify as follows:**

**Committee Reason:**

Report for 06-28– 2021		
<b>Committee decision:</b> D	<b>Committee Vote at Meeting:</b> 25-2-2	<b>Committee Vote on Ballot:</b> 39-1-1
<b>REPORT OF HEARING:</b> The committee was split on if this is designating a room or space, so it was not clear if this would have to meet all the signage requirements including raised, braille and placement next to the compartment door. Putting this identification on the compartment could be read to be wheelchairs only, like parking. There are no clear requirements for size or location. Is this really a problem? The wheelchair stall is already easily identifiable by the wider door. Modification (if any): Committee Reason:		
<b>Committee decision:</b> AS BC1	<b>Committee Vote at Meeting:</b> 13-5	<b>Committee Vote on Ballot:</b>
<b>REPORT OF HEARING – FIRST DRAFT</b> Modification (if any): Committee Reason: A wheelchairs symbol on the door as an additional identification aid is appropriate – similar to designated aisle seats, dining at tables. This should not be held to the full room designation requirements.		
<b>Committee decision:</b> AS/AM/D	<b>Committee Vote at Meeting:</b>	<b>Committee Vote on Ballot:</b>
<b>FINAL ACTION:</b> Modification (if any): Committee Reason:		

## 06-29 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-29	Boecker	604.10.5 (New), 604.10.6 (New)	AS 17-6-4	9-22-2022 2-29-2024	Final Action BC1 AM

Comment 1 <sup>st</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Paarlberg, ICC	Affirmative	AS 27-0	2-29-2024	

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Schorr, ATBCB	AM			

## 06-29 – 2021

### 604.10.5(New), 604.10.6(New)

**Proponent:** Gene Boecker, Code Consultants, Inc.

#### SECTION 604 WATER CLOSETS AND TOILET COMPARTMENTS

##### 604.10 Ambulatory accessible toilet compartments.

Add new text as follows:

**604.10.5. Height.** The height of water closet seats shall comply with Section 604.4.

**604.10.6 Dispensers.** Toilet paper dispensers shall comply with Section 604.7.

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**REASON:** The height of the seat in the ambulatory compartment is interpreted as being the same as that for the wheelchair accessible compartment since the provisions are all in Section 604. The same is true for the toilet paper dispenser. The reasons for their placement is the specific locations is applicable to individuals needing both types of fixtures. However, because the wheelchair accessible compartment is deemed “accessible” the ambulatory compartment often does not get the same recognition. We frequently see these two elements improperly installed. If a little more ink will make it clear that the intent is the same for the ambulatory compartment as the wheelchair compartment, it will be a big help to proper installations.

**Committee Action:** 17-6-4 As Submitted

#### REPORT OF HEARING:

#### Modification (if any):

**Committee Reason:** The additional sections will provide references for items that are commonly missed for ambulatory compartments. However, there was a request to make this a complete list for ambulatory compartment requirements.

604.10-BOECKER.doc

## 06-29 – 2021 Ballot Comments

### BALLOT COMMENT 1- FIRST DRAFT:

Proponent: Kimberly Paarlberg, ICC

Desired Action: Affirmative with comment

Modification: See Ballot Comment 1

## 06-29 – 2021 Ballot Comment 1

### 604.10.5-604.10.8

**Proponent: Kimberly Paarlberg, ICC**

Further modify as indicated in red.

### 604.10 Ambulatory accessible toilet compartments.

**604.10.1 General.** Ambulatory accessible toilet compartments shall comply with Section 604.10.

#### Figure 604.10.1

#### AMBULATORY COMPARTMENT

**604.10.2 Size.** The minimum area of an ambulatory accessible toilet compartment shall be 60 inches (1525 mm) minimum in depth and a width of 35 inches (890 mm) minimum and 37 inches (940 mm) maximum.

### 06-25-2021 AM

**604.10.3 Doors.** ~~Doors for~~ ambulatory accessible toilet ~~compartments~~ ~~compartment doors, including door hardware,~~ shall comply with ~~Section 404~~ Sections 404.2.2, 404.2.3.2, 404.2.4 and 404.2.9. The door shall be self-closing with a balanced door or spring hinges. Door hardware shall comply with Section 404.2.6. In addition a A door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch. Compartment doors shall not swing into the required minimum area of the compartment. Hinge and latch side of the doors are permitted to be oriented so that the door opens in the direction of the approach.

#### Exceptions:

1. Outside of the ambulatory accessible toilet compartment, the door is not required to comply with Section 404.2.3.2 where the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be is 42 inches (1065 mm) minimum.
2. Within the ambulatory accessible toilet compartment, maneuvering clearances at the door shall not be required to comply with Section 404 404.2.3.2.

**604.10.4 Grab bars.** Grab bars shall comply with Section 609. Side wall grab bars complying with Section 604.5.1 shall be provided on both sides of the compartment.

**604.10.5 Location.** The location of the water closet shall comply with Section 604.2.

### 06-29-2021 AS

**604.10.6 604.10.5 Height.** The height of water closet seats shall comply with Section 604.4.

**604.10.7 Flush controls.** Flush controls shall comply with Section 604.6.

**06-29-2021 AS**

**604.10.8 604.10.6 Dispensers.** Toilet paper dispensers shall comply with Section 604.7.

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**REASON:** If the intent of the committee is to reference the requirements in 604.10 rather than rely on Section 604.1, this should be a complete list.

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**Committee Action for Ballot Comment 1:** AS 27-0

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:** The added sections will provide a complete list for ambulatory stalls.

**06-29 Paarlberg.doc**

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**06-29 – 2021 1<sup>st</sup> draft Committee Action**

**Committee Action for First Ballot:** AFM by BC1

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:** The added sections will provide a complete list for ambulatory stalls.

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**06-29 – 2021 2<sup>nd</sup> draft Ballot Comment 1**  
**604.10.6**

**Proponent:** Josh Schorr ATBCB

**Vote:** negative with comment, AM

**Further revise as follows:**

**604.10.6 Flush controls.** Flush controls shall ~~comply with Section 604.6. be hand-operated or automatic.~~  
Where only hand operated flush controls are provided, they shall comply with the operable parts requirements in Sections 309.4 and 609.3.

Staff note: 309.4 is force; 609.3 is spacing for grab bars. 604.6 does include exception 1 for ambulatory stalls. Since ambulatory stalls do not include rear grab bars, is Section 609.3 applicable?

Technically, and option would be –

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**604.6 Flush controls.** Flush controls shall be hand-operated or automatic. Where only hand operated flush controls are provided, they shall comply with *operable parts*. Hand-operated flush controls shall be located on the open side of the centerline of the water closet.

**Exceptions:**

~~1. In ambulatory accessible toilet compartments complying with Section 604.10, flush controls shall be permitted to be located on either side of the water closet.~~

~~2.~~ Hand-operated flush controls shall be permitted to cross the centerline of the water closet, provided that the portion of the control that is located to the open side of the centerline independently complies with the operable parts requirements in Section 309.4.

**604.10.6 Flush controls.** Flush controls shall ~~comply with Section 604.6, be hand-operated or automatic.~~  
Where only hand operated flush controls are provided, they shall comply with the operable parts requirements in Sections 309.4.

**REASON:** By requiring compliance with operable parts, the flush controls must also have a clear floor space within reach range. It doesn't make sense to include clear floor space within an ambulator compartment. Often flush controls are on the back of the water closet or behind the water closet – so a side reach would be required. As it's an enclosed space, that means a 60 inch minimum width even though the compartment is only permitted to be 35 – 37 inches wide.

I don't know if we'd want to address the height of the operable part. If so, a higher maximum height should be considered as it does not need to be within reach range for a person sitting in a wheelchair.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-29 – 2021 2<sup>nd</sup> draft Committee Action**

**Committee Action for First Ballot:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Further modify as follows:**

**Committee Reason:**

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Report for <b>06-29– 2021</b>		
Committee decision: AS	Committee Vote at Meeting: 17-6-4	Committee Vote on Ballot: 39-1-1
<b>REPORT OF HEARING:</b>		
Modification (if any):		
Committee Reason: The additional sections will provide references for items that are commonly missed for ambulatory compartments. However, there was a request to make this a complete list for ambulatory compartment requirements.		



<b>Report for 06-29- 2021</b>		
<b>Committee decision:</b> AFM by BC1	<b>Committee Vote at Meeting:</b> 27-0	<b>Committee Vote on Ballot:</b>
<b>REPORT OF HEARING – FIRST DRAFT</b>		
Modification (if any):		
Committee Reason: The added sections will provide a complete list for ambulatory stalls.		
<b>Committee decision:</b> AS/AM/D	<b>Committee Vote at Meeting:</b>	<b>Committee Vote on Ballot:</b>
<b>FINAL ACTION:</b>		
Modification (if any):		
Committee Reason:		

## 06-30– 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-30	Boecker	604.10.5 (New), 703.6.3.5 (New), Figure 703.6.3.5 (New)	D 25-2-2	12-1-2022 3-14-2024	Final Action AM by PC1

Comment 1 <sup>st</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Pace, HUD	Affirmative	NA	3-14-2024	
PC1	Toji	AS	AM 18-4-2	3-14-2024	modification

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Gilliland WABO	AM			See 6-28-2021
BC2	Buuck NAHB	D			
BC3	Toji, HLAA	DD			

## 06-30 – 2021

**604.10.5(New), 703.6.3.5(New), Figure 703.6.3.5(New)**

**Proponent:** Gene Boecker, Code Consultants, Inc.

### SECTION 604 WATER CLOSETS AND TOILET COMPARTMENTS

Add new text as follows:

**604.10 Ambulatory accessible toilet compartments.**

**604.10.5 Identification.** The ambulatory stall shall be identified with the United Nations Symbol for Elderly complying with Section 703.6.3.5.

**703.6 Symbols of accessibility.**

**703.6.3.5 Symbol for the elderly.** The ambulatory stall shall be identified by the United Nations Symbol for the Elderly complying with Figure 703.6.3.5



**FIGURE 703.6.3.5**  
**UNITED NATIONS SYMBOL FOR THE ELDERLY**

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**REASON:** In a typical toilet room, the ambulatory compartment was usually identified by the wide out-swinging door and loop handle. However, recent design changes with full height panels or walls with standard doors and lever set hardware have created the condition where it is a game of hide and seek to find behind which door is the ambulatory compartment. The trend toward gender neutral toilet rooms has led to designs with common lavatory areas and toilet compartments which are enclosed by walls and doors.

This is a similar provision to that for checkout aisles. Where not all the accessible, something needs to be done to identify the accessible element without trying to open all the doors.

A new symbol is being proposed for inclusion as a result of the need to identify the ambulatory compartment. This symbol is the recommended symbol for “elderly” according to the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA). After a search of multiple symbols for this use, the most easily recognizable one was this symbol.

Additional information can be found at <https://thenounproject.com/ochavisual/collection/ocha-humanitarian-icons-v02/>

Notes 9-22-2022: Committee discussed if the compartments should be identified. Moved to end of Chapter 6 or until the Communications task group has a symbol suggestion, whichever comes first.

**Committee Action:** Disapprove 20-2-2

## **REPORT OF HEARING:**

### **Modification (if any):**

**Committee Reason:** The committee felt the choice of symbol was not appropriate, and there was no agreement for any other alternatives shown during the discussion. There were also the same concerns for this being a space designation and having to comply with the signage requirements or raised, braille and placement. This compartment also has a door wider than typical compartments and swings out instead of in, so you should be able to identify this compartment without signage.

**604.10.5-BOECKER.doc**

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## **06-30 – 2021 Ballot Comments**

**BALLOT COMMENT 1- FIRST DRAFT:**

Proponent: *Rex Pace, HUD*

Desired Action: Affirmative with comment

Modification:

Reason: Conceptually, this proposal makes sense and the aim is supported. Additionally, disagree with the committee's reasoning and accept the proposition that the ambulatory accessible toilet compartment can be difficult to identify when the compartment door is closed and agree with the proponent that door width/size alone is not a sufficient designation. Concurrence with disapproval is based on a lack of consensus of an appropriate symbol to be used to identify the compartment but if resolved would support the proposal. More investigation and analysis will be required for this aspect of any future proposal

**06-30 – 2021 Public Comment 1****102.1**

**Proponent:** Sharon Toji

**Request As Submitted.**

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**REASON:** Refer to Communications Task Group for recommendation.

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**06-30 – 2021 Public Comment 1 modification****604.10.5, 703.6.3.5**

**Proponent:** Gene Boecker

**Replace the proposal with the following:**

**604.10 Ambulatory accessible toilet compartments.**

**604.10.5 Identification.** The ambulatory stall shall be identified with the Symbol for Injured Person complying with Section 703.6.3.5.

**703.6 Symbols of accessibility.**

**703.6.3.5 Symbol for injured persons.** The Symbol for the Injured Persons shall comply with Figure 703.6.3.5



**FIGURE 703.6.3.5**  
**SYMBOL FOR INJURED PERSONS**

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**Committee Action for Public Comment 1:** AM 18-4-2

**REPORT OF HEARING:**

**Modification (if any):**

**604.10.5 Identification.** The ambulatory ~~stall~~ accessible toilet compartment shall be identified with the Symbol for Injured Person complying with Section 703.6.3.5.

**Committee Reason:** The revision to Section 604.10.5 is editorial to match the term used in 604.10. The modification to Public Comment 1 is approved. Symbol for injured persons is appropriate to identify ambulatory stalls.

**06-30 Toji.doc**

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**06-30 – 2021 1<sup>st</sup> draft Committee Action**

**Committee Action for First Ballot:** AM 18-4-2

**REPORT OF HEARING:**

**Modification (if any):**

**Replace with the following:**

**604.10.5 Identification.** The ambulatory accessible toilet compartment shall be identified with the Symbol for Injured Person complying with Section 703.6.3.5.

**703.6.3.5 Symbol for injured persons.** The Symbol for the Injured Persons shall comply with Figure 703.6.3.5



**FIGURE 703.6.3.5**  
**SYMBOL FOR INJURED PERSONS**

**Committee Reason:** The revision to Section 604.10.5 is editorial to match the term used in 604.10. The modification to Public Comment 1 is approved. Symbol for injured persons is appropriate to identify ambulatory stalls.

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## **06-30 – 2021 2<sup>nd</sup> draft Ballot Comment 1**

### **604.10.5**

**Proponent:** Jenifer Gilliland WABO

**Vote:** negative with comment, AM

**Further revise as follows:**

**604.10.5 Identification.** In gender neutral toilet rooms, the ~~The~~ ambulatory *accessible* toilet compartment shall be identified with the Symbol for Injured Person complying with Section 703.6.2.2.

Staff note: See also 06-28-2021.

The submitted text was as follows. This was revised to match the proponents reason statement.

**604.10.5 Identification.** The ambulatory accessible gender neutral toilet compartment shall be identified with the Symbol for Injured Person complying with Section 703.6.3.5.

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**REASON:** According to the proponent's, some configurations of gender neutral toilet rooms and the move towards full height partitions and walls for privacy make it difficult for users to identify the ambulatory compartment. This proposal narrows the scope of the original proposal to better align with its original stated intent by limiting the signage requirement to gender neutral ambulatory toilet compartments only. Requiring the marking of every ambulatory toilet compartment is excessive.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:** AS/AM/D

### **REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**



## 06-30 – 2021 2<sup>nd</sup> draft Ballot Comment 2

### 604.10.8, 703.6.2.2, Figure 703.6.2.2

**Proponent:** Dan Buuck NAHB

**Vote:** negative with comment, D

**Request disapproval.**

~~**604.10.8 Identification.** The ambulatory *accessible* toilet compartment shall be identified with the Symbol for Injured Person complying with Section 703.6.2.2.~~

~~**703.6.2.2 Symbol for injured persons.** The Symbol for the Injured Persons shall comply with Figure 703.6.2.2.~~

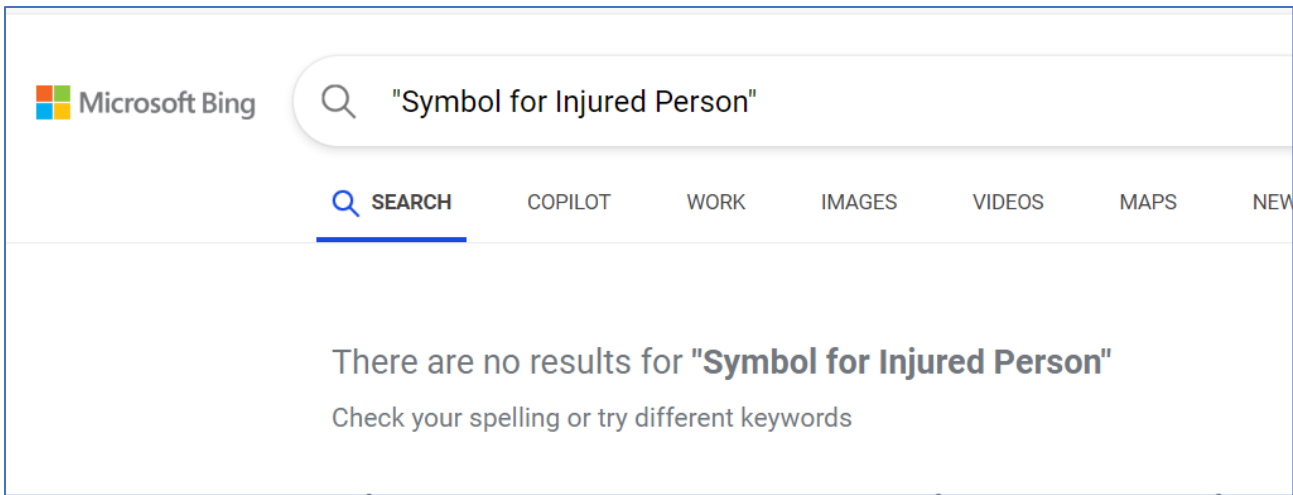


~~**FIGURE 703.6.2.2  
SYMBOL FOR INJURED PERSONS**~~

Staff note: The comment was to remove the symbol, but the location where the symbol is required is also included here.

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**REASON:** After an internet search, looking for signs or decals that use the “Symbol for injured person” none were found. In fact, the symbol itself didn’t come up when searching that term. This may be due to the fact this symbol isn’t an internationally recognized symbol at this time, like the other accessibility symbols are today. This would make compliance difficult and costly, and in some cases impossible to achieve. Suggesting that this section should not be included in the standard until an internationally recognized symbol is available for this purpose and proper signage is commercially available.



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Committee Action on 2<sup>nd</sup> draft Ballot Comment 2: AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-30 – 2021 2<sup>nd</sup> draft Ballot Comment 3**  
**604.10.8, 703.6.2.2, Figure 703.6.2.2**

**Proponent:** Sharon Toji, HLAA

**Vote:** negative with comment, Disapproval

**Further revise as follows:**

**Request disapproval.**

~~**604.10.8 Identification.** The ambulatory *accessible* toilet compartment shall be identified with the Symbol for Injured Person complying with Section 703.6.2.2.~~

~~**703.6.2.2 Symbol for injured persons.** The Symbol for the Injured Persons shall comply with Figure 703.6.2.2.~~



## FIGURE 703.6.2.2 SYMBOL FOR INJURED PERSONS

**REASON:** Although I am in support of having a pictogram that identifies the special toilet stall that has grab bars on each side to aid those with a variety of mobility problems so they can safely and independently approach the toilet, I do not approve of this pictogram, especially with the title of “injured person”. I think it gives the wrong impression both about what the special stall is like, and about what the purpose is. We need to work further on a design for a pictogram to represent individuals with a disability that allows them to be ambulatory, rather than wheelchair users. The pictogram is misleading.

**Committee Action on 2<sup>nd</sup> draft Ballot Comment 3:** AS/AM/D

### REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:**

## 06-30 – 2021 2<sup>nd</sup> draft Committee Action


**Committee Action for First Ballot:** AS/AM/D

### REPORT OF HEARING:

**Modification (if any):**

**Further modify as follows:**

**Committee Reason:**

Report for 06-30– 2021		
<i>Committee decision: D</i>	<i>Committee Vote at Meeting: 20-2-2</i>	<i>Committee Vote on Ballot: 39-1-1</i>
<b>REPORT OF HEARING:</b>		
Modification (if any):		
Committee Reason: The committee felt the choice of symbol was not appropriate, and there was no agreement for any other alternatives shown during the discussion. There were also the same concerns for this being a space designation and having to comply with the signage requirements or raised, braille and placement. This compartment also has a door wider than typical compartments and swings out instead of in, so you should be able to identify this compartment without signage.		
<i>Committee decision: AM PC1</i>	<i>Committee Vote at Meeting: 18-4-2</i>	<i>Committee Vote on Ballot:</i>
<b>REPORT OF HEARING – FIRST DRAFT</b>		
Modification (if any):		
<b>604.10.5 Identification.</b> The ambulatory accessible toilet compartment shall be identified with the Symbol for Injured Person complying with Section 703.6.3.5.		
<b>703.6.3.5 Symbol for injured persons.</b> The Symbol for the Injured Persons shall comply with Figure 703.6.3.5		
		
<b>FIGURE 703.6.3.5 SYMBOL FOR INJURED PERSONS</b>		

**Report for 06-30– 2021**

Committee Reason: The revision to Section 604.10.5 is editorial to match the term used in 604.10. The modification to Public Comment 1 is approved. Symbol for injured persons is appropriate to identify ambulatory stalls.

**Committee decision: AS/AM/D****Committee Vote at Meeting:****Committee Vote on Ballot:****FINAL ACTION:**

Modification (if any):

Committee Reason:

## 06-32 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-32	Williams	605.3	AS 14-10-2	9-22-2022	staff note for conflict between 06-32 and 06-34 Final Action AM BC2 and PC1 editorial

Comment 1 <sup>st</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Dain, AIA	Affirmative	NA	2-29-2024	
<b>BC2</b>	Paarlberg, ICC	Negative	AM 19-4	2-29-2024	<b>Replacement</b>
<b>PC1</b>	Terminology	AM	Editorial	9-12-2024	Editorial

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Mazz, USA	AM			

## 06-32 – 2021

### 605.3

**Proponent:** Richard Williams, CWA Consultants representing self

**Revise as follows:**

### SECTION 605 URINALS

**605.3 Clear Floor Space.** A clear floor space complying with Section 305.3, positioned for forward approach, shall be provided. Where the depth of the forward approach to the urinal exceeds 24 inches (610 mm), the width of the clear floor space shall be a minimum 36 inches (914 mm) and shall comply with Section 305.7.2.

**REASON:** The proposed change to Section 605.3 is an attempt to clarify the requirement for additional clear floor space with for urinals when the depth of surrounding walls or partitions exceeds 24". This proposal does not change the requirement but as is currently written, we find this increased width requirement is often overlooked by designers. Adding the reference to Section 305.7.2 will help to clarify this requirement.

**Committee Action:** 14-10-2 As Submitted

### REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:** While the committee felt that it is important to remind designers that a urinal might be in an alcove and then the approach would be wider, the text should not repeat the requirements in the alcove building block in Section 305.7.2. Public comments are expected to address this.

605.3\_Williams.doc

## 06-32 – 2021 Ballot Comments

### BALLOT COMMENT 1- FIRST DRAFT:

Proponent: *Daniel Dain, AIA*

Desired Action: Affirmative with comment

Modification: See Ballot Comment 1

### BALLOT COMMENT 2- FIRST DRAFT:

Proponent: *Kimberly Paarlberg, ICC*

Desired Action: Negative with comment

Modification: See Ballot Comment 2

## 06-32 – 2021 Ballot Comment 1 605.3

**Proponent:** Dan Dain, AIA

**Further modify the proposal:**

**605.3 Clear Floor Space.** A clear floor space complying with Section 305.3, positioned for forward approach, shall be provided. Where the depth of the forward approach to the urinal exceeds 24 inches (610 mm), ~~the width of the clear floor space shall be a minimum 36 inches (914 mm) and shall~~ comply with Section 305.7.2.

**-or-**

**Further modify the proposal:**

**605.3 Clear Floor Space.** A clear floor space complying with Section 305, positioned for forward approach, shall be provided. ~~Where the depth of the forward approach to the urinal exceeds 24 inches (610 mm), the width of the clear floor space shall be a minimum 36 inches (914 mm) and shall comply with Section 305.7.2.~~

**REASON:** Not opposed to the intent. Several references to 305.3 are so specific they miss some of the other applicable parts of 305, not to mention 305.2.

**Committee Action for Ballot Comment 1:**

**REPORT OF HEARING:**

**Modification (if any):**



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## 06-32 – 2021 Ballot Comment 2

### 605.3

**Proponent:** Kimberly Paarlberg, ICC

**Further modify as follows:**

**605.3 Clear Floor Space.** A clear floor space complying with Section 305.3, positioned for forward approach, shall be provided measured from the front, exterior the rim of the urinal. Where the clear floor space in front of the urinal is confined on both sides of the clear floor space, the alcove shall comply with Section 305.7.2.  
~~Where the depth of the forward approach to the urinal exceeds 24 inches (610 mm), the width of the clear floor space shall be a minimum 36 inches (914 mm) and shall comply with Section 305.7.2.~~

---

**REASON:** There needs to be coordination between 06-32-21 and 06-34-22. This modification would specify the location of the clear floor space so someone would stand at the urinal, and provide a reminder for the alcove provisions.

**This is what was approved.**

#### 06-32-2021 AS

**605.3 Clear Floor Space.** A clear floor space complying with Section 305.3, positioned for forward approach, shall be provided. Where the depth of the forward approach to the urinal exceeds 24 inches (610 mm), the width of the clear floor space shall be a minimum 36 inches (914 mm) and shall comply with Section 305.7.2.

#### 06-34-2021 AM

**605.3 Clear floor space.** A clear floor space complying with Section 305 positioned for forward approach shall be provided measured from the front, exterior the rim of the urinal.

#### 06-34-2021 AM

**605.4 Flush controls.** Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with Section 309.

**Exception:** The clear floor space shall not be required to extend under the urinal for the purposes of Section 308.2 where the controls have a high reach of 44 inches (1120 mm) maximum.

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## 06-32 – 2021 Ballot Comment 2 Replacement

### 605.3

**Proponent:** Kimberly Paarlberg, ICC

**Further modify as follows:**

**605.3 Clear Floor Space.** A clear floor space complying with Section 305.3, positioned for forward approach, shall be provided measured from the front, exterior of the urinal rim. Clear floor space confined on opposing sides shall comply with Section 305.7.2. ~~Where the depth of the forward approach to the urinal exceeds 24 inches (610 mm), the width of the clear floor space shall be a minimum 36 inches (914 mm) and shall comply with Section 305.7.2.~~

---

**REASON:** This was discussed with the Editorials task group regarding coordination with the change to 605.3 in 06-32 and 06-34. They felt the revised language would be easier to understand.

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**Committee Action for Ballot Comment 2:**

AFM by BC2 replacement and modification

BC2 AM 24-0

Modification – change ‘edge’ to ‘exterior’ – AM 19 - 5

**REPORT OF HEARING:**

**Modification (if any):**

**605.3 Clear Floor Space.** A clear floor space complying with Section 305.3, positioned for forward approach, shall be provided measured from the front, ~~edge~~ **exterior** of the urinal rim. Clear floor space confined on opposing sides shall comply with Section 305.7.2.

**Committee Reason:** The modification to change ‘edge’ to ‘exterior’ will clarify where you measure to for the clear floor space. The BC2 replacement will coordinate of change to 605.3 to coordinate 06-32 and 06-34 for the space at the front of the urinal for use. This moving back the clear floor space to allow for standing at the urinal would exceed ADA requirements.

**06-32 Paarlberg.doc**

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**06-32 – 2021 Public Comment 1**

**605.3**

**Proponent:** Marsha Mazz, representing the Terminology Task Group

**Further revise as follows:**

**SECTION 605  
URINALS**

**605.3 Clear Floor Space.** A clear floor space ~~complying with Section 305.3,~~ positioned for forward approach, shall be provided. ~~Where the depth of the forward approach to the urinal exceeds 24 inches (610 mm), the width of the clear floor space shall be a minimum 36 inches (914 mm) and also shall comply with Section 305.7.2.~~

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**REASON:** This is part of a proposal from the Terminology task group to define the building blocks so that a reference is not required. This public comment is included here because it was part of new text. Please see the complete proposal for additional information.

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**Committee Action for Public Comment 1:**

Editorial

## REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:**

06-32 Terminology.doc

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## 06-32 – 2021 1<sup>st</sup> draft Committee Action

**Committee Action for First Ballot:**

Final Action AM BC2 replacement and PC1

## REPORT OF HEARING:

**Modification (if any):**

**605.3 Clear Floor Space.** A clear floor space complying with Section 305.3, positioned for forward approach, shall be provided measured from the front; ~~edge~~-~~exterior~~ of the urinal rim. Clear floor space confined on opposing sides shall comply with Section 305.7.2.

**Committee Reason:** The modification to change ‘edge’ to ‘exterior’ will clarify where you measure to for the clear floor space. The BC2 replacement will coordination of change to 605.3 to coordinate 06-32 and 06-34 for the space at the front of the urinal for use. This moving back the clear floor space to allow for standing at the urinal would exceed ADA requirements.

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## 06-32 – 2021 2<sup>nd</sup> draft Ballot Comment 1

### 605.3

**Proponent:** Marsha Mazz USA

**Vote:** negative with comment, AM

**Further revise as follows:**

**605.3 Clear floor space.** A clear floor space complying with Section 305.3, positioned for forward approach, shall be provided measured from the front edge of the urinal rim.

Where the clear ~~Clear~~ floor space ~~is~~ confined on opposing sides for a depth exceeding 24 inches (610 mm), the clear floor space shall comply with Section 305.7.2.

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**REASON:** This modification clarifies that the provision does not apply unless the enclosure is an alcove. While the reference to Section 305.72 may suggest this, it is at least arguable that opposing partitions of any size would trigger a requirement for a 36-inch wide clear floor space.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:**

AS/AM/D

## REPORT OF HEARING:

**Modification (if any):**

Committee Reason:

## 06-32 – 2021 2<sup>nd</sup> draft Committee Action

Committee Action for First Ballot: AS/AM/D

### REPORT OF HEARING:

Modification (if any):

Further modify as follows:

Committee Reason:

Report for 06-32– 2021		
Committee decision: AS	Committee Vote at Meeting: 14-10-2	Committee Vote on Ballot: 38-2-1
REPORT OF HEARING:		
Modification (if any):		
Committee Reason: While the committee felt that it is important to remind designers that a urinal might be in an alcove and then the approach would be wider, the text should not repeat the requirements in the alcove building block in Section 305.7.2. Public comments are expected to address this.		
Committee decision: AM BC2, PC1 – see E11	Committee Vote at Meeting: BC2 19-4	Committee Vote on Ballot:
REPORT OF HEARING – FIRST DRAFT		
Modification (if any):		
Modification (if any): <b>605.3 Clear Floor Space.</b> A clear floor space complying with Section 305.3, positioned for forward approach, shall be provided measured from the front, <del>edge</del> exterior of the urinal rim. Clear floor space confined on opposing sides shall comply with Section 305.7.2.		
Committee Reason: The modification to change 'edge' to 'exterior' will clarify where you measure to for the clear floor space. The BC2 replacement will coordination of change to 605.3 to coordinate 06-32 and 06-34 for the space at the front of the urinal for use. This moving back the clear floor space to allow for standing at the urinal would exceed ADA requirements.		
Committee decision: AS/AM/D	Committee Vote at Meeting:	Committee Vote on Ballot:
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

## 06-33 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-33	Paarlberg	605.5 (New), 605.5.1 (New), 605.5.2 (New), 605.5.3 (New)	D 19-2-3	9-22-2022	Final Action AS BC1

Comment 1 <sup>st</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Paarlberg	Negative	AS 16-8	2-29-2024	
PC1	Toji	AS	NA		Out of order

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Hall ASID	AM			
BC2	Roether	AM			
BC3	Schorr ATBCB	AM			See 06-25-2021
BC4	Mazz USA	AM			

## 06-33 – 2021

**605.5(New), 605.5.1(New), 605.5.2(New), 605.5.3(New)**

**Proponent:** Kimberly Paarlberg, International Code Council

Add new text as follows:

### SECTION 605 URINALS

**605.5 Urinal compartments.** Urinal compartments, where provided shall comply with Section 605.5.

**605.5.1 Size.** The minimum area of a urinal compartment shall be 60 inches (1525 mm) minimum in depth and a width of 35 inches (890 mm) minimum and 37 inches (940 mm) maximum.

**605.5.2 Doors.** Doors for urinal compartments shall comply with Sections 404.2.2, 404.2.3.2, 404.2.4 and 404.2.9. The door shall be self-closing with a balanced door or spring hinges. Door hardware shall comply with Section 404.2.6. In addition a door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch. Compartment doors shall not swing into the required minimum area of the compartment.

#### **Exceptions:**

1. Outside of the urinal compartment, the door shall not be required to comply with Section 404.2.3.2 where the approach is to the latch side of the compartment door, clearance between the door side of

the compartment and any obstruction is 42 inches (1065 mm) minimum. Hinge and latch side of the doors are permitted to be oriented so that the door opens in the direction of the approach.

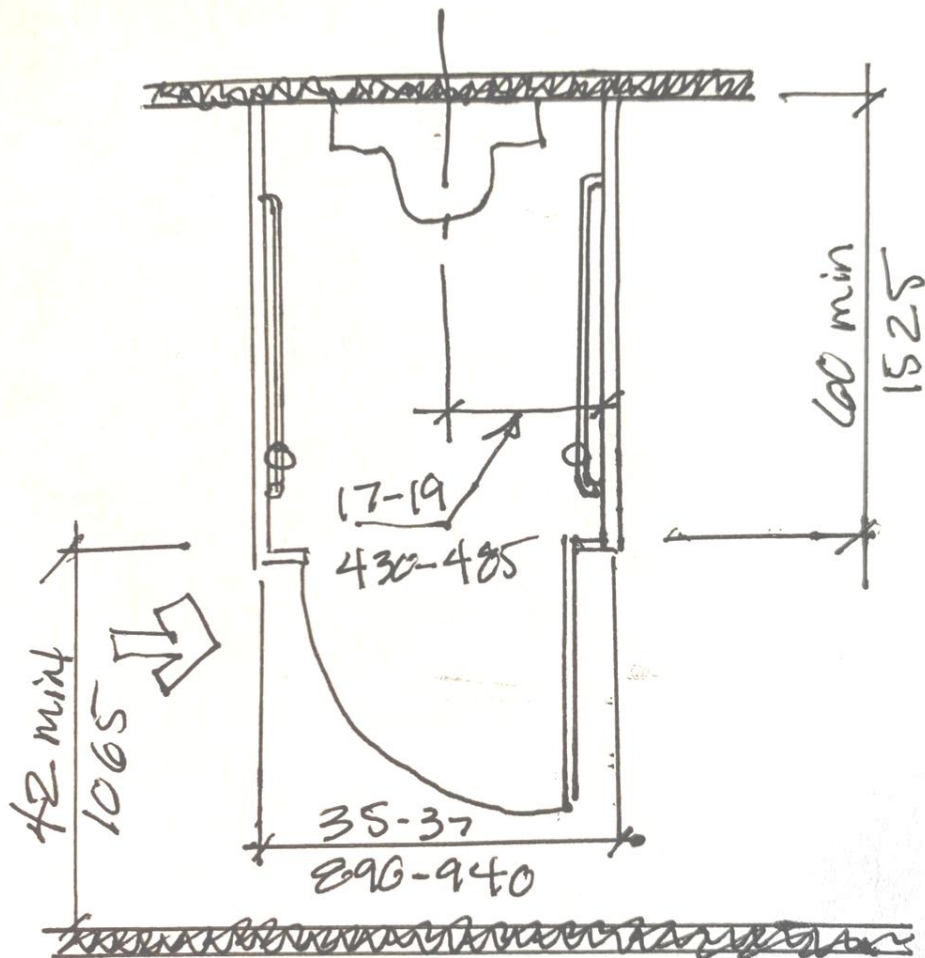
2. Within the ambulatory accessible toilet compartment, maneuvering clearances at the door shall not be required to comply with Section 404.2.3.2.

**605.5.3 Grab bars.** Grab bars shall comply with Section 609. Horizontal side wall grab bars complying with Section 604.5.1.1 shall be provided on both sides of the compartment.

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**REASON:** The 2021 IPC and IBC allows gender neutral multi-stall toilet rooms. For privacy, this may result in the required accessible urinal being located in a compartment. It is my understanding that persons choosing to use the urinal instead of transferring to the water closet will have some weight bearing ability, therefore, this proposal is based on an ambulatory stall requirement.





2021 IPC

## SECTION 403 MINIMUM PLUMBING FACILITIES

403.1.1 Fixture calculations. To determine the occupant load of each sex, the total occupant load shall be divided in half. To determine the required number of fixtures, the fixture ratio or ratios for each fixture type shall be applied to the occupant load of each sex in accordance with Table 403.1. Fractional numbers resulting from applying the fixture ratios of Table 403.1 shall be rounded up to the next whole number. For

calculations involving multiple occupancies, such fractional numbers for each occupancy shall first be summed and then rounded up to the next whole number.

**Exceptions:**

1. The total occupant load shall not be required to be divided in half where *approved* statistical data indicate a distribution of the sexes of other than 50 percent of each sex.
2. Where multiple-user facilities are designed to serve all genders, the minimum fixture count shall be calculated 100 percent, based on total occupant load. In such multiple-user facilities, each fixture type shall be in accordance with ICC A117.1 and each urinal that is provided shall be located in a stall.
3. Distribution of the sexes is not required where single-user water closets and bathing room fixtures are provided in accordance with Section 403.1.2.

403.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

**Exceptions:**

1. Separate facilities shall not be required for dwelling units and sleeping units.
2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or fewer.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or fewer.
4. Separate facilities shall not be required in business *occupancies* in which the maximum occupant load is 25 or fewer.
5. Separate facilities shall not be required to be designated by sex where single-user toilet rooms are provided in accordance with Section 403.1.2.
6. Separate facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by both sexes and privacy for water closets is provided in accordance with Section 405.3.4. Urinals shall be located in an area visually separated from the remainder of the facility or each urinal that is provided shall be located in a stall.

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**Committee Action:**        19-2-3                      Disapproved

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:** The committee felt that additional information on the use of urinals by persons with disabilities is needed to determine if an ambulatory type compartment or a wheelchair accessible type compartment is needed. With the more common design of multi-gender toilet room this is a gap in the current standard.

**605 NEW-PAARLBERG.doc**

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**06-33 – 2021 Ballot Comments**



**BALLOT COMMENT 1- FIRST DRAFT:**Proponent: *Kimberly Paarlberg, ICC*

Desired Action: Negative with comment

Modification:

Reason: Request reconsideration for As Submitted. The ICC continues to get many questions about gender neutral toilet rooms. The changes for 06-32 and 06-34 appear to back up my assumption that access to a urinal is utilized by persons with some weight bearing. Thus a compartment similar to an ambulatory stall is appropriate for accessible lavatories. Remember that there will always be an accessible toilet compartment in the same room.

**06-33 – 2021 Public Comment 1  
605****Proponent:** Sharon Toji**Further revise as follows:**

No text for signage was suggested in the proposal.

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**REASON:** Refer to Communications Task Group for recommendation.

---

**Committee Action for Public Comment:** AS 16-8**REPORT OF HEARING:****Modification (if any):**

**Committee Reason:** There is no guidance for how an accessible urinal located within a stall should be addressed. These will show up in gender neutral bathrooms. These requirements are based on an ambulatory stall dimensions and grab bars. This would allow access for people with some leg bearing.

**06-33 Toji.doc**

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**06-33 – 2021 1<sup>st</sup> draft Committee Action****Committee Action for First Ballot:** AS BC1 16-8**REPORT OF HEARING:****Modification (if any):**

**Committee Reason: BC1 -** There is no guidance for how an accessible urinal located within a stall should be addressed. These will show up in gender neutral bathrooms. These requirements are based on an ambulatory stall dimensions and grab bars. This would allow access for people with some leg bearing.

---

**06-33 – 2021 2<sup>nd</sup> draft Ballot Comment 1  
605.5**

**Proponent:** Angeline Arandanas Hall ASID

**Vote:** negative with comment, AM

**Further revise as follows:**

Request the committee discuss the clarification that all urinal compartments require grab bars.

---

**REASON:** This question is being asked for clarification for large facilities (e.g. athletic stadiums, airports): Has the committee determined that all urinal compartments being provided require grab bars, vs. a % of urinal compartments requiring grab bars?

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-33 – 2021 2<sup>nd</sup> draft Ballot Comment 2**  
**605.5**

**Proponent:** Ed Roether

**Vote:** negative with comment, AM

**Further revise as follows:**

Modified the provisions to be only for accessible urinal compartments.

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**REASON:** As written, all urinal compartments would be required to meet all requirements, including grab bars, not just accessible urinals.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 2:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-33 – 2021 2<sup>nd</sup> draft Ballot Comment 3**  
**605.5.2**

**Proponent:** Josh Schorr ATBCB

**Vote:** negative with comment, AM

**Further revise as follows:**

ICC A117.1 Comments on 2<sup>nd</sup> Draft Chapter 6 3-30-2025

Page 130 of 230

**605.5.2 Doors.** Doors for urinal compartments shall comply with Sections 404.2.2, 404.2.3.2, 404.2.4 and 404.2.9. The door shall be self-closing with a balanced door, gravity hinges or spring hinges. Door hardware shall comply with Section 404.2.6. In addition, a door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch. Compartment doors shall not swing into the required minimum area of the compartment.

**Exceptions:**

1. Outside of the urinal compartment, the door shall not be required to comply with Section 404.2.3.2 where the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction is 42 inches (1065 mm) minimum. Hinge and latch side of the doors are permitted to be oriented so that the door opens in the direction of the approach.
2. Within the ambulatory *accessible* toilet compartment, *maneuvering clearances* at the door shall not be required to comply with Section 404.2.3.2.

Staff note: See 06-25-2021

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**REASON:** Gravity hinges are a common method of providing a self-closing door. We don't want that omitted as an option.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 3:** AS/AM/D

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**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-33 – 2021 2<sup>nd</sup> draft Ballot Comment 4**  
**605.5.1**

**Proponent:** Marsha Mazz USA

**Vote:** negative with comment, AM

**Further revise as follows:**

**605.5.1 Size.** The minimum area of a urinal compartment shall be ~~60~~ 66 inches (~~1525~~ 1675 mm) minimum in depth and a width of ~~35~~ 36 inches (~~890~~ 915 mm) minimum and ~~37~~ 38 inches (~~940~~ 965 mm) maximum.

---

**REASON:** Section 605.3 requires a urinal to have a clear floor space 52 inches in depth (for new construction) positioned for forward approach that is to be measured from the front edge of the urinal rim. In a 60-inch-deep compartment, that leaves 8 inches for the depth of the urinal measured from the back wall to the clear floor space. While a urinal doesn't extend as far from the wall as a water closet, a urinal compartment would be far narrower than a toilet compartment, leaving little or no room to maneuver in order to adjust clothing, align oneself to use the fixture, and re-position to reach to the flush control.

Further, if the width of the clear floor space is permitted to be 35 inches, a conflict exists with requirement in Section 605.3 for the clear floor space to be 36 inches wide when partitions create an alcove condition.

Staff note: This was submitted as a comment of 6-34, but this is applicable to 06-33.

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Committee Action on 2<sup>nd</sup> draft Ballot Comment 4: AS/AM/D

**REPORT OF HEARING:**

Modification (if any):

Committee Reason:

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**06-33 – 2021 2<sup>nd</sup> draft Committee Action**

Committee Action for First Ballot: AS/AM/D

**REPORT OF HEARING:**

Modification (if any):

Further modify as follows:

Committee Reason:

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<b>Report for 06-33– 2021</b>		
<b>Committee decision:</b> D	<b>Committee Vote at Meeting:</b> 19-2-3	<b>Committee Vote on Ballot:</b> 39-1-1
<b>REPORT OF HEARING:</b>		
Modification (if any):		
Committee Reason: The committee felt that additional information on the use of urinals by persons with disabilities is needed to determine if an ambulatory type compartment or a wheelchair accessible type compartment is needed. With the more common design of multi-gender toilet room this is a gap in the current standard.		
<b>Committee decision:</b> AS BC1	<b>Committee Vote at Meeting:</b> 16-8	<b>Committee Vote on Ballot:</b>
<b>REPORT OF HEARING – FIRST DRAFT</b>		
Modification (if any):		
Committee Reason:		
BC1 - There is no guidance for how an accessible urinal located within a stall should be addressed. These will show up in gender neutral bathrooms. These requirements are based on an ambulatory stall dimensions and grab bars. This would allow access for people with some leg bearing.		
<b>Committee decision:</b> AS/AM/D	<b>Committee Vote at Meeting:</b>	<b>Committee Vote on Ballot:</b>
<b>FINAL ACTION:</b>		
Modification (if any):		
Committee Reason:		

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## 06-40 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-40	Hirsch	607.2, 607.3 (New), 607.5, Figures 607.2(A), 607.2(B), 607.3 (New), 607.5, 1103.2.5.1 (A), 1103.2.5.1 (B)	AM 18-7-5	12-15-22 3-28-2024	Bathing related – 06-40, 06-59, 11-29 Final Action AFM BC3 and PC1

Comment 1 <sup>st</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Anderson, AIA	Negative	NA	3-28-2024	
BC2	Dain, AIA	Affirmative	NA	3-28-2024	
<b>BC3</b>	Paarlberg, AIA	Negative	AM 26-0-0	3-28-2024	
BC4	Buuck, NAHB	Negative	NA	3-28-2024	
<b>PC1</b>	Terminology	AM	AM 28-0-2	3-28-2024	Editorial
<b>PC2</b>	Buuck	AM	AS 11-14-2 failed	3-28-2024	
<b>PC3</b>	Stratton	AM	NA	3-28-2024	

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Buuck, NAHB	AM			
BC2	Schorr, ATBCB	AM			
BC3	Paarlberg, ICC	AM			

## 06-40 – 2021

**607.2, 607.3(New), 607.5, Figures 607.2(A), 607.2(B), 607.3(New), 607.5, 1103.2.5.1(A), 1103.2.5.1(B)**

**Proponent:** Thomas Hirsch, FAIA, Hirsch Group Architecture, representing self; M. Bradley Gaskins, AIA; Gina Hillberry for United Cerebral Palsy; Joe Jurkiewicz, AIA; Marsha Mazz for United Spinal Association; Edward Steinfeld, Arch.D, AIA; and Steven R. Winkel, FAIA, PE, CASp

**Revise as follows:**

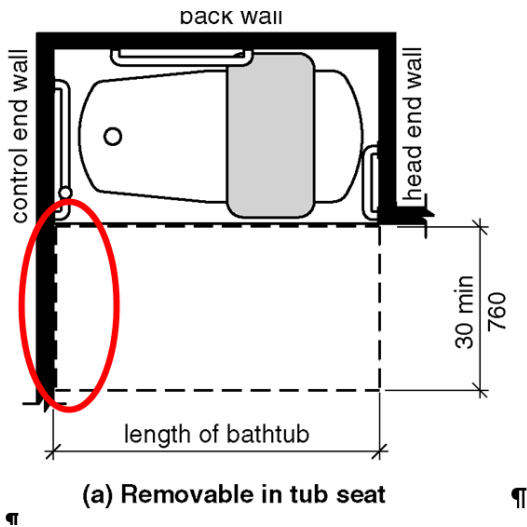
### SECTION 607



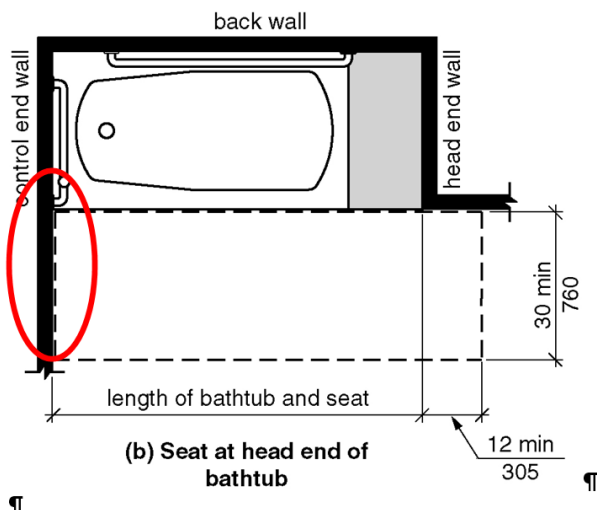
## BATHTUBS

**607.2 Transfer Clearance.** A transfer clearance in front of bathtubs extending the length of the bathtub and 30 inches (760 mm) minimum in depth shall be provided. Where a permanent seat is provided at the head end of the bathtub, the transfer clearance shall extend 12 inches (305 mm) minimum beyond the wall at the head end of the bathtub.

*Note: The wall in the Figures 607.2(A) and 607.2(B) would be jogged to indicate the additional 4 inch toe clearance in the new Figure 607.3. The committee will need to decide if Figures 607.2(A) and 607.2 (B) should be revised to show the control clearance with the transfer clearance or if the control clearance should be in a separate Figure 607.3. The figure submitted indicates the transfer clearance moving forward, not an addition 4 inch control clearance as the text indicates.*

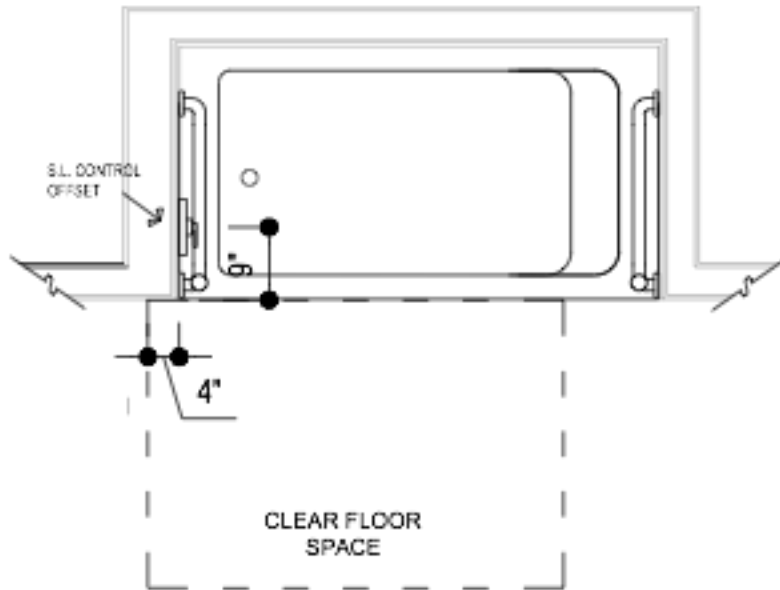


**FIGURE 607.2(A)**  
**TRANSFER CLEARANCE FOR BATHTUBS WITH REMOVABLE IN TUB SEATS**



**FIGURE 607.2(B)**  
**TRANSFER CLEARANCE FOR BATHTUBS WITH SEAT AT HEAD END OF TUB**

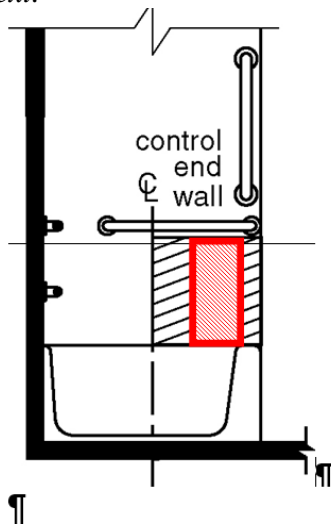
**607.3 Control Clearance.** The clear floor space for toe clearance at the controls shall extend 4 inches (100 mm) minimum beyond the control end wall.



**FIGURE 607.3**  
**CLEARANCE FOR BATHTUBS CONTROLS**

**607.5 Controls.** Controls, other than drain stoppers, ~~shall be provided on an end wall,~~ located between the bathtub rim and grab bar, and ~~between the open side of the bathtub and the centerline of the width of the bathtub~~ the centerline of controls measured from the approach side of the bathtub shall be located 5 inches (127 mm) minimum and 9 inches (229 mm) maximum from the clear floor space. Controls shall comply with Section 309.4.

*Note: The area for the controls in Figure 607.5 would be revised to the smaller area indicated in the revised text.*



**FIGURE 607.5**  
**LOCATION OF BATHTUB CONTROLS**

*Note: The references from Accessible and Type A units are shown so that the committee is clear on how this proposal will affect unit requirements.*

## SECTION 1102 ACCESSIBLE UNITS

**1102.11.2 Toilet and bathing facility.** At least one toilet and bathing facility shall comply with Section 603. At least one lavatory, one water closet and either a bathtub or shower within the unit shall comply with Sections 604 through 610. These toilet and bathing fixtures shall be in a single toilet/bathing area, such that travel between fixtures does not require travel through other parts of the unit.

## SECTION 1103 TYPE A UNITS

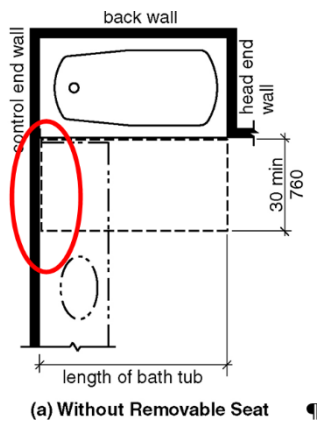
**1103.11.2.5 Bathing fixtures.** The bathing fixture shall be a bathtub complying with Section 1103.11.2.5.1 or a shower compartment complying with Section 1103.11.2.5.2.

**1103.11.2.5.1 Bathtub.** Bathtubs shall comply with Section 607.

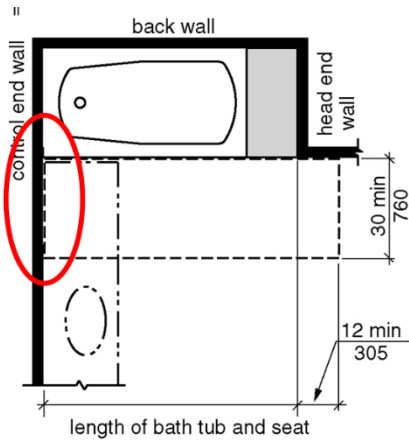
**Exception:** Countertops and cabinetry shall be permitted at one end of the clearance, provided the following criteria are met:

1. The countertop and cabinetry can be removed;
2. The floor finish extends under the countertop and cabinetry; and
3. The walls behind and surrounding the countertop and cabinetry are finished.

*Note: The wall in the Figures 1103.11.2.5.1(A) and 1103.11.2.5.1(B) would be jogged to indicate the additional 4 inch control clearance in the new Figure 607.2.1*



**Figure 1103.11.2.5.1(A)**  
**CLEARANCE FOR BATHTUBS IN TYPE A UNITS WITH REMOVABLE SEATS**



(b) With Permanent Seat

**Figure 1103.11.2.5.1(B)**

### **CLEARANCE FOR BATHTUBS IN TYPE A UNITS WITH PERMANENT SEATS**

**REASON:** Based on anthropometry, the provision of toe space past the control end of the fixture accomplishes realistic reach of the control for 90% of persons measured. In existing buildings “technical infeasibility” provides an exception for difficult situations.

**Notes:** Table till end of Chapter 6

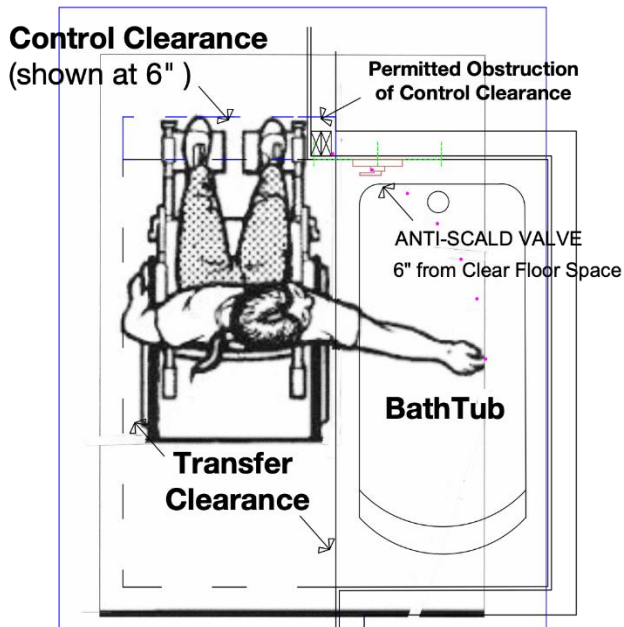
## **06-40 – 2021 Modification**

**607.2, 607.3(New), 607.5, Figures 607.2(A), 607.2(B), 607.3(New), 607.5, 1103.2.5.1(A), 1103.2.5.1(B)**

**Proponent:** Thomas Hirsch, FAIA, Hirsch Group Architecture, representing self

**Further revise as follows:**

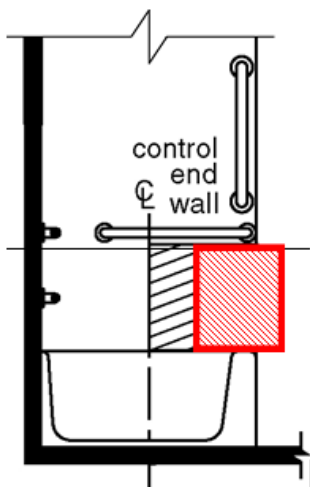
**607.3 Control Clearance.** The clear floor space for toe clearance complying with Section 306.2 at the controls shall extend 4-6 inches (100 152 mm) minimum beyond the control end wall. An obstruction by the control wall of 4 inches (102 mm) maximum shall be permitted.



*Note: This is a replacement figure. The clear floor space location was revised in the figure, but the location of the valve does not match the text in Section 607.5.*

**FIGURE 607.3  
CLEARANCE FOR BATHTUBS CONTROLS**

**607.5 Controls.** Controls, other than drain stoppers, located between the bathtub rim and grab bar, and the centerline of the control valve shall be located ~~controls measured from the approach side of the bathtub shall be located 5 inches (127 mm) minimum and~~ 9 inches (229 mm) maximum from the clear floor space. Controls shall comply with Section 309.4.



*Note: The area for the controls in Figure 607.5 would be revised to the smaller area indicated in the revised text. 9" is from the clear floor space, not from the front of the tub.*

**FIGURE 607.5  
LOCATION OF BATHTUB CONTROLS**

**Reason:**

1. Conforms “toe space” with prior use of the term in Sec. 306.2.
2. Allows intrusion of wall framing without interfering with user’s toes
3. Allows for plumbing valves & piping in typical use.

**Staff note:** This requirement would apply to Accessible and Type A units.

**Staff Note 12-1-2022:** Tabled till 12-15-2022 meeting and first in order of discussion.

**Committee Action:** As Modified

Notes 12-15-2022: Proposal split

Chair decided changes to Section 607.2 revisions are editorial

Part 1 Section 607.3 (control clearance) AM 18-7-5

Part 2 Section 607.5 (control location) AM 5-22-2; D 25-0-2

**REPORT OF HEARING:**

**Modification (if any):**

**Replace the proposal with the following:**

**607.2 Transfer Clearance.** A transfer clearance in front of bathtubs extending the length of the bathtub and 30 inches (760 mm) minimum in depth shall be provided. Where a permanent seat is provided at the head end of the bathtub, the transfer clearance shall extend 12 inches (305 mm) minimum beyond the wall at the head end of the bathtub.

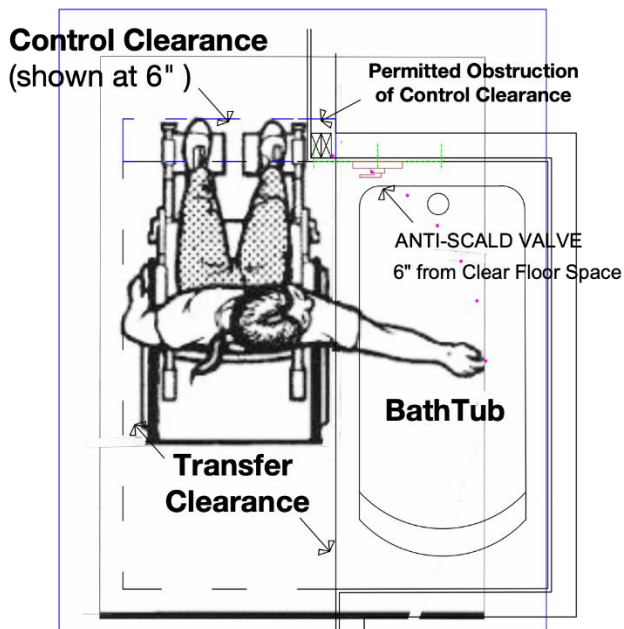
**FIGURE 607.2(A)**

**TRANSFER CLEARANCE FOR BATHTUBS WITH REMOVABLE IN TUB SEATS**

**FIGURE 607.2(B)**

**TRANSFER CLEARANCE FOR BATHTUBS WITH SEAT AT HEAD END OF TUB**

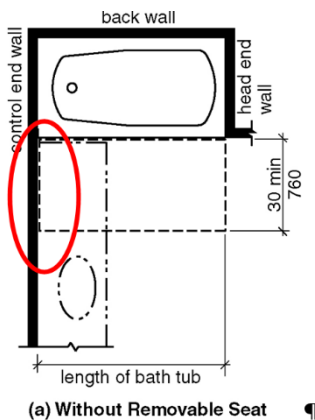
**607.3 Control Clearance.** The clear floor space for toe clearance complying with Section 306.2 at the controls shall extend 6 inches (152 mm) minimum beyond the control end wall. An obstruction by the control wall of 4 inches (102 mm) maximum shall be permitted.



**FIGURE 607.3**  
**CLEARANCE FOR BATHTUBS CONTROLS**

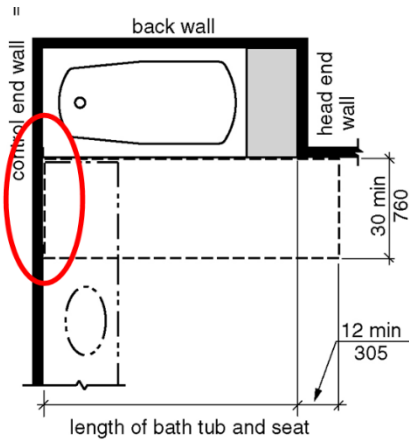
*Note: The figure submitted is the suggested start for a new figure.*

*Note: The wall in the Figures 1103.11.2.5.1(A) and 1103.11.2.5.1(B) would be jogged to indicate the additional 6-inch control clearance in the new Figure 607.3*



**Figure 1103.11.2.5.1(A)**  
**CLEARANCE FOR BATHTUBS IN TYPE A UNITS WITH REMOVABLE SEATS**





(b) With Permanent Seat

**Figure 1103.11.2.5.1(B)**

### **CLEARANCE FOR BATHTUBS IN TYPE A UNITS WITH PERMANENT SEATS**

**Committee Reason:** The proposal was divided for discussion. For clarity, the modification shows the final version approved by the committee. The acting chair, Gina Hilberry, determined that the change to Section 607.2 was editorial due to the change for control clearance. The replacement for the new Section 607.3 for control clearance aligns better with the information for reach based on the anthropometric information from Dr. Steinfeld. The obstruction in the control clearance would allow for the physical elements in the wall needed to construct a corner. Since the widest part of the wheelchair is at the rear wheels, this will not be an obstruction for reach. There were concerns raised that the language was not clear and additional modifications are necessary. The committee felt that the current language in Section 607.5 for control location provided better direction since it included all of the controls (temperature, on/off, diverters) instead of just to the center of a valve. The proposed language assumed one center control, was too restrictive, and did not address the handle locations, spread mount controls or the diverter location.

607.2-HIRSCH.doc

## **06-40 – 2021 Ballot Comments**

### **BALLOT COMMENT 1- FIRST DRAFT:**

Proponent: *Doug Anderson, AHLA*

Desired Action: Negative with comment

Modification:

Reason: This will be very difficult to achieve in many existing bathrooms. Existing conditions should be exempted from this requirement.

### **BALLOT COMMENT 2- FIRST DRAFT:**

Proponent: *Daniel Dain, AIA*

Desired Action: Affirmative with comment

Modification:

Reason: Review all locations of “clear floor space” vs “clearance” or “transfer clearance” and confirm they are distinctly used if and where there is a clear distinction. The standard also uses maneuvering clearance and consider that a toilet requires transfer

clearance in the same manner as a tub or shower seat. Also note that without reference to 305 there is no reference to 305.2 Floor surfaces.

**BALLOT COMMENT 3- FIRST DRAFT:**

Proponent: *Kimberly Paarlberg, ICC*

Desired Action: Negative with comment

Modification: See Ballot Comment 3

**BALLOT COMMENT 4- FIRST DRAFT:**

Proponent: *Daniel Buuck, NAHB*

Desired Action: Negative with comment

Modification:

Reason: The addition of the clearance beyond the control wall will have significant impacts on the current design of bathrooms in multi-family, requiring additional square footage to be dedicated to bathrooms. This would increase the cost per unit of construction in multifamily construction, making it more difficult to provide affordable accessible housing.

## 06-40 – 2021 Ballot Comment 3

607.2, 607.3

**Proponent: Kimberly Paarlberg, AIA**

**Revise as follows:**

**Further modify**

**607.2 ~~Transfer~~ Clearance.** A ~~transfer~~ clearance in front of bathtubs extending the length of the bathtub and 30 inches (760 mm) minimum in depth shall be provided. Where a permanent seat is provided at the head end of the bathtub, the transfer clearance shall extend 12 inches (305 mm) minimum beyond the wall at the head end of the bathtub.

**FIGURE 607.2(A)**

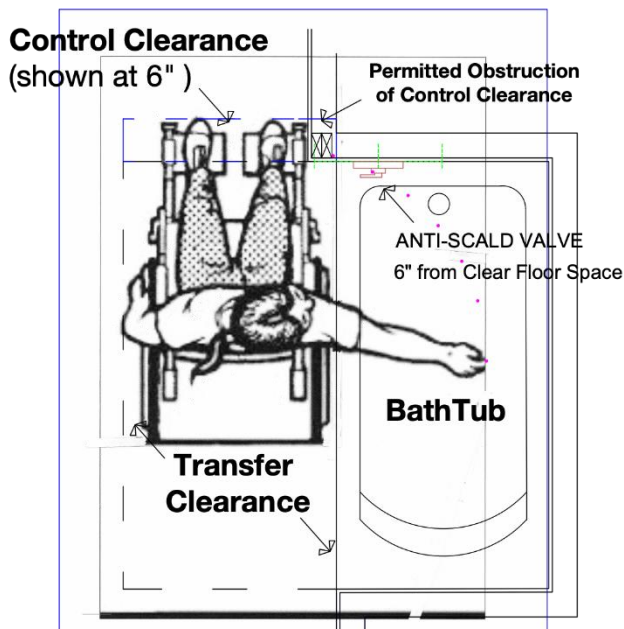
**~~TRANSFER~~ CLEARANCE FOR BATHTUBS WITH REMOVABLE IN TUB SEATS**

**FIGURE 607.2(B)**

**~~TRANSFER~~ CLEARANCE FOR BATHTUBS WITH SEAT AT HEAD END OF TUB**

**607.3 Control Clearance.** ~~The A~~ clear floor space for access to bathtub controls. ~~for toe clearance complying with Section 306.2 at the controls~~ shall extend 6 inches (152 mm) minimum beyond the control end wall. ~~An obstruction by the control wall of 4 inches (102 mm) maximum shall be permitted.~~

**Exception:** The control wall shall be permitted to overlap the clear floor space 4 inches (102 mm) maximum measure horizontally from the outside face of the bathtub.



**FIGURE 607.3**  
**CLEARANCE FOR BATHTUBS CONTROLS**

**REASON:** This is a request for disapproval.

The proposal changed the clearance in front of the tub to ‘transfer clearance’. The clearance in front of the tub is for positioning and transfer. In addition, by putting this at tubs – why is it not at water closets, tubs, showers, benches, beds – anywhere where someone is transferring? This additional term will add confusion.

The requirements for toe clearance in the ICC A117.1 Section 306.2 talks about a 30” minimum width, a 6” maximum depth and a 9” minimum in height. Is this toe clearance permitted to be under an accessible lavatory? If the tub is at the end of the room, this could require the entire room to be made 6” wider. You cannot cut into a plumbing wall that moves up a building with water supply, drainage and vent piping – so this would require a 6” furr out for the head of the tub.

The justification for this is based on Dr. Steinfeld’s reach study, but it does not take into consideration that the controls are inches off of the control wall surface.

The last sentence of 607.3 allows for construction of a corner that would now be required. However the 4” does not address the thickness of drywall or tile. The language of “an obstruction by the control wall” is confusion.

If the committee still feels this additional space is needed I would propose the above modifications:

**Committee Action for Ballot Comment 3:**

mod 26-1-2; AM 26-0-0

## **REPORT OF HEARING:**

**Modification (if any):**

**Replace 607.3 with the following:**

**607.3 Control Clearance.** ~~The A clear floor space shall be provided at the bathtub controls. complying with Section 306.2 at the controls~~ The toe clearance portion of the clear floor space shall extend 6 inches (152 mm) minimum beyond the control end wall. ~~An obstruction by the control wall of 4 inches (102 mm) maximum shall be permitted.~~

**Exception:** The control wall shall be permitted to overlap the clear floor space 4 inches (102 mm) maximum measured horizontally from the outside face of the bathtub.

**Committee Reason:** The modification is intended to clarify there is an option of just toe clearance past the control wall of the tub, and not to be read to require a 6" additional clearance that could be read to be full height. The change to separates the control clear floor space from the maneuvering space for the tub would improve clarity.

06-40 Paarlberg.doc

## 06-40 – 2021 Public Comment 1

### 607.2, 607.2.1

**Proponent:** Marsha Mazz, representing the Terminology Task Group

Further revise as follows:

#### SECTION 607 BATHTUBS

**607.1 General.** Bathtubs shall comply with Section 607.

**607.2 Transfer Maneuvering Clearance.** A transfer maneuvering clearance ~~in front of~~ at bathtubs extending the length of the bathtub and 30 inches (760 mm) minimum in depth shall be provided. Where a permanent seat is provided at the head end of the bathtub, the transfer maneuvering clearance at the bathtub shall extend 12 inches (305 mm) minimum beyond the wall at the head end of the bathtub.

**Figure 607.2 (A)**

~~TRANSFER MANEUVERING~~ CLEARANCE ~~FOR AT~~ BATHTUBS WITH REMOVABLE IN TUB SEATS

**FIGURE 607.2(B)**

~~TRANSFER MANEUVERING~~ CLEARANCE ~~FOR AT~~ BATHTUBS WITH SEAT AT HEAD END OF TUB

~~607.3 607.2.1 Clear floor space at the Controls Clearance.~~ The clear floor space ~~for toe clearance complying with Section 306.2~~ at the controls shall extend 6 inches (152 mm) minimum beyond the control end wall. ~~An obstruction by the control wall of 4 inches (102 mm) maximum shall be permitted. An obstruction for the clear floor space shall be permitted at the control wall and 4 inches (102 mm) maximum, measured horizontally.~~

**FIGURE 607.3 607.2.1**

**CLEARANCE CLEAR FLOOR SPACE FOR BATHTUBS CONTROLS**

**REASON:** This is part of a proposal from the Terminology task group to define the building blocks so that a reference is not required. This public comment is included here because it was part of new text. Please see the complete proposal for additional information.

**REPORT OF HEARING:**

**Modification (if any):**

**Replace 607.3 with the following:**

~~607.3~~ **607.2.1 Control Clearance.** ~~The A~~ clear floor space shall be provided at the bathtub controls. ~~complying with Section 306.2 at the controls~~ The toe clearance portion of the clear floor space shall extend 6 inches (152 mm) minimum beyond the control end wall. ~~An obstruction by the control wall of 4 inches (102 mm) maximum shall be permitted.~~

**Exception:** The control wall shall be permitted to overlap the clear floor space 4 inches (102 mm) maximum measured horizontally from the outside face of the bathtub.

**Committee Reason:** The modification is to copy what was developed in the modification to BC3. Maneuvering clearance would coordinate with the committee decisions for other fixtures and will clarify the requirements.

**06-40 Terminology.doc**

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**06-40 – 2021 Public Comment 2**

**607.3**

**Proponent:** Dan Buuck, National Association of Home Builders (NAHB)

**Further revise as follows:**

**SECTION 607  
BATHTUBS**

**607.3 Control Clearance.** ~~Where a~~ The clear floor space for toe clearance complying with Section 306.2 at the controls ~~shall extend~~ s 6 inches (152 mm) minimum beyond the control end wall. ~~An an~~ obstruction by the control wall of 4 inches (102 mm) maximum shall be permitted.

---

**REASON:** As currently written, the requirement for additional space beyond the control wall would require a major overhaul of standard residential building designs. I believe assumptions were made that led to the approval of this new requirement. For example, that the area could be taken from an adjacent space or that a current building design can be easily expanded to accommodate this space. This is far from universally true, and the additional costs for this change will likely have a negative effect on the affordability of accessible housing.

The reason statement for the original proposal stated that “technical infeasibility” would provide relief for existing buildings. However, the use of the technical infeasibility provision is limited and not broadly understood. As defined by the International Existing Building Code (IEBC), the term does not apply to all load-bearing members; it only encompasses those that are “an essential part of the structural frame.” It also does not apply to other site constraints unless they “prohibit” modifications. The concept of “technical infeasibility” is

very subjective and should not be relied upon here. It may seem to some that an additional 6-inch space is not that much, but it could have an enormous impact on providing affordable housing in existing buildings.

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**Committee Action for Ballot Comment 2:** AS 11-14-2

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:** Better access for bathtub controls should be a requirement, not a choice.

06-40 Buuck.doc

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**06-40 – 2021 Public Comment 3**  
**607.3**

**Proponent:** Peter Stratton, Steven Winter Associates, Inc.

**Further revise as follows:**

**SECTION 607**  
**BATHTUBS**

**607.3 Control Clearance.** The clear floor space for toe clearance complying with Section 306.2 at the controls shall extend 6 inches (152 mm) minimum beyond the control end wall. ~~An obstruction by the control wall of 4 inches (102 mm) maximum shall be permitted. Where the toe clearance extends beyond the control end wall, an encroachment of 4 inches maximum into the side of the toe clearance is permitted.~~

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**REASON:** As originally proposed, the statement is not clear.

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**Committee Action for Public Comment 3:** No Action

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:** The concern is addressed in the modification to BC3.

06-40 Stratton.doc

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**06-40 – 2021 1<sup>st</sup> draft Committee Action**

**Committee Action for First Ballot:** AFM by BC3 AM 26-0-0 and PC1 AM 28-0-2

**REPORT OF HEARING:**

**Modification (if any):**

**Replace 607.3 with the following:**

~~**607.3 607.2.1 Control Clearance.** The A clear floor space shall be provided at the bathtub controls, complying with Section 306.2 at the controls The toe clearance portion of the clear floor space shall extend 6 inches (152 mm) minimum beyond the control end wall. An obstruction by the control wall of 4 inches (102 mm) maximum shall be permitted.~~

**Exception:** The control wall shall be permitted to overlap the clear floor space 4 inches (102 mm) maximum measured horizontally from the outside face of the bathtub.

**Committee Reason:**

BC3 - The modification is intended to clarify there is an option of just toe clearance past the control wall of the tub, and not to be read to require a 6" additional clearance that could be read to be full height. The change to separates the control clear floor space from the maneuvering space for the tub would improve clarity.

PC1 - The modification is to copy what was developed in the modification to BC3. Maneuvering clearance would coordinate with the committee decisions for other fixtures and will clarify the requirements.

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## **06-40 – 2021 2<sup>nd</sup> draft Ballot Comment 1**

### **607.2.1**

**Proponent:** Dan Buuck NAHB

**Vote:** negative with comment, AM

**Replace:**

~~**607.2.1 Clear floor space at the controls.** A clear floor space shall be provided at the bathtub controls. The toe clearance portion of the clear floor space shall extend 6 inches (152 mm) minimum beyond the control end wall.~~

~~**Exception:** The control wall shall be permitted to overlap the clear floor space 4 inches (102 mm) maximum measured horizontally from the outside face of the bathtub.~~

**607.2.1 Clear floor space at the controls.** Where a clear floor space for toe clearance complying with Section 306.2 is provided at the controls extends beyond the control end wall, an obstruction by the control wall of 4 inches (102 mm) maximum shall be permitted.

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**REASON:** As currently written, the requirement for additional space beyond the control wall would require a major overhaul of standard residential building designs. I believe assumptions were made that led to the approval of this new requirement. For example, that the area could be taken from an adjacent space or that a current building design can be easily expanded to accommodate this space. This is far from universally true, and the additional costs for this change will likely have a negative effect on the affordability of accessible housing. The reason statement for the original proposal stated that “technical infeasibility” would provide relief for existing buildings. However, the use of the technical infeasibility provision is limited and not broadly understood. As defined by the International Existing Building Code (IEBC), the term does not apply to all load-bearing members; it only encompasses those that are “an essential part of the structural frame.” It also does not apply to other site constraints unless they “prohibit” modifications. The concept of “technical infeasibility” is very subjective and should not be relied upon here. It may seem to some that an additional 6-inch space is not that much, but it could have an enormous impact on providing affordable housing in existing buildings.



**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-40 – 2021 2<sup>nd</sup> draft Ballot Comment 2**  
**607.2.1, Figure 607.2.1**

**Proponent:** Josh Schorr ATBCB

**Vote:** negative with comment, AM

**Further revise as follows:**

~~**607.2.1 Clear floor space at the controls.** A clear floor space shall be provided at the bathtub controls. The toe clearance portion of the clear floor space shall extend 6 inches (152 mm) minimum beyond the control end wall.~~

~~**Exception:** The control wall shall be permitted to overlap the clear floor space 4 inches (102 mm) maximum measured horizontally from the outside face of the bathtub.~~

~~**FIGURE 607.2.1**  
**CLEAR FLOOR SPACE FOR BATHTUBS CONTROLS**~~

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**REASON:** Many bathtubs are positioned so that at least the control wall or the opposite side wall of the bathtub is aligned with the walls of the room. By requiring additional space beyond the seat wall (if provided) and additional space beyond the control wall, the bathtub now needs to be offset from both adjacent walls. I also don't understand the exception; how can a wall overlap a clear floor space?

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-40 – 2021 2<sup>nd</sup> draft Ballot Comment 3**  
**607.2.1, Figure 607.2.1**

**Proponent:** Kimberly Paarlberg, ICC

**Vote:** negative with comment, AM

**Further revise as follows:**

~~607.2.1 Clear floor space at the controls. A clear floor space shall be provided at the bathtub controls. The toe clearance portion of the clear floor space shall extend 6 inches (152 mm) minimum beyond the control end wall. Exception: The control wall shall be permitted to overlap the clear floor space 4 inches (102 mm) maximum measured horizontally from the outside face of the bathtub.~~

~~FIGURE 607.2.1  
CLEAR FLOOR SPACE FOR BATHTUBS CONTROLS~~

**REASON:** This requires the bathtub to be offset from the main plumbing wall. In multi-story building, water supply, drains and vents are in vertical shafts and extend multiple floors with multiple connections. Some of the discussion talked about a hole for toe clearance into the wall – that is very difficult to do along a plumbing wall with everything that is in the wall and the fire protection requirements. This is literally going to result in the bathroom having to be 6” wider just for toe clearance. Or to keep the same room size, the designer will shorten the tub length, which shortens the transfer location.

In addition, the argument about the reach range was not allowing for consideration that plumbing controls stick out from the wall, so a user does not have to reach past their toes if the room wall and the control wall were the same.

Advocates did report complaints about reaching controls, but they did not say if the controls were located correctly past the tub center line or not.

This needs to be more closely investigated before we make this a minimum requirement. This is not a best design practice document.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 3:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-40– 2021 2<sup>nd</sup> draft Committee Action**

**Committee Action for First Ballot:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Further modify as follows:**

**Committee Reason:**

Report for 06-40– 2021		
Committee decision: AM	Committee Vote at Meeting: 18-7-5	Committee Vote on Ballot: 36-4-1
<b>REPORT OF HEARING:</b> Modification (if any): Replace the proposal with the following:  <b>607.2 Transfer Clearance.</b> A transfer clearance in front of bathtubs extending the length of the bathtub and 30 inches (760 mm) minimum in depth shall be provided. Where a permanent seat is provided at the head end of the bathtub, the transfer clearance shall extend 12 inches (305 mm) minimum beyond the wall at the head end of the bathtub.		

## Report for 06-40- 2021

### FIGURE 607.2(A) TRANSFER CLEARANCE FOR BATHTUBS WITH REMOVABLE IN TUB SEATS

### FIGURE 607.2(B) TRANSFER CLEARANCE FOR BATHTUBS WITH SEAT AT HEAD END OF TUB

**607.3 Control Clearance.** The clear floor space for toe clearance complying with Section 306.2 at the controls shall extend 6 inches (152 mm) minimum beyond the control end wall. An obstruction by the control wall of 4 inches (102 mm) maximum shall be permitted.

*Note: This figure submitted is the suggested start for a new figure.*

### FIGURE 607.3 CLEARANCE FOR BATHTUBS CONTROLS

*Note: The wall in the Figures 1103.11.2.5.1(A) and 1103.11.2.5.1(B) would be jogged to indicate the additional 6-inch control clearance in the new Figure 607.3*

#### Figure 1103.11.2.5.1(A) CLEARANCE FOR BATHTUBS IN TYPE A UNITS WITH REMOVABLE SEATS

#### Figure 1103.11.2.5.1(B) CLEARANCE FOR BATHTUBS IN TYPE A UNITS WITH PERMANENT SEATS

Committee Reason: The proposal was divided for discussion. For clarity, the modification shows the final version approved by the committee. The acting chair, Gina Hilberry, determined that the change to Section 607.2 was editorial due to the change for control clearance. The replacement for the new Section 607.3 for control clearance aligns better with the information for reach based on the anthropometric information from Dr. Steinfeld. The obstruction in the control clearance would allow for the physical elements in the wall needed to construct a corner. Since the widest part of the wheelchair is at the rear wheels, this will not be an obstruction for reach. There were concerns raised that the language was not clear and additional modifications are necessary. The committee felt that the current language in Section 607.5 for control location provided better direction since it included all of the controls (temperature, on/off, diverters) instead of just to the center of a valve. The proposed language assumed one center control, was too restrictive, and did not address the handle locations, spread mount controls or the diverter location.

**Committee decision: AFM BC3  
and PC1**

**Committee Vote at Meeting: 26-0-0,  
28-0-2**

**Committee Vote on Ballot:**

### REPORT OF HEARING – FIRST DRAFT

Modification (if any):

The modification is intended to clarify there is an option of just toe clearance past the control wall of the tub, and not to be read to require a 6" additional clearance that could be read to be full height. The change to separates the control clear floor space from the maneuvering space for the tub would improve clarity.

Committee Reason:

BC3 - The modification is intended to clarify there is an option of just toe clearance past the control wall of the tub, and not to be read to require a 6" additional clearance that could be read to be full height. The change to separates the control clear floor space from the maneuvering space for the tub would improve clarity.

PC1 - The modification is to copy what was developed in the modification to BC3. Maneuvering clearance would coordinate with the committee decisions for other fixtures and will clarify the requirements.

**Committee decision: AS/AM/D**

**Committee Vote at Meeting:**

**Committee Vote on Ballot:**

### FINAL ACTION:

Modification (if any):

Committee Reason:

## 06-53 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-53	Paarlberg	607.6, 608.5	AM 21-2-2	10-20-22 3-15-2024	Bathing related Final Action AFM by BC1 AS and PC1 AM

Comment 1 <sup>st</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Pace, HUD	Affirmative	AS 16-5-3	3-14-2024	Developed during meeting
PC1	Mazz, USA	AM	AM 22-7-1	3-14-2024	

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Mazz, USA	AM			

## 06-53 – 2021 607.6, 608.5

**Proponent:** Kimberly Paarlberg, International Code Council

**Revise as follows:**

### SECTION 607 BATHTUBS

**607.6 Hand shower.** A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used as both a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a control with a nonpositive shutoff feature. Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars.

#### **Exceptions:**

1. In other than Accessible units and Type A units, a fixed shower head located not greater than 48 inches (1220 mm) above the bottom of the bathtub shall be permitted in lieu of a hand shower.
2. In Accessible units, a fixed shower head located at not greater than 48 inches (1220 mm) above the tub floor shall be permitted in lieu of a hand shower where the clinical needs of a person receiving care or security concerns would consider the shower hose a safety hazard.

### SECTION 608 SHOWER COMPARTMENT

**608.5 Hand showers.** A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used both as a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a control with a nonpositive shutoff feature. Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars. A means to hold the hand shower ~~wand~~ while in the on or off position shall be located at a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower finish floor.

**Exception Exceptions:**

1. In other than Accessible units and Type A units, a fixed shower head located not greater than 48 inches (1220 mm) maximum above the shower floor shall be permitted in lieu of a hand shower.
  2. In Accessible units, a fixed shower head located at not greater than 48 inches (1220 mm) above the tub floor shall be permitted in lieu of a hand shower where the clinical needs of a person receiving care or security concerns would consider the shower hose a safety hazard.
- 

**REASON:** This proposal has two points.

The first exception in 607.5 is intended to be consistent between the current exception in 608.5. The fixed head should be an option in tubs or showers.

The second exception in 607.5 and 608.5 is in consideration of suicide prevention and security concerns in some hospitals and jails (which require Accessible units). I found several studies indicating that suicides are the number one cause of deaths in jails. In addition, there is a concern that the hose could be ripped out of the wall and used as some kind of weapon.

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## **06-53 – 2021 Modification**

### **607.6, 608.5**

**Proponent:** Marsha Mazz, United Spinal Assoc.

**Further revise as follows:**

#### **SECTION 607 BATHTUBS**

**607.6 Hand shower.** A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used as both a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a control with a nonpositive shutoff feature. Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars.

**Exceptions:**

1. In other than Accessible units and Type A units, a fixed shower head located not greater than 48 inches (1220 mm) above the bottom of the bathtub shall be permitted in lieu of a hand shower.
2. In Accessible units, a fixed shower head located at not greater than 48 inches (1220 mm) above the tub floor shall be permitted in lieu of a hand shower where the ~~clinical needs of a person receiving care or security concerns would consider the shower hose a safety hazard~~ toilet or bathing room is specially designed without protrusions for purposes of suicide prevention.

#### **SECTION 608 SHOWER COMPARTMENT**

**608.5 Hand showers.** A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used both as a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a control with a nonpositive shutoff feature. Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars. A means to hold the hand shower ~~wand~~ while in the on or off position shall be located at a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower finish floor.

**Exceptions:**

1. In other than Accessible units and Type A units, a fixed shower head located not greater than 48 inches (1220 mm) above the shower floor shall be permitted in lieu of a hand shower.
2. In Accessible units, a fixed shower head located at not greater than 48 inches (1220 mm) above the tub floor shall be permitted in lieu of a hand shower where the ~~clinical needs of a person receiving care or security concerns would consider the shower hose a safety hazard~~ toilet or bathing room is specially designed without protrusions for purposes of suicide prevention.

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Reason: Proposed Exception 2 requires the enforcing authority to “know” when a specific person’s “clinical needs” warrant concern regarding potential suicide. Not only is there no way for a code official to make this determination, but it is also unlikely that the prospective occupant of the unit will be: (1) known at the time of construction, and (2) a permanent resident, thereby necessitating reevaluation when the occupant changes. Further, Accessible units are scoped for both transient lodging and institutional occupancies. I don’t think we can assume that every occupant of an Accessible space has “clinical needs”.

Unlike proposed Exception 2, the modification provides visible and unambiguous criteria for determining where the exception for suicide concerns applies using language from a current exception in the Standard that addresses the same concern related to grab bars, Exception 2 to § 604, which is based on Exception 3 to § 604.5 of the 2010 ADA Standards.

We have NOT included the portion of the exception meant to address “security concerns” because we are not convinced that these are significant issues in transient lodging and institutional occupancies. Furthermore, an Exception in the 2010 ADA Standards to §608.6 allows a fixed shower head in all bathing facilities EXCEPT: “medical care facilities, long-term care facilities, transient lodging guest rooms, or residential dwelling units”. Consequently, the proposed exception applied to Accessible units would directly conflict with the ADA Standards and, in practicality, could not be used.

**BACKGROUND INFORMATION:****2017 ICC A117.1**

**604.5 Grab bars.** Grab bars for water closets shall comply with Section 609 and shall be provided in accordance with Sections 604.5.1 and 604.5.2. Grab bars shall be provided on the rear wall and on the side wall closest to the water closet.

**Exceptions:** 1. Grab bars shall not be required to be installed in a toilet room for a single occupant, accessed only through a private office and not for common use or public use, provided reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with Section 604.5.

2. In detention or correction facilities, grab bars shall not be required to be installed in housing or holding cells or rooms that are specially designed without protrusions for purposes of suicide prevention.

**2010 ADA Standards****608.6 Shower Spray Unit and Water**

A shower spray unit with a hose 59 inches (1500 mm) long minimum that can be used both as a fixed-position shower head and as a hand-held shower shall be provided. The shower spray unit shall have an on/off control with a non-positive shut-off. If an adjustable-height shower head on a vertical bar is used, the

bar shall be installed so as not to obstruct the use of grab bars. Shower spray units shall deliver water that is 120°F (49°C) maximum.

**EXCEPTION:** A fixed shower head located at 48 inches (1220 mm) maximum above the shower finish floor shall be permitted instead of a hand-held spray unit in facilities that are not medical care facilities, long-term care facilities, transient lodging guest rooms, or residential dwelling units.

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Committee Action: Approval as Modified 21-2-2

## **REPORT OF HEARING:**

**Modification (if any):** Per the modification indicated above.

Further modify as follows:

### **SECTION 607 BATHTUBS**

**607.6 Hand shower.** A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used as both a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a control with a nonpositive shutoff feature. Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars.

#### **Exceptions:**

1. In other than Accessible units and Type A units, a fixed shower head located not greater than 48 inches (1220 mm) above the bottom of the bathtub shall be permitted in lieu of a hand shower.
2. In Accessible units, a fixed shower head located at not greater than 48 inches (1220 mm) above the tub floor shall be permitted in lieu of a hand shower where the ~~clinical needs of a person receiving care or security concerns would consider the shower hose a safety hazard~~ toilet or bathing room is specially designed without protrusions for purposes of suicide prevention.

### **SECTION 608 SHOWER COMPARTMENT**

**608.5 Hand showers.** A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used both as a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a control with a nonpositive shutoff feature. Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars. A means to hold the hand shower ~~wand~~ while in the on or off position shall be located at a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower finish floor.

#### **Exceptions:**

1. In other than Accessible units and Type A units, a fixed shower head located not greater than 48 inches (1220 mm) above the shower floor shall be permitted in lieu of a hand shower.
2. In Accessible units, a fixed shower head located at not greater than 48 inches (1220 mm) above the tub floor shall be permitted in lieu of a hand shower where the ~~clinical needs of a person receiving care or security concerns would consider the shower hose a safety hazard~~ toilet or bathing room is specially designed without protrusions for purposes of suicide prevention.

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**Committee Reason:** The addition of the exception for a fixed shower head in bathtubs is coordinating with the same allowance in showers and is needed to address locations where the chance of vandalism is high. This may need to be coordinated with the allowance for seats on the head wall in the replacement to 06-45.



The new exception for locations where there may be concerns for resident safety is needed in areas such as psych wards or dementia wards in hospitals and suicide watch areas in jails. The modification was for consistency with the terminology used in Section 604.5.

607.6 THOMPSON.doc

## 06-53 – 2021 Ballot Comments

### BALLOT COMMENT 1- FIRST DRAFT:

Proponent: *Rex Pace, HUD*

Desired Action: Affirmative with comment

Modification:

Reason: The inclusion of language for suicide prevention is a necessary and supported. However, the original proposed text more appropriately addresses the range of necessary considerations and likely scenarios. The final text does not cover all the concerns that the committee believes as such in its reason statement. Dangerous actions may be attempted by occupants under care or restraint that are not necessarily motivated by the desire to commit suicide.

## 06-53 – 2021 Ballot Comment 1 607.6, 608.5 (developed during meeting)

**Modify Exception 2 as follows:**

### SECTION 607 BATHTUBS

**607.6 Hand shower.** A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used as both a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a control with a nonpositive shutoff feature. Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars.

#### Exceptions:

1. In other than Accessible units and Type A units, a fixed shower head located not greater than 48 inches (1220 mm) above the bottom of the bathtub shall be permitted in lieu of a hand shower.
2. In Accessible units, a fixed shower head located at not greater than 48 inches (1220 mm) above the tub floor shall be permitted in lieu of a hand shower where there are security or safety concerns that the shower hose poses a hazard. the toilet or bathing room is specially designed without protrusions for purposes of suicide prevention.

### SECTION 608 SHOWER COMPARTMENT

**608.5 Hand showers.** A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used both as a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a control with a nonpositive shutoff feature. Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars. A means to hold the hand shower ~~wand~~ while in the on or off position shall be located at a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower finish floor.

#### Exceptions:

1. In other than Accessible units and Type A units, a fixed shower head located not greater than 48 inches (1220 mm) above the shower floor shall be permitted in lieu of a hand shower.
2. In Accessible units, a fixed shower head located at not greater than 48 inches (1220 mm) above the tub floor shall be permitted in lieu of a hand shower where there are security or safety concerns that the shower hose poses a hazard. ~~the toilet or bathing room is specially designed without protrusions for purposes of suicide prevention.~~

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**Committee Action for Ballot Comment 1:**

AS 16-5-3

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:** It is important to include safety concerns for areas like jails, holding cells, hospitals where constant monitoring is not an option – both for hoses being used as a possible weapon or suicide prevention. Current modification to limit this only to areas totally designed for suicide prevention is too limiting. Commentary should include additional information to clarify what kinds of concerns are legitimate.

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## **06-53 – 2021 Public Comment 1**

### **607.6**

**Proponent:** Marsha Mazz, United Spinal Association

**Revise as follows:**

#### **SECTION 607**

#### **BATHTUBS**

**607.6 Hand shower.** A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used as both a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a control with a nonpositive shutoff feature. Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars.

**Exceptions Exception:**

- ~~1. In other than Accessible units and Type A units, a fixed shower head located not greater than 48 inches (1220 mm) above the bottom of the bathtub shall be permitted in lieu of a hand shower.~~
2. In Accessible units, a fixed shower head located at not greater than 48 inches (1220 mm) above the tub floor shall be permitted in lieu of a hand shower where the toilet or bathing room is specially designed without protrusions for purposes of suicide prevention.

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**REASON:** This exception evolved from an exception for places where vandalism is a concern to a full-out exception for non-residential facilities. If people with disabilities need a hand shower to bathe effectively, they need it no matter the location. We are not suggesting replacing the exception for vandalism because accessibility should be maintained regardless of the designer's belief that vandalism could occur.

(Staff note: This section was revised by 06-45-21 AM, 06-47-21 AM, 06-53-21 AM, 06-54-21 AM)

**REPORT OF HEARING:****Modification (if any):**

**608.5 Hand showers.** A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used both as a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a control with a nonpositive shutoff feature. Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars. A means to hold the hand shower ~~wand~~ while in the on or off position shall be located at a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower finish floor.

**Exception Exceptions:**

- ~~1. In other than Accessible units and Type A units, a fixed shower head located 48 inches (1220 mm) maximum above the shower floor shall be permitted in lieu of a hand shower.~~
2. In Accessible units, a fixed shower head located at not greater than 48 inches (1220 mm) above the tub floor shall be permitted in lieu of a hand shower where the clinical needs of a person receiving care or security concerns would consider the shower hose a safety hazard.

**Committee Reason:** Removed exception 1 from bathtubs and showers; this is not specific to vandalism so current language is too broad and can be used for locations where hand showers are needed.

**06-53 Mazz.doc**

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**06-53 – 2021 1<sup>st</sup> draft Committee Action****Committee Action for First Ballot:**

AM by BC1 and PC1

**REPORT OF HEARING:****Modification (if any):****Committee Reason:**

**BC1-** It is important to include safety concerns for areas like jails, holding cells, hospitals where constant monitoring is not an option – both for hoses being used as a possible weapon or suicide prevention. Current modification to limit this only to areas totally designed for suicide prevention is too limiting. Commentary should include additional information to clarify what kinds of concerns are legitimate.

**PC1 -** Removed exception 1 from bathtubs and showers; this is not specific to vandalism so current language is too broad and can be used for locations where hand showers are needed.

---

**06-53 – 2021 2<sup>nd</sup> draft Ballot Comment 1****607.6****Proponent:** Marsha Mazz USA**Vote:** negative with comment, AM

**607.6 Hand shower.** A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used as both a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a nonpositive shut-off feature that complies with the operable parts requirements in Section 309.4. A fixed shower head, in addition to the hand shower shall be permitted.

**Exception:** In Accessible units, a fixed shower head located ~~at not greater than~~ 48 inches (1220 mm) maximum above the tub floor shall be permitted in lieu of a hand shower ~~where there are security or safety concerns that the shower hose poses a hazard in bathing facilities that are specially designed without protrusions for purposes of suicide prevention.~~

**REASON:** The exception presents an opportunity to refuse to provide hand showers in just about any Accessible unit and, it invites the owner or designer to make assumptions about the occupants that may be unwarranted and in violation of the Fair Housing Act and the ADA. Use of the terms “security” and “safety” together is confusing. When would a “security” concern result in a decision that a hose poses a hazard? The provision begs the question “To whom does the hose present a hazard”? This exception should only be permitted when life safety is a concern e.g. in a hospital where suicide is a concern, not in hotels, nursing homes, group homes, and similar facilities where the occupants are free to use the bathroom without supervision.

**Staff note:** This would reverse the decision the committee made with Ballot Comment 1 to the 1<sup>st</sup> draft.

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

**06-53 – 2021 2<sup>nd</sup> draft Committee Action**

**Committee Action for First Ballot:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Further modify as follows:**

**Committee Reason:**

<b>Report for 06-53- 2021</b>		
<b>Committee decision: AM</b>	<b>Committee Vote at Meeting: 21-2-2</b>	<b>Committee Vote on Ballot:39-1-1</b>
<b>REPORT OF HEARING:</b> Modification (if any): Further revise as follows:		
SECTION 607 BATHURS		

## Report for 06-53– 2021

**607.6 Hand shower.** A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used as both a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a control with a nonpositive shutoff feature. Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars.

**Exceptions:**

1. In other than Accessible units and Type A units, a fixed shower head located not greater than 48 inches (1220 mm) above the bottom of the bathtub shall be permitted in lieu of a hand shower.
2. In Accessible units, a fixed shower head located at not greater than 48 inches (1220 mm) above the tub floor shall be permitted in lieu of a hand shower where the ~~clinical needs of a person receiving care or security concerns would consider the shower hose a safety hazard~~ toilet or bathing room is specially designed without protrusions for purposes of suicide prevention.

### SECTION 608 SHOWER COMPARTMENT

**608.5 Hand showers.** A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used both as a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a control with a nonpositive shutoff feature. Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars. A means to hold the hand shower wand while in the on or off position shall be located at a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower finish floor.

**Exceptions:**

1. In other than Accessible units and Type A units, a fixed shower head located not greater than 48 inches (1220 mm) above the shower floor shall be permitted in lieu of a hand shower.
2. In Accessible units, a fixed shower head located at not greater than 48 inches (1220 mm) above the tub floor shall be permitted in lieu of a hand shower where the ~~clinical needs of a person receiving care or security concerns would consider the shower hose a safety hazard~~ toilet or bathing room is specially designed without protrusions for purposes of suicide prevention.

Committee Reason: The addition of the exception for a fixed shower head in bathtubs is coordinating with the same allowance in showers and is needed to address locations where the chance of vandalism is high. This may need to be coordinated with the allowance for seats on the head wall in the replacement to 06-45.

The new exception for locations where there may be concerns for resident safety is needed in areas such as psych wards or dementia wards in hospitals and suicide watch areas in jails. The modification was for consistency with the terminology used in Section 604.5.

**Committee decision:** AFM by BC1 and PC1

**Committee Vote at Meeting:**  
BC1- AS 16-5-3; PC1 AM 22-7-1

**Committee Vote on Ballot:**

#### REPORT OF HEARING – FIRST DRAFT

Modification (if any):

Committee Reason:

**BC1-** It is important to include safety concerns for areas like jails, holding cells, hospitals where constant monitoring is not an option – both for hoses being used as a possible weapon or suicide prevention. Current modification to limit this only to areas totally designed for suicide prevention is too limiting. Commentary should include additional information to clarify what kinds of concerns are legitimate.

**PC1** - Removed exception 1 from bathtubs and showers; this is not specific to vandalism so current language is too broad and can be used for locations where hand showers are needed.

**Committee decision:** AS/AM/D

**Committee Vote at Meeting:**

**Committee Vote on Ballot:**

#### FINAL ACTION:

Modification (if any):

Committee Reason:

## 06-58 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-58	Anderson – Accessible bathing	608.2.1.1, Figure 608.2.1.1	AM 26-4-2	11-03-22 5-23-24	Bathing related Final action is AFM BC2 and BC3

Comment 1 <sup>st</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Dain, AIA	Affirmative	NA	5-23-2024	
BC2	Pace, HUD	Affirmative	AS 20-0-3	3-14-2024	Developed during meeting
<b>BC3</b>	Paarlberg, ICC	Negative	AM 19-0-3	5-23-2024	Replacement

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Mazz, USA	AM			

## 06-58 – 2021

### 608.2.1.1, Figure 608.2.1.1

**Proponent:** Doug Anderson, representing A117.1 Accessible Bathing Task Group

**Revise as follows:**

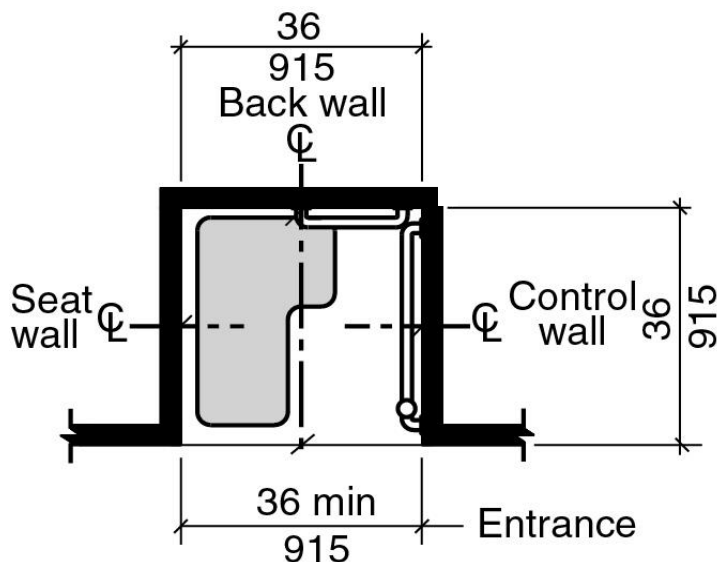
### SECTION 608 SHOWER COMPARTMENTS

**608.1 General.** Shower compartments shall comply with Section 608.

**608.2 Size, clearance and seat.** Shower compartments shall have sizes, clearances and seats complying with Section 608.2.

**608.2.1 Transfer-type shower compartments.** Transfer-type shower compartments shall comply with Section 608.2.1.

**608.2.1.1 Size.** Transfer-type shower compartments shall have a clear inside dimension of ~~36~~ 35 to 37 inches (~~915~~ 889-940 mm) in width measured at the center point of opposing sides and ~~36~~ 35 to 37 inches (~~915~~ 889-940 mm) in depth measured from the center point of ~~opposing sides~~ the rear wall to the to the outside of the threshold. An entry 36 inches (915 mm) minimum in width shall be provided.



Note: inside finished dimensions measured at the center points of opposing sides

**FIGURE 608.2.1.1  
TRANSFER-TYPE SHOWER COMPARTMENT SIZE**

*Note: Modify figure to include new dimension range.*

**REASON:** This proposal is seeking to build in construction tolerance to the transfer shower inside dimensions.

## 06-58 – 2021 Modification

### 608.2.1.1, Figure 608.2.1.1

**Proponent:** Scott Brady, representing Fiat and Stern-Williams

**Further modify as follows:**

### SECTION 608 SHOWER COMPARTMENTS

**608.1 General.** Shower compartments shall comply with Section 608.

**608.2 Size, clearance and seat.** Shower compartments shall have sizes, clearances and seats complying with Section 608.2.

**608.2.1 Transfer-type shower compartments.** Transfer-type shower compartments shall comply with Section 608.2.1.

**608.2.1.1 Size.** Transfer-type shower compartments shall have a clear inside dimension of 35 to 37 inches (889-940 mm) in width measured at the center point of opposing sides and 35 to 37 inches (889-940 mm) in depth measured from the center point of the rear wall to the outside of the threshold. Shower compartment



dimensions shall be measured at a height from 20 inches (508) minimum to 72 inches (1828 mm) maximum above the shower floor. An entry 36 inches (915 mm) minimum in width shall be provided.

Reason: I like the proposed modification to allow for 35-37 inches on the inside wall dimensions. I would like to add that this dimension apply to a certain height range – the working area inside the shower. I'm suggesting this range be from the top of the seat to a height of 6 feet.

Both Fiat and Stern-Williams make shower floors. In typical construction, tile walls sit on top of a ledge on the floor base. We make the floor base 36x36 to meet the standard, but as you move up from the floor, the walls of the base draft outward with radiused corners, then there's the ledge the wall sits on, so the distance between, centers of the walls can be 40" x 40". To keep the walls at 36"x36", we need to make the insides of the floors a little smaller. The same logic applies above the shower. Once you get above a certain height (I'm guessing 6'), the 36" x 36" working area doesn't matter. The shower may be sitting in an area that expands out another few inches above it.

## TERRAZZO WHEELCHAIR SHOWER RECEPTOR

### TERRAZZO WHEELCHAIR SHOWER RECEPTOR

- No threshold terrazzo wheelchair receptor with stainless steel strainer plate.
- One piece floor fabricated from precast terrazzo, made of black and white marble chips cast in white Portland cement.
- Min compressive strength of 3,000 p.s.i. after seven days of curing.
- Recessed for floor installation.
- Factory grounded and polished to remove air holes and/or excess pits grouted.
- Min shoulder of 4" high inside, 6" high outside, with a min of 1/2" wide.
- Integral tiling flange made of galvanized bonderized steel with min of 1" above shoulder.
- Stainless steel and cast integral drain provide a min caulked lead connection of 1" deep, to a 2" pipe. Quick drain connection using a QDC-4 connector can also be used.
- Complies to 2010 ADA guideline.



#### Nominal Dimensions:

- ☐ **ADATN3636** 41.23" x 38.62" (1047 x 981mm)
- ☐ **ADATN6030** 65.23" x 32.62" (1657 x 829mm)
- ☐ **ADATN6036** 65.23" x 38.62" (1657 x 981mm)

#### NOTES:

Establish 1/4" clearance between shower floor and wall. It is required that the entire area between the receptor and the building floor have a 1/2" layer of mortar in order that shower floors be level.

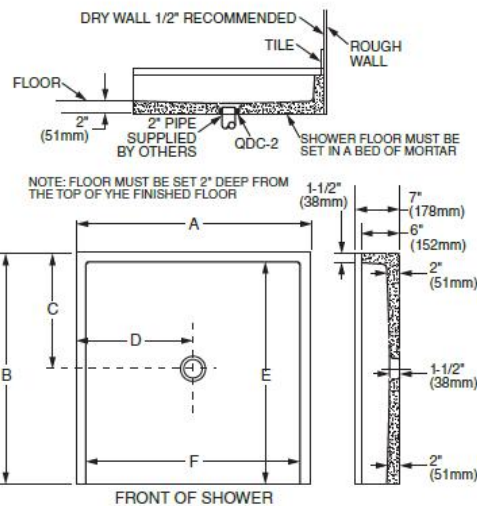
It is recommended that a floor drain be installed at or near the entrance of the shower.

All models comply with Americans With Disabilities Act and A117.1 handicapped standards.

**IMPORTANT:** Rough-in dimensions may vary 1/2" and are subject to change or cancellation without prior notice.



**MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES - CHECK LOCAL CODES.**



	OUTSIDE DIMENSIONS				MINIMUM INSIDE DIMENSIONS	
	A	B	C	D	E	F
ADATN-3636	41.23" (1047mm)	38.62" (981mm)	18.31" (465mm)	20.62" (524mm)	36" (914mm)	36" (914mm)
ADATN-6030	65.23" (1657mm)	32.62" (829mm)	15.75" (400mm)	32.62" (829mm)	30" (762mm)	60" (1542mm)
ADATN-6036	65.23" (1657mm)	38.62" (981mm)	15.75" (400mm)	32.62" (829mm)	36" (914mm)	60" (1542mm)

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Revised 12/17

**Modification (if any):**  
**Further modify as follows:**

**608.2.1.1 Size.** Transfer-type shower compartments shall have a clear inside dimension of 35 to 37 inches (889-940 mm) in width measured at the center point of opposing sides and 35 to 37 inches (889-940 mm) in depth measured from the center point of the ~~rear back~~ wall to the to the ~~centerline outside~~ of the threshold. An entry 36 inches (915 mm) minimum in width shall be provided.

**Committee Reason:** The modification from ‘rear’ to ‘back’ is to match the terminology in the figure. The modification from ‘outside’ to ‘centerline’ was an attempt to clarify that the size is within the shower, and the width and the location of a threshold are not addressed in the standard or the plumbing codes. There was additional discussion on if the depth of the shower should be the ‘entrance’ since the threshold could be from fully inside to fully outside of the shower itself. There was concern about at what height the shower size should be measured – at the floor (where there can be a curve or side curb) or at the elevations where the size was the concern – knee height for seating and shoulder height for reach to controls and grab bars.

**608.2.2.1-ANDERSON.doc**

## 06-58 – 2021 Ballot Comments

### BALLOT COMMENT 1- FIRST DRAFT:

Proponent: *Daniel Dain, AIA*

Desired Action: Affirmative with comment

Modification:

Reason: “Center point” is confusing being that you mean the center point of the wall height or height of the shower - however some showers have exposed ceilings (fitness center, high school locker room) that could be 20' AFF. The threshold being the opening is understandable (where the walls turn in the figure), but the floor threshold if there is marble or some other transition material (e.g. prefab unit to floor tile) could be confusing – so, the figures will help clarify these concerns – an elevation view or 3D would be needed for center point.

### BALLOT COMMENT 2- FIRST DRAFT:

Proponent: *Rex Pace, HUD*

Desired Action: Affirmative with comment

Modification:

Reason: The proposed range is supported. However, the shower entry is still required to be 36 inches minimum wide, therefore, a secondary conflict may be possible. Given how many showers are manufactured, the effective interior width size will be much closer to 36 inches than 35 inches so this requirement, while on the whole supported, may cause some confusion. Recommend that commentary emphasize the 35-inch dimension for the shower depth to the threshold centerline from the back wall. While somewhat concerned about a centerline dimension and the variables this may entail, the proposal as a whole is still supported

### BALLOT COMMENT 3- FIRST DRAFT:

Proponent: *Kimberly Paarlberg, ICC*

Desired Action: Negative with comment

Modification: Ballot Comment 3

## 06-58 – 2021 Ballot Comment 2

### 608.2.1 (developed during meeting)

Further revise as follows:

**608.2.1.1 Size.** Transfer-type shower compartments shall have a clear inside dimension of 35 to 37 inches (889-940 mm) in width measured at the center point of opposing sides and 35 to 37 inches (889-940 mm) in depth measured from the center point of the back wall to the to the centerline of the threshold. An entry ~~36~~ 35 to 37 inches (~~915~~ 889-940 mm) ~~minimum~~ in width shall be provided.

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Committee Action for Ballot Comment 2:

AS 20-0-3

#### REPORT OF HEARING:

Modification (if any):

**Committee Reason:** Revising the minimum door opening to match minimum shower sizes adds consistency with what the committee approved for the shower size.

06-58 Paarlberg.doc

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## 06-58 – 2021 Ballot Comment 3

### 608.2.1

Proponent: Kimberly Paarlberg, ICC

Further revise as follows:

**608.2.1.1 Size.** Transfer-type shower compartments shall have a clear inside dimension of 35 to 37 inches (889-940 mm) in width ~~measured at the center point of opposing sides~~ and 35 to 37 inches (889-940 mm) in depth ~~measured at the center point of opposing sides at a height of 36 inches from the floor from the center point of the back wall to the to the centerline of the threshold.~~ An entry 36 inches (915 mm) minimum in width shall be provided.

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**REASON:** : I agree with the dimensional tolerances for showers, however the last phrase would have the shower measure at the floor. This is a problem for shower bases with curbs on the side or back that are higher than the threshold and for curved edges that improve cleanability. Also, the threshold may not be related to the size of the shower or the location of the seat – someone could just move the threshold out to comply – and this could reduce access. If there is no threshold, then where would the measurement be?

Example:



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## 06-58 – 2021 Ballot Comment 3 Replacement

### 608.2.1

**Proponent:** Kimberly Paarlberg, Gina Hilberry, Rex Pace, Scott Windley

**Further revise as follows:**

**608.2.1.1 Size.** Transfer-type shower compartments shall have a clear inside dimension of 35 to 37 inches (889-940 mm) in width measured at the center point of opposing side walls and 35 to 37 inches (889-940 mm) in depth measured at the center point of the back wall and the plane in line with the front face of the shower enclosure. from the center point of the back wall to the to the centerline of the threshold. An entry 36 35 to 37 inches (915 889-940 mm) minimum in width shall be provided. The shower dimensions shall be measured at a height of 17 minimum to 37 inches maximum (432-940 mm) from the shower floor.

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**Reason:** The highlighted text is what the committee approved in BC2. Shower pans have curbs and rounded corners close to the floor. Many showers have extended thresholds to deal with the change of elevation between the shower floor and the room floor, or a shower may not have threshold where the room floor and shower floor are the same. The is the same issue with the curb and rounded corners at the back wall. The important clearance is at the reach for grab bars and controls – thus the height. The range is because shower floors are sloped.

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**Committee Action for Ballot Comment 3:**

AM 19-0-3; modification 17-1-4

### REPORT OF HEARING:

**Modification (if any):**

**Further modify as follows:**

**608.2.1.1 Size.** Transfer-type shower compartments shall have a clear inside dimension of 35 inches (899 mm) minimum to 37 inches maximum (889-940 mm) in width measured at the center point of opposing side walls and 35 inches (899 mm) minimum to 37 inches maximum (889-940 mm) in depth measured at the center point of the

back wall and the plane in line with the front face of the shower enclosure.. The shower clear inside dimensions shall be measured at a height of 17 minimum to 37 inches maximum (432-940 mm) from the shower floor. An entry 35 inches (899 mm) minimum to 37 inches maximum (889-940 mm) in width shall be provided. ~~The shower dimensions shall be measured at a height of 17 minimum to 37 inches maximum (432-940 mm) from the shower floor.~~

**Committee Reason:** The committee modified the language for the range to minimum and maximum for consistency. The committee added ‘clear inside’ to the last sentence for coordination with the first sentence and moved it up. The revision clarifies that the location of the threshold is not always related to the compartment size of the shower compartment – it could be in or outside of the useable shower compartment area. The range for height is the area above the seat, allowing space for a person’s knees and to the grab bar, so people using the seat can reach across. This is the important area for access to use the shower. This allows for curbs and curved corners in the shower.

06-58 Paarlberg.doc

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## 06-58 – 2021 1<sup>st</sup> draft Committee Action

Committee Action for First Ballot:

AM by BC2 and PC3 replacement – 19-0-3

### REPORT OF HEARING:

**Modification (if any):**

**Further modify as follows:**

**608.2.1.1 Size.** Transfer-type shower compartments shall have a clear inside dimension of ~~36 (915 mm) 35 inches (899 mm) minimum to 37 inches (940 mm) maximum~~ in width measured at the center point of opposing sides and ~~36 (915 mm) 35 inches (899 mm) minimum to 37 inches (940 mm) maximum~~ in depth measured from the center point ~~of opposing sides the back wall to the to the centerline of the threshold.~~ The shower clear inside dimensions shall be measured at a height of 17 minimum to 37 inches maximum (432-940 mm) from the shower floor. An entry ~~36 inches (915 mm) minimum~~ 35 inches (899 mm) minimum to 37 inches (940 mm) maximum in width shall be provided.

**Committee Reason:** The committee modified the language for the range to minimum and maximum for consistency. The committee added ‘clear inside’ to the last sentence for coordination with the first sentence. The revision clarifies that the location of the threshold is not always related to the compartment size of the shower compartment – it could be in or outside of the useable shower compartment area. The range for height is the area above the seat, allowing space for a person’s knees and to the grab bar, so people using the seat can reach across. This is the important area for access to use the shower. This allows for curbs and curved corners in the shower.

Measuring at the threshold, as was originally approved, could cause conflicts and mis-interpretations that are corrected with this modification.

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## 06-58 – 2021 2<sup>nd</sup> draft Ballot Comment 1

### 608.2.1.1

**Proponent:** Marsha Mazz USA

**Vote:** negative with comment, AM



**Further revise as follows:**

**608.2.1.1 Size.** Transfer-type shower compartments shall have a clear inside dimension of 35 inches (899 mm) minimum to 37 inches (940 mm) maximum in width measured at the center point of opposing side walls and 35 inches (899 mm) minimum to 37 inches (940 mm) maximum in depth measured from the center point of the back wall to the plane in line with the front face of the shower enclosure. ~~The shower clear inside dimensions shall be measured at a height of 17 minimum to 37 inches maximum (432-940 mm) from the shower floor.~~ An entry 35 inches (899 mm) minimum to 37 inches (940 mm) maximum in width shall be provided.

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**REASON:** The Committee's intent is unclear in the following sentence:

“The shower clear inside dimensions shall be measured at a height of 17 minimum to 37 inches maximum (432-940 mm) from the shower floor.”

Does the Committee mean that measurements in transfer showers must be taken at every point higher than 17 inches and lower than (or including) 37 inches? Or does the Committee mean that one measurement anywhere within this range will suffice? Something else? Please note that Section 608.2.2.1 for alternate shower compartments and Section 608.2.3.1 for Standard roll-in showers merely require clear inside dimensions to be “measured at the center point of opposing sides”. It does not make sense to treat transfer showers so differently from these other two shower types. The requirement for measurements to be taken at the center point of opposing sides is in the 2010 ADA Standards and has not posed significant difficulty. The ICC A117.1 Commentary can suggest measurement techniques and we would strongly recommend that the Committee abandons these new criteria until they can be clearly stated and applied consistently for all types of showers.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-58 – 2021 2<sup>nd</sup> draft Committee Action**

**Committee Action for First Ballot:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Further modify as follows:**

**Committee Reason:**

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Report for <del>06-58– 2021</del>		
Committee decision: AM	Committee Vote at Meeting: 26-4-2	Committee Vote on Ballot: 37-3-1
<b>REPORT OF HEARING:</b> Modification (if any): Further modify as follows:  <b>608.2.1.1 Size.</b> Transfer-type shower compartments shall have a clear inside dimension of 35 to 37 inches (889-940 mm) in width measured at the center point of opposing sides and 35 to 37 inches (889-940 mm) in depth measured from the center point of the <del>rear back</del> wall to the <del>centerline outside</del> of the threshold. An entry 36 inches (915 mm) minimum in width shall be provided.		



**Report for 06-58– 2021**

Committee Reason: The modification from 'rear' to 'back' is to match the terminology in the figure. The modification from 'outside' to 'centerline' was an attempt to clarify that the size is within the shower, and the width and the location of a threshold are not addressed in the standard or the plumbing codes. There was additional discussion on if the depth of the shower should be the 'entrance' since the threshold could be from fully inside to fully outside of the shower itself. There was concern about at what height the shower size should be measured – at the floor (where there can be a curve or side curb) or at the elevations where the size was the concern – knee height for seating and shoulder height for reach to controls and grab bars.

**Committee decision: AFMPC3 and BC2**

**Committee Vote at Meeting: 19-0-3**

**Committee Vote on Ballot:**

**REPORT OF HEARING – FIRST DRAFT**

Modification (if any):

**As further modified by PC3 replacement.**

**608.2.1.1 Size.** Transfer-type shower compartments shall have a clear inside dimension of ~~36 (915 mm)~~ **35 inches (899 mm) minimum to 37 inches (940 mm) maximum** in width ~~measured at the center point of opposing sides~~ and ~~36 (915 mm)~~ **35 inches (899 mm) minimum to 37 inches (940 mm) maximum** in depth measured from the center point ~~of opposing sides the back wall to the to the centerline of the threshold.~~ **The shower clear inside dimensions shall be measured at a height of 17 minimum to 37 inches maximum (432-940 mm) from the shower floor.** An entry ~~36 inches (915 mm) minimum 35 inches (899 mm) minimum to 37 inches (940 mm) maximum~~ in width shall be provided.

Committee Reason:

The committee modified the language for the range to minimum and maximum for consistency. The committee added 'clear inside' to the last sentence for coordination with the first sentence. The revision clarifies that the location of the threshold is not always related to the compartment size of the shower compartment – it could be in or outside of the useable shower compartment area. The range for height is the area above the seat, allowing space for a person's knees and to the grab bar, so people using the seat can reach across. This is the important area for access to use the shower. This allows for curbs and curved corners in the shower.

Measuring at the threshold, as was originally approved, could cause conflicts and mis-interpretations that are corrected with this modification.

**Committee decision: AS/AM/D**

**Committee Vote at Meeting:**

**Committee Vote on Ballot:**

**FINAL ACTION:**

Modification (if any):

Committee Reason:

## 06-82 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-82	Steinfeld	610.3	AS 22-2-1; D 17-4-3	11-17-22 6-20-24	Bathing related Final Action AFM PC1 and PC2

Comment 1 <sup>st</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Pace, HUD	Affirmative	NA	6-20-2024	
PC1	Steinfeld	AM	AS 21-0-3	6-20-2024	Added 5-7-2024
PC2	Steinfeld	AM	AM 21-0-3	6-20-2024	Added 5-7-2024

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Mazz, USA	AM			See 06-18-2021

## 06-82 – 2021 610.3

**Proponent:** Ed Steinfeld, IDEA Center, University of Buffalo representing RESNA

**Revise as follows:**

### SECTION 610 SEATS

**610.3 Shower Compartment Seats.** The height of shower compartment seats shall be 17 inches (430 mm) minimum and ~~19~~ 20 inches (~~485~~ 510 mm) maximum above the bathroom floor, measured to the top of the seat. In transfer-type and alternate roll-in-type showers, the seat shall extend along the seat wall to a point within 3 inches (75 mm) of the compartment entry. In standard roll-in-type showers, the seat shall extend from the control wall to a point within 3 inches (75 mm) of the compartment entry. Seats shall comply with Section 610.3.1 or 610.3.2.

**EXCEPTION:** An accessible seat which is adjustable in height shall be permitted where the seat is adjustable within a range of 15 inches (380 mm) minimum to 25 inches (635 mm) maximum, provided that at least one adjustment setting provides a seat within the range specified in this section.

**REASON:** The current standard does not reflect the findings of recent research. The existing dimensions are based on 1970's data. Since that time, new wheelchair technology, particularly the common use of cushions and other seating supports designed to reduce pressure ulcers and position people for improved social interaction and use of equipment, have led to increased seat heights. See Design Resources: Analysis of Seat Height for Wheeled Mobility Devices at <http://idea.ap.buffalo.edu/wp-content/uploads/sites/110/2019/08/23.pdf> The above proposed revision is consistent with this research.

Committee Action: split question – 610.3 AS 22-2-1; exception AS 11-12-2; D 17-4-3

## REPORT OF HEARING:

Modification (if any):

Further revise as follows:

### SECTION 610 SEATS

**610.3 Shower Compartment Seats.** The height of shower compartment seats shall be 17 inches (430 mm) minimum and 20 inches (510 mm) maximum above the bathroom floor, measured to the top of the seat. In transfer-type and alternate roll-in-type showers, the seat shall extend along the seat wall to a point within 3 inches (75 mm) of the compartment entry. In standard roll-in-type showers, the seat shall extend from the control wall to a point within 3 inches (75 mm) of the compartment entry. Seats shall comply with Section 610.3.1 or 610.3.2.

**EXCEPTION:** ~~An accessible seat which is adjustable in height shall be permitted where the seat is adjustable within a range of 15 inches (380 mm) minimum to 25 inches (635 mm) maximum, provided that at least one adjustment setting provides a seat within the range specified in this section.~~

**Committee Reason:** The committee split the question between the change in Section 610.3 and the exception. The allowance for the shower seat to be higher is based on the anthropometric study and would improve access for persons using a mobility aids with higher seats. The exception is not needed because someone would always choose to provide an option that improved access. In addition, there were concerns about the operation of an adjustable option without technical requirements.

610.2-STEINFELD.doc

## 06-82 – 2021 Ballot Comments

<b>BALLOT COMMENT 1- FIRST DRAFT:</b>	
Proponent: <i>Rex Pace, HUD</i>	
Desired Action: Affirmative with comment	
Modification:	
Reason: The vote against this exception does not dispute the legitimacy or wisdom of the range for an adjustable seat height. Rather it is simply that a fix height seat heigh for showers is permitted to begin with and therefore any adjustable range would exceed the minimum requirement. Additionally, this is currently what is achievable for a fixture of this nature. The adjustable height range is encouraged as a best practice that, hopefully, future technology will readily permit.	

## 06-82 – 2021 Public Comment 1

### 609.3

**Proponent:** Ed Steinfeld, IDEA Center, University of Buffalo representing RESNA

**Further revise original proposal as follows:**

**610.3 Shower Compartment Seats.** The height of shower compartment seats shall be 17 inches (430 mm) minimum and ~~19 20~~ inches (~~485 510~~ mm) maximum above the bathroom floor, measured to the top of the seat. In transfer-type and alternate roll-in-type showers, the seat shall extend along the seat wall to a point

within 3 inches (75 mm) of the compartment entry. In standard roll-in-type showers, the seat shall extend from the control wall to a point within 3 inches (75 mm) of the compartment entry. Seats shall comply with Section 610.3.1 or 610.3.2.

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**REASON:** This proposal has been split into two items – maximum height and an exception for adjustable seats. Reconsideration is requested for 06-18 and 6-82 because in review of these proposals, the A117.1 felt the information in the anthropometric study should be the basis to revise the standard. Further, discussion indicated that committee members were unhappy with differences in seat height range. They desired consistency across all instances where seat height was specified for bathroom fixtures. Approving all these proposals would add consistency in the document.

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**Committee Action for PC1:** AS 21-0-3

## **REPORT OF HEARING:**

### **Modification (if any):**

**Committee Reason:** While the 20” height does differ from the 2010 ADA Accessibility Standard, Dr. Steinfeld’s research does show that the seats of mobility devices are higher. We agree with the technical justification.

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## **06-82 – 2021 Public Comment 2**

### **609.3**

**Proponent:** Ed Steinfeld, IDEA Center, University of Buffalo representing RESNA

### **Further revise original proposal as follows:**

**610.3 Shower Compartment Seats.** The height of shower compartment seats shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the bathroom floor, measured to the top of the seat. In transfer-type and alternate roll-in-type showers, the seat shall extend along the seat wall to a point within 3 inches (75 mm) of the compartment entry. In standard roll-in-type showers, the seat shall extend from the control wall to a point within 3 inches (75 mm) of the compartment entry. Seats shall comply with Section 610.3.1 or 610.3.2.

**EXCEPTION:** An shower compartment seat which is adjustable in height by the user is permitted provided that at least one adjustment setting provides a seat within the range specified in Section 610.3 and the range of adjustments is 17 inches (430 mm) minimum to 20 inches (510 mm) maximum above the floor.

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**REASON:** This proposal has been split into two items – maximum height and an exception for adjustable seats. Approving all these proposals would add consistency in the document while also insuring that new technology providing adjustable height seating would address the range of needs in the wheelchair user population.

**REPORT OF HEARING:**

**Modification (if any):**

**Replace with the following:**

**610.3 Shower Compartment Seats.** The height of shower compartment seats shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the bathroom floor, measured to the top of the seat. In transfer-type and alternate roll-in-type showers, the seat shall extend along the seat wall to a point within 3 inches (75 mm) of the compartment entry. In standard roll-in-type showers, the seat shall extend from the control wall to a point within 3 inches (75 mm) of the compartment entry. Seats shall comply with Section 610.3.1 or 610.3.2.

**Exception A shower compartment seat which is adjustable in height by the user within the range specified in Section 610.3.**

**Committee Reason:** The exceptions will reinforce that the new technologies that allow for adjustable seating should be permitted.

It is the intent of the committee that the seats can be adjusted to outside of the specified range as well – this will exceed requirements.

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## **06-82 – 2021 1<sup>st</sup> draft Committee Action**

**Staff notes from 4-11-2024:**

- BC1 - There was a proposal for D for consistency with the committee action on 06-18. D 3-20-1 Committee Reason: The data from Dr. Steinfeld does support the 20” increase for transfer seats.
- Given the committee’s vote, there was a motion to reconsider 06-18 and BC2 to 06-18.
- There was a motion to restore the exception, and then the item was tabled.

**Committee Action for First Ballot:**

**REPORT OF HEARING:**

**Modification (if any):**

**Replace with the following:**

**610.3 Shower Compartment Seats.** The height of shower compartment seats shall be 17 inches (430 mm) minimum and ~~19~~ **20** inches (~~485~~ **510** mm) maximum above the bathroom floor, measured to the top of the seat. In transfer-type and alternate roll-in-type showers, the seat shall extend along the seat wall to a point within 3 inches (75 mm) of the compartment entry. In standard roll-in-type showers, the seat shall extend from the control wall to a point within 3 inches (75 mm) of the compartment entry. Seats shall comply with Section 610.3.1 or 610.3.2.

**Exception A shower compartment seat which is adjustable in height by the user within the range specified in Section 610.3.**

**Committee Reason:**

**PC1** - While the 20" height does differ from the 2010 ADA Accessibility Standard, Dr. Steinfeld's research does show that the seats of mobility devices are higher. We agree with the technical justification.

**PC2** - The exceptions will reinforce that the new technologies that allow for adjustable seating should be permitted.

It is the intent of the committee that the seats can be adjusted to outside of the specified range as well – this will exceed requirements.

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## 06-82 – 2021 2<sup>nd</sup> draft Ballot Comment 1

### 610.3

**Proponent:** Marsha Mazz USA

**Vote:** negative with comment, AM

#### Further revise as follows:

**610.3 Shower compartment seats.** The height of shower compartment seats shall be 17 inches (430 mm) minimum and 20 inches (510 mm) maximum above the bathroom floor, measured to the top of the seat. In transfer-type and alternate roll-in-type showers, the seat shall extend along the seat wall to a point within 3 inches (75 mm) of the compartment entry. In standard roll-in-type showers and in alternate transfer type showers, the seat shall extend from the control wall to a point within 3 inches (75 mm) of the compartment entry. Seats shall comply with Section 610.3.1 or 610.3.2. In alternate transfer type showers the seat shall also have a seat back complying with Section 610.3.3.

~~**Exception:** A shower compartment seat which is adjustable in height by the user within the range specified in Section 610.3.~~

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**REASON:** Delete the exception because it is not needed. If the seat meets the specified height, it complies whether it is adjustable outside these heights. Also, it is unclear whether the exception for height adjustability intends to exempt just the height requirements or all the requirements in this Section, including the point(s) to which the seat(s) must extend and the required seat back for alternate-type transfer showers.

Staff note: See 06-18-2021.

This comment was submitted for 06-61, but the exception was added in 06-82.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:** AS/AM/D

#### REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:**

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## 06-82 – 2021 2<sup>nd</sup> draft Committee Action

**Committee Action for First Ballot:** AS/AM/D

#### REPORT OF HEARING:

**Modification (if any):**

**Further modify as follows:**

## Committee Reason:

<b>Report for 06-82– 2021</b>		
<b>Committee decision:</b> AS/D	<b>Committee Vote at Meeting:</b> 22-2-2/17-4-3	<b>Committee Vote on Ballot:</b> 39-1-1
<b>REPORT OF HEARING:</b> Modification (if any): <b>Further revise as follows:</b>		
<b>SECTION 610 SEATS</b>		
<b>610.3 Shower Compartment Seats.</b> The height of shower compartment seats shall be 17 inches (430 mm) minimum and 20 inches (510 mm) maximum above the bathroom floor, measured to the top of the seat. In transfer-type and alternate roll-in-type showers, the seat shall extend along the seat wall to a point within 3 inches (75 mm) of the compartment entry. In standard roll-in-type showers, the seat shall extend from the control wall to a point within 3 inches (75 mm) of the compartment entry. Seats shall comply with Section 610.3.1 or 610.3.2. <b>EXCEPTION:</b> An accessible seat which is adjustable in height shall be permitted where the seat is adjustable within a range of 15 inches (380 mm) minimum to 25 inches (635 mm) maximum, provided that at least one adjustment setting provides a seat within the range specified in this section.		
Committee Reason: The committee split the question between the change in Section 610.3 and the exception. The allowance for the shower seat to be higher is based on the anthropometric study and would improve access for persons using a mobility aids with higher seats. The exception is not needed because someone would always choose to provide an option that improved access. In addition, there were concerns about the operation of an adjustable option without technical requirements.		
<b>Committee decision:</b> AFM PC1 & PC2	<b>Committee Vote at Meeting:</b> 21-0-3	<b>Committee Vote on Ballot:</b>
<b>REPORT OF HEARING – FIRST DRAFT</b>		
Modification (if any): <b>610.3 Shower Compartment Seats.</b> The height of shower compartment seats shall be 17 inches (430 mm) minimum and <del>19</del> <b>20</b> inches ( <del>485</del> <b>510</b> mm) maximum above the bathroom floor, measured to the top of the seat. In transfer-type and alternate roll-in-type showers, the seat shall extend along the seat wall to a point within 3 inches (75 mm) of the compartment entry. In standard roll-in-type showers, the seat shall extend from the control wall to a point within 3 inches (75 mm) of the compartment entry. Seats shall comply with Section 610.3.1 or 610.3.2. <b>Exception</b> A shower compartment seat which is adjustable in height by the user within the range specified in Section 610.3.		
Committee Reason: <b>PC1</b> - While the 20" height does differ from the 2010 ADA Accessibility Standard, Dr. Steinfeld's research does show that the seats of mobility devices are higher. We agree with the technical justification. <b>PC2</b> - The exceptions will reinforce that the new technologies that allow for adjustable seating should be permitted. It is the intent of the committee that the seats can be adjusted to outside of the specified range as well – this will exceed requirements.		
<b>Committee decision:</b> AS/AM/D	<b>Committee Vote at Meeting:</b>	<b>Committee Vote on Ballot:</b>
<b>FINAL ACTION:</b>		
Modification (if any):		
Committee Reason:		



## 06-84 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-84	Carpenter-Assisted toileting and bathing	611(New)	AS-31-1-3	3-24-2022 3-28-24	Final Action is AM PC1 and PC2

Comment 1 <sup>st</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Schoonover	Affirmative	NA	3-28-2024	
PC1	Carpenter, Paarlberg	AM	AS 24-2-6	3-28-2024	
PC2	Terminology	AM	AM 30-1-0	3-28-2024	Editorial

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Mazz, USA	AM			See also 06-15
BC2	Buuck, NAHB	AM			

## 06-84 – 2021

611(New)

**Proponent:** Amy Carpenter, representing Assisted Toileting and Bathing work group

Add new text as follows:

### **SECTION 611** **ASSISTED TOILET AND BATHING ROOMS**

**611.1 General.** Individual use bathrooms for assisted toileting and bathing shall comply with Section 611.

#### **611.2 Clearances.**

**611.2.1 Turning Space.** A turning space shall be provided within the room.

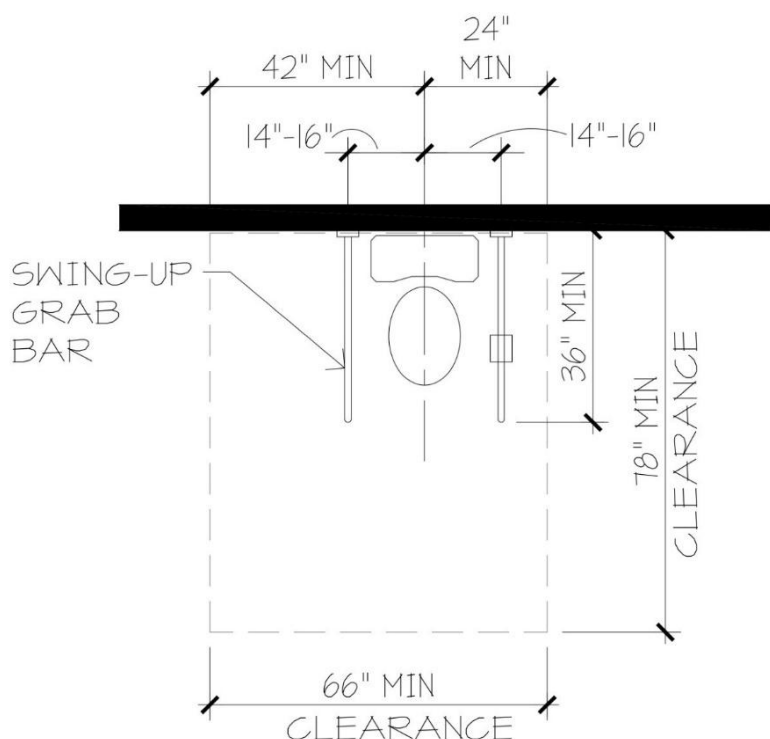
**611.2.2 Door Swing.** Doors shall not swing into the bathroom.

**Exception:** Where a clear floor space complying with Section 305.3 is provided in the room beyond the arc of the door and emergency rescue door hardware, that allows the door to be swung out of the room, is provided.

**611.3 Mirrors.** A mirror shall be mounted with the bottom edge of the reflecting surface 40 inches (1015 mm) maximum above the floor.

**611.4 Coat Hooks.** Coat hooks shall be located within one of the reach ranges specified in Section 308.

**611.5 Water Closets.** Water closets for assisted toileting shall comply with Section 611.5.



**FIGURE 611.5**  
**ASSISTED USE WATER CLOSET**

**611.5.1 Clearance width.** Clearance around the water closet shall be 66 inches (1676 mm) minimum. A minimum dimension of 24 inches (609 mm) shall be provided on each side, measured from the centerline of the water closet.

**611.5.2 Clearance depth.** Clearance around the water closet shall be 78 inches (1981 mm) minimum in depth, measured perpendicular from the rear wall.

**611.5.3 Clearance overlap.** The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, paper dispensers, sanitary napkin receptacles, coat hooks, shelves, accessible routes, clear floor space at other fixtures and the turning space. Towel bars that meet the strength requirements of Section 609.8 shall be permitted to overlap the clearance at the water closet. No other obstructions shall be within the required water closet clearance.

**611.5.4 Height.** The height of the water closet shall comply with Section 604.4

**611.5.5 Grab bars.** Grab bars for assisted toileting shall comply with Sections 611.5.5.1 through 611.5.5.6

**611.5.5.1** Swing up grab bars shall be provided at both sides of the water closet.

**611.5.5.2** Swing up grab bars shall be located 14 to 16 inches (355 to 406 mm) from the centerline of the water closet.

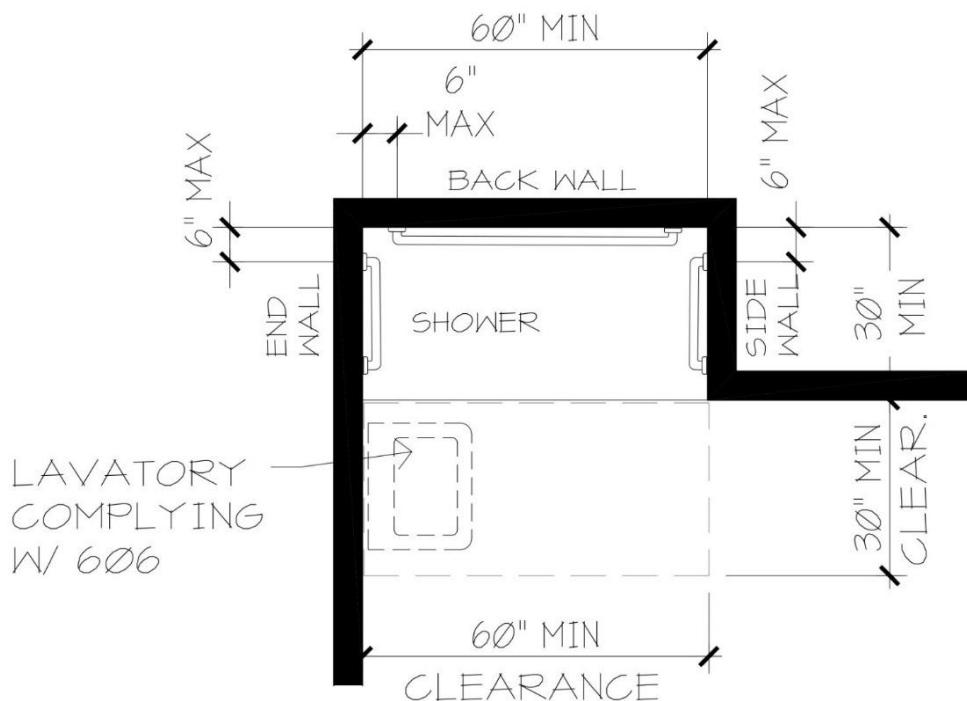


**611.5.7 Flush Controls.** Flush controls shall comply with Section 604.6

**611.5.8 Dispensers.** Toilet paper dispensers shall be mounted on at least one of the swing up grab bars and shall be located at 24 inches (610 mm) minimum to 36 inches (915 mm) maximum measured perpendicular to the rear wall. Dispensers shall not be of a type that control delivery or do not allow continuous paper flow.

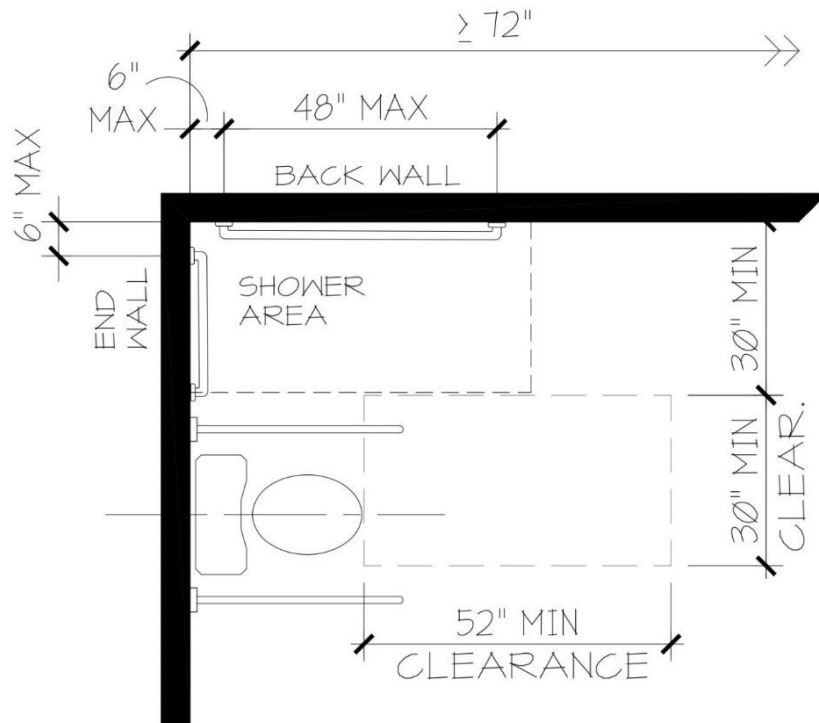
**611.6 Lavatories and Sinks.** Where a lavatory or sink is provided inside the room used for assisted toileting and bathing, it shall comply with Section 606.

**611.7 Showers.** Roll-in showers for assisted bathing shall comply with Section 611.7.



**FIGURE 611.7(A)**  
**ROLL-IN SHOWERS FOR ASSISTED BATHING**  
**OPTION 1**





**FIGURE 611.7(C)**  
**ROLL-IN SHOWERS FOR ASSISTED BATHING**  
**OPTION 3**

**611.7.1 Size.** A roll-in shower area for assisted bathing shall have a clear inside dimension of 60 inches (1525 mm) minimum in length and 30 inches (760 mm) minimum in depth, measured at the center point of opposing sides.

**611.7.2 Clearance.** A clearance of 60 inches (1525 mm) minimum in length adjacent to the long side of the shower area, and 30 inches (760 mm) minimum in depth, shall be provided.

**Exceptions:**

1. A lavatory complying with Section 606 shall be permitted at one end of the clearance.
2. Where the shower area exceeds minimum sizes, the clear floor space shall be placed 30 inches (760 mm) minimum from the back wall and the length shall be parallel to the back wall.

**611.7.3 Seat.** A fixed folding or non-folding wall-mounted seat is not permitted.

**611.7.4 Grab bars.** Grab bars shall comply with Section 609 and shall be provided in accordance with Section 611.7.4.1

**611.7.4.1** Horizontal grab bars in roll-in showers for assisted bathing shall be provided on the back wall, end wall and side wall. Grab bars shall extend within 6 inches (150 mm) maximum from adjacent walls.

**Exceptions:**

1. The back-wall grab bar shall not be required to exceed 48 inches (1220 mm) in length.
2. End-wall and side-wall grab bars shall not be required to exceed 30 inches (760 mm) in length.

3. If the back-wall length is 72 inches (1830 mm) or greater, a side-wall grab bar is not required.

**611.7.5 Controls.** On/off and temperature adjustment controls for roll-in showers for assisted bathing shall comply with Section 309.4 and shall comply with all of the following:

1. Installed at a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor,
2. Located either on the end wall or side wall, 18 inches (455 mm) minimum and 48 inches (1220 mm) maximum from the back wall, and
3. Located to allow access by a caregiver and minimize reaching through the water stream

**Exception:** Where the back wall length is 72 inches (1830 mm) or greater, controls are permitted to be located on the back wall at a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor and 27 inches (685 mm) minimum and 60 inches (1525 mm) maximum from the end wall.

**611.7.6 Hand Showers.** At least one hand shower complying with Section 309.4, Section 608.5 and Section 611.7.6 shall be provided in roll-in showers for assisted bathing. The hand shower shall be located:

1. At a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor, and
2. On the end wall, back wall or side wall within the shower area.

**611.7.7 Thresholds.** Thresholds in roll-in showers for assisted bathing shall comply with Section 608.6

**611.7.8 Shower enclosures.** Shower area enclosures shall not obstruct access to controls or hand shower from outside the shower area. Floor mounted enclosures shall maintain a minimum clear opening width of 41.5 inches (1054 mm) with no added threshold.

**611.7.9 Water Temperature.** Water Temperature shall comply with Section 608.8.

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**REASON:** This proposed new section is meant to provide an alternative compliance path for a percentage of the fully accessible units that are required in Nursing Homes and Assisted Living residences. These changes are specifically aimed at addressing the needs of older adults who live in care settings (receiving custodial care and/or medical care). It is our intent that Owners/Operators of these care settings can choose have some units comply with these alternatives in lieu of complying with traditional accessible unit requirements. A rehabilitation facility that serves primarily younger people, with spinal cord injuries, would likely not choose to have any units meet this alternate standard. However, many nursing homes serving elders, where the average age of resident is usually around 88 – 90 years old, would likely choose to have as many units as possible meet this alternate standard.

The 2021 International Building Code, Chapter 11 introduced these measures into the code as the deadline for inclusion in the last edition of the Standard had passed. We are hoping to include this language in the Standard this cycle and remove the language from IBC Chapter 11. The ICC A117.1 committee approved a work group to develop criteria for assisted toileting and bathing. Meetings were held every two weeks and were open to the public. In addition to the members of the task group, there was participation by a variety of interested parties. The language contained within this proposal was developed and reviewed by the work group and a consensus was reached.

The language contained in this proposal is based on research sponsored by the Mayer-Rothschild Foundation as well as direct experience and feedback from caregivers and gerontologists, along with the input of the task group. The intent of the language is to be flexible to cover the needs of elders as they decline in



ability over time and gradually need more support and caregiver assistance in all activities of daily living. While they may be able to independently shower or transfer to the toilet when they first move in to a care community, their needs do increase over time. Many do become completely dependent on assistance by one or more caregivers. The proposal seeks to strike a balance between the accessibility needs of both the elder resident as well as the needs of the care staff.

It was decided to place all requirements around assisted bathing and toileting into a distinct section to aid with use of the Standard and keep all requirements together. If the Committee would prefer to disperse the requirements into Section 604 and 608, we would be OK with that change.

### **Assisted toileting:**

Current existing accessibility provisions contained in the standard do not adequately address the needs of older adults as they lose upper body strength and mobility. They simply do not have the strength to use wall-mounted grab bars at toilets to accomplish a transfer. Additionally, many have balance issues that require additional support on both sides of the toilet. Further, most residents in care settings, although they may use wheelchairs for mobility, still have some use of their legs and most can bear weight on one or both legs. Therefore, the requirements meant to address the needs of fully paralyzed or quadriplegic persons is not necessarily beneficial to elders.

A search of CMS data shows only 1% of residents in nursing homes, nationwide, have a diagnosis of quadriplegia or paraplegia. With a minimum of 50% of nursing home resident rooms being required to meet current standards, an average of 49% of these rooms are simply not working well for the residents who live there. Falls in bathrooms are one of the largest risks of injury and death in nursing homes.

Research sponsored by the Mayer-Rothschild foundation studied how elders in care settings transfer on and off the toilet, both independently and with staff assistance. The dimensions and clearances contained in this proposal are all based on these recommendations. Most important is the additional space provided on both sides of the toilet over the traditional 18 inches contained in the Standard. This added space is critical for allowing care staff to stand alongside the toilet to assist with sitting and standing without injuring themselves. This additional clearance around the toilet also makes maneuvering of various lift devices easier, along with giving residents using mobility devices more space to maneuver.

The inclusion of a floor mounted support post to attach the swing-up grab bars to was considered to be an important component for both new and existing construction. The Rothschild study calls for the grab bar to extend 6-9" beyond the front edge of the toilet. With most elongated bowl toilets extending approximately 30 inches from the back wall, this requires a minimum length swing-up bar at 36", which is difficult to find on the market today. This also brought up concerns about structural stability of wall blocking and proper connections. One of the task group alerted the group to the support posts that are currently available on the market. Benefits of the support post include the ability to use standard, shorter swing-up bars to still achieve the desired distance in front of the toilet, better structural stability, and the ability of users to better customize the height of the mounting to their specific needs. (people do shrink as they age)

Research and practical experience showed the task group that very few lifetime wheelchair users complete a side-slide transfer with the wheelchair completely parallel to the toilet and the back wheels all the way back to the rear wall. The majority of wheelchair users angle towards the toilet, using the space in front and to the side of the toilet. With elders who can bear weight and stand to transfer, the space adjacent to the toilet along the rear wall is rarely accessed or needed. In addition, the toilet tank or space for the flush valve assembly push the "seat" of the toilet out a certain distance from the wall. It was felt that a floor mounted post and associated mounting plate could overlap the clearance around the toilet by a small amount, provided that the flush controls were still easily accessed.

### **Assisted Bathing:**

Many residents in Assisted Living and Nursing Home care settings are assisted, to varying levels, with their bathing activities as they may not be able to safely accomplish this on their own. Traditionally, roll-in-type showers have been used in care settings because of the ease of access they provide (low/no

threshold). However, there are some requirements in the current Standard that can make it more difficult for care staff to assist with bathing.

For example, a wall mounted seat can be difficult for an elder to transfer on and off and many are fearful of falling off. Additionally, with the seat against the side wall and back wall, it is difficult, if not impossible for a caregiver to adequately access and wash all parts of a resident. For this reason, wall mounted seats are typically folded up and a mobile shower chair or stool is brought in. However, the folded seat still takes up space, and there are sharp edges and protrusions that can tear delicate elder skin or cause other injuries to the resident or caregiver. Mobile shower chairs are also better as they have arms that provide support and balance assistance for residents when standing/sitting and while seated. Caregivers can either turn the resident's chair while bathing, or walk around the person in the chair to be able to reach and wash all areas.

Similarly, the location of the controls on the back wall of a standard roll-in shower makes it more difficult for a caregiver to access them to turn the water on/off as well as to adjust the temperature during a shower. They either need to reach across the resident being bathed, which is awkward, or often need to reach through the water stream, which gets them wet. Some people might think it's not a big deal for the caregiver to get wet, and that should be expected as part of their job. However, what everyone needs to remember is that in care settings such as Assisted Living and Nursing communities, the caregiver may have to bathe up to eight residents per shift. If they need to go change out of wet clothes after each shower, that takes them away from their duties and away from the residents they need to serve. It just isn't practical.

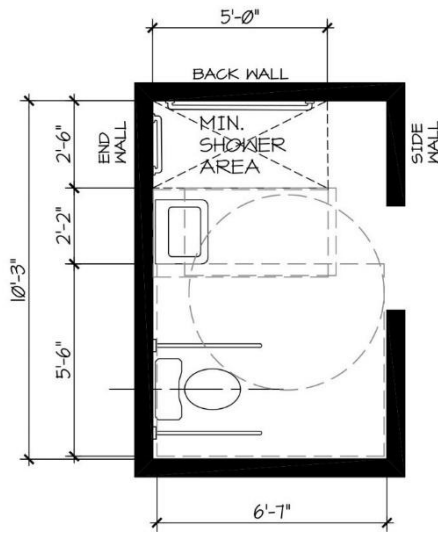
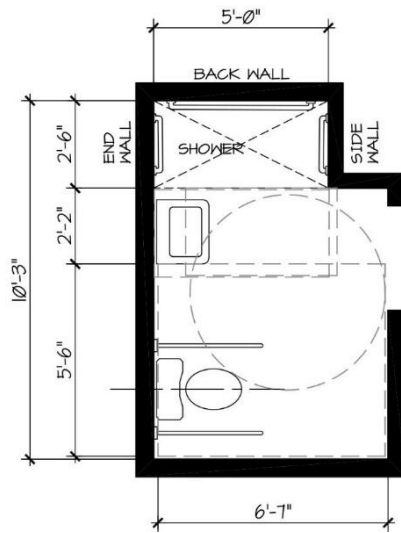
The language proposed removes the requirement for a permanent seat, in favor of allowing for the community to determine what is the best type of bench or chair to meet the resident's needs. It also allows for the controls that regulate on/off and temperature to be located such that they can be reached from outside the shower area, but also could be reached by a resident from inside the shower, should they be able to be more independent. The dimensions for the location of controls are meant to assume that a shower chair might be placed towards one corner of the shower and the areas behind that chair location would not be reachable. It also prohibits controls on the back wall of the shower in a typical 3-wall shower compartment.

The shower size and clearance language is meant to recognize that showers that often work best for assisted bathing are not simply the standard size, but sometimes larger, more open configurations work better. Larger, open showers also work better for care recipients that must be bathed in a semi or fully-reclined position. Sometimes the showers only have two walls or the entire bathroom is designed as a wet room and the designated shower "area" is in one corner. This is often called a "European shower".

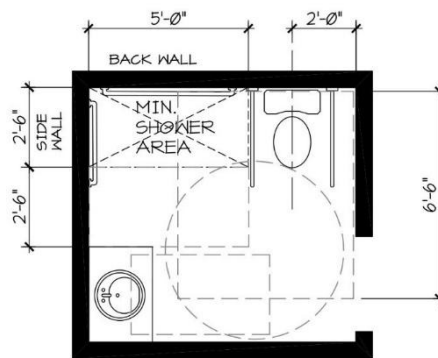
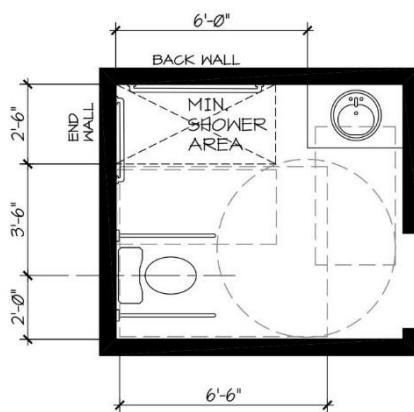
We maintained the language for clearance needed to access the shower area as well as the allowance for a lavatory to overlap the clearance similar to standard roll-in-type showers.

The grab bar language is similar to the standard roll-in-type shower, but with an additional bar where the seat would normally be. We chose to be intentionally silent on providing a vertical grab bar, as we felt that the location of a vertical bar would be highly dependent on the access point to the shower and location of the controls. In addition, if a resident has assistance in bathing, the vertical grab bar is not as needed for getting in and out of the shower enclosure. There is nothing prohibiting a vertical grab bar from being added.

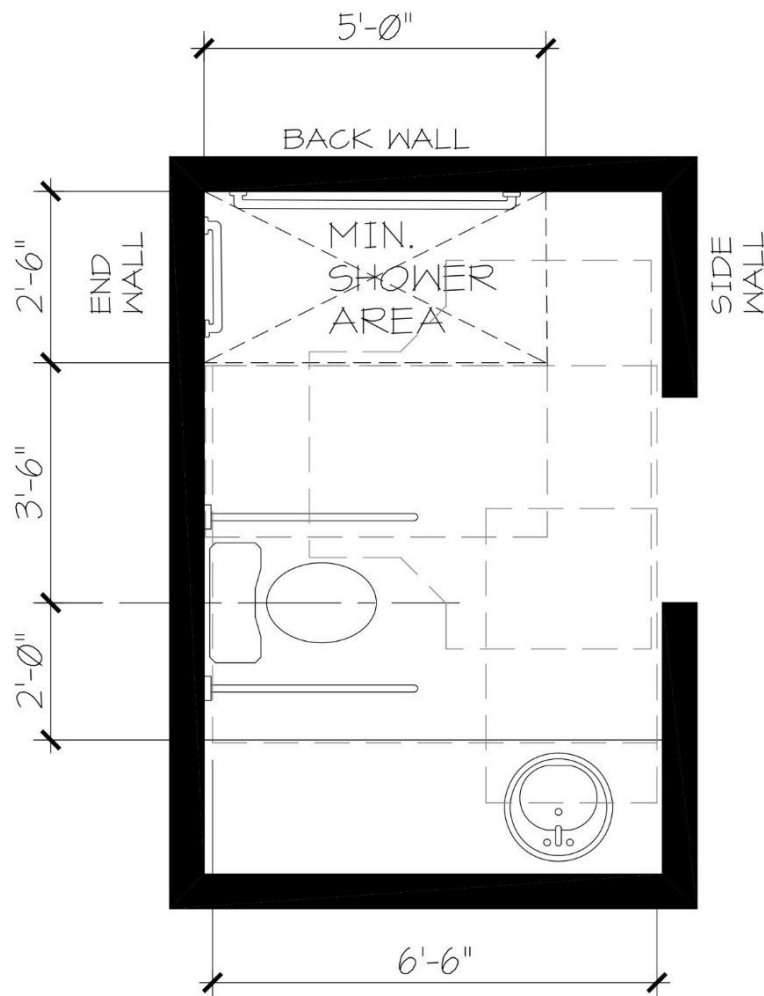
Example layouts:



**Sample bathroom layout A & B**



**Sample Bathroom layout C & D**



**Sample bathroom layout E**

Committee Action: Approved as submitted (31-1-3)

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:** The committee felt the research for proposal included valid information for assisted transfers. It is appropriate to limit this application to locations where people are not strong enough to self-transfer, such as assisted living facilities, nursing homes and rehabilitation facilities (which is the current scoping in the IBC). It was requested that the committee look at the language in Section 611.7.4.1 regarding the length of the grab bars – ‘minimum’ may be confusing.

**Staff note:** Editorial - Title added to Section 611.7.9.

**611 NEW-CARPENTER.doc**

## 06-84 – 2021 Ballot Comments

### BALLOT COMMENT 1- FIRST DRAFT:

Proponent: Ken Schoonover, self

Desired Action: Affirmative with Comment

Modification:

## 06-84 – 2021 Public Comment 1

### 611(New)

**Proponent:** Amy Carpenter and Kimberly Paarlberg, ICC

**Revise text as follows:**

#### SECTION 611

#### ASSISTED TOILET AND BATHING ROOMS

**611.1 General.** Individual use bathrooms for assisted toileting and bathing shall comply with Section 611.

#### 611.2 Clearances.

**611.2.1 Turning Space.** A turning space shall be provided within the room.

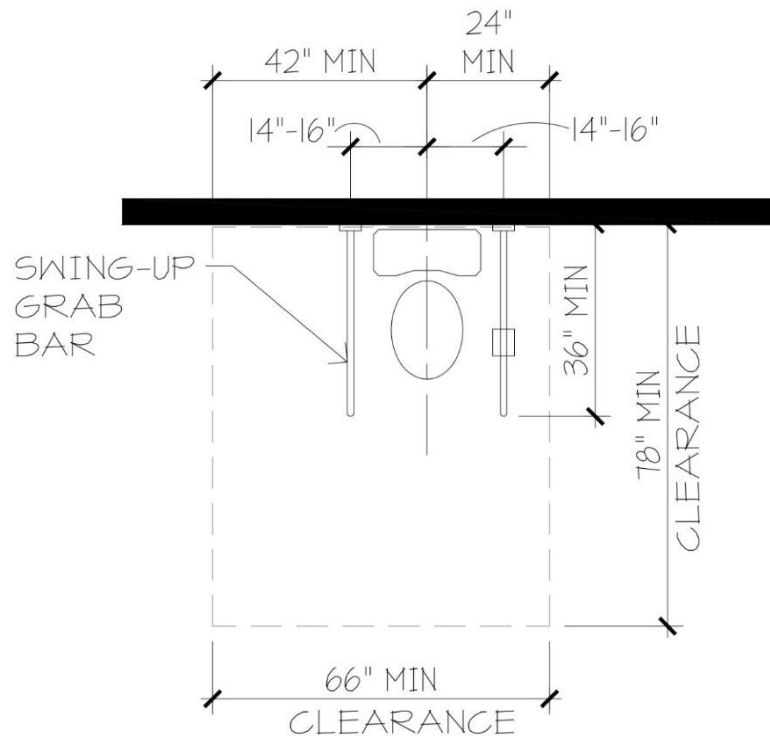
**611.2.2 Door Swing.** Doors shall not swing into the bathroom.

**Exception:** Where a clear floor space complying with Section 305.3 is provided in the room beyond the arc of the door and emergency rescue door hardware, that allows the door to be swung out of the room, is provided.

**611.3 Mirrors.** Where provided, A mirror shall be mounted with the bottom edge of the reflecting surface 40 inches (1015 mm) maximum above the floor.

**611.4 Coat Hooks.** Where provided, Coat hooks shall be located within one of the reach ranges specified in Section 308.

**611.5 Water Closets.** Water closets for assisted toileting shall comply with Section 611.5.



**FIGURE 611.5**  
**ASSISTED USE WATER CLOSET**

**611.5.1 Clearance width.** Clearance width around the water closet shall be ~~66 inches (1676 mm) minimum~~. A minimum dimension of 24 inches (609 mm) ~~shall be provided on each side,~~ on one side and a minimum dimension of 42 inches (1066 mm) on the other side, measured from the centerline of the water closet to the side of the clearance or any obstruction.

**611.5.2 Clearance depth.** Clearance around the water closet shall be 78 inches (1981 mm) minimum in depth, measured perpendicular from the rear wall.

**611.5.3 Clearance overlap.** The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, paper dispensers, sanitary napkin receptacles, coat hooks, shelves, accessible routes, clear floor space at other fixtures and the turning space. ~~Towel bars that meet the strength requirements of Section 609.8 shall be permitted to overlap the clearance at the water closet.~~ No other obstructions shall be within the required water closet clearance.

**Exceptions:**

1. Towel bars that meet the strength requirements of Section 609.8 shall be permitted to overlap the clearance at the water closet.
2. Floor mounted support posts for swing up grab bars complying with Section 611.5.3.1.

**611.5.4 Height.** The height of the water closet shall comply with Section 604.4

~~611.5.7~~ **611.5.5 Flush Controls.** Flush controls shall comply with Section 604.6.

~~611.5.5~~ **611.5.6 Grab bars.** Grab bars for assisted toileting shall comply with Sections 609.2, 611.5.5.1 611.5.6.1 through 611.5.5.6 611.5.6.6.

~~611.5.5.1~~ **611.5.6.1 Number.** Swing up grab bars shall be provided at both sides of the water closet.

~~611.5.5.2~~ **611.5.6.2 Location.** Swing up grab bars shall be located 14 to 16 inches (355 to 406 mm) from the centerline of the water closet.

~~611.5.5.3~~ **611.5.6.3 Length.** Swing up grab bars shall extend a minimum of 36 inches (915 mm), measured perpendicular from the rear wall to the furthest projection of the bar.

~~611.5.5.4~~ **611.5.6.4 Height.** The height of the swing up grab bar, when in the down position, shall be 30 inches (760 mm) minimum and 34 inches (865 mm) maximum measured from the floor to the topmost portion of the bar.

~~611.5.5.5~~ **611.5.6.5 Strength.** Swing up grab bars shall meet structural strength requirements per Section 609.8.

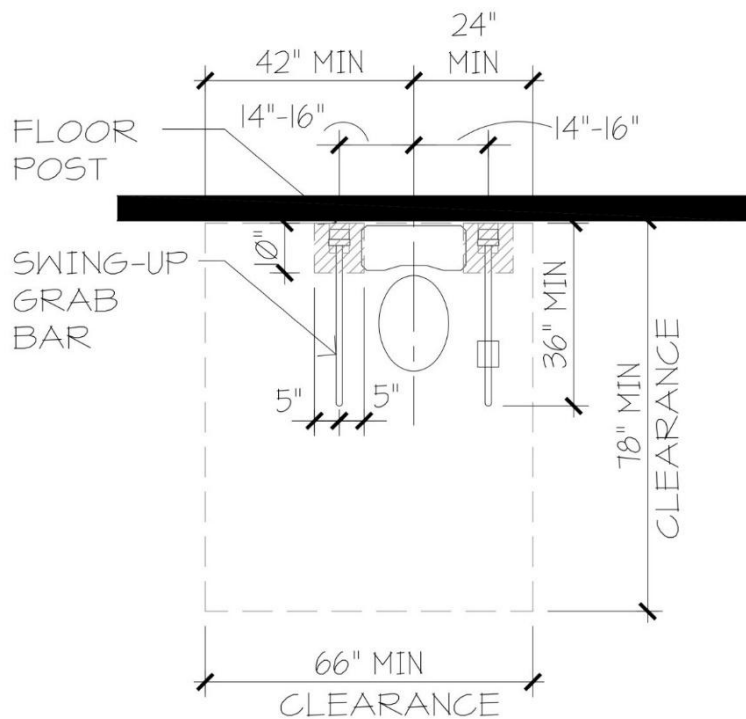
**Exception:** Swing up bars are not required to resist required forces when being moved upward to the vertical position.

~~611.5.5.6 A floor-mounted support post, complying with Section 611.5.6 shall be permitted as an alternate to mounting swing up grab bars directly to a reinforced wall behind the toilet.~~

**611.5.6.6 611.5.6 Floor-mounted support post.** Where the supporting structure for the grab bars is a floor mounted post, A floor-mounted support post, used as an alternate means of support for swing up grab bars shall be designed to meet the structural strength requirements of Section 609.8 and the post shall be permitted to be located within the clearance around the water closet provided it meets all of the following:

1. The floor plate and post shall not extend more than 10 inches (254 mm) in depth measured perpendicular to the back wall,
2. The floor plate and post shall not extend more than 5 inches (127 mm) in width, measured from the centerline of the grab bar to either side,
3. The post location shall not block access to the flush controls, and
4. The floor plate and post shall not overlap any other required clearances or turning space.



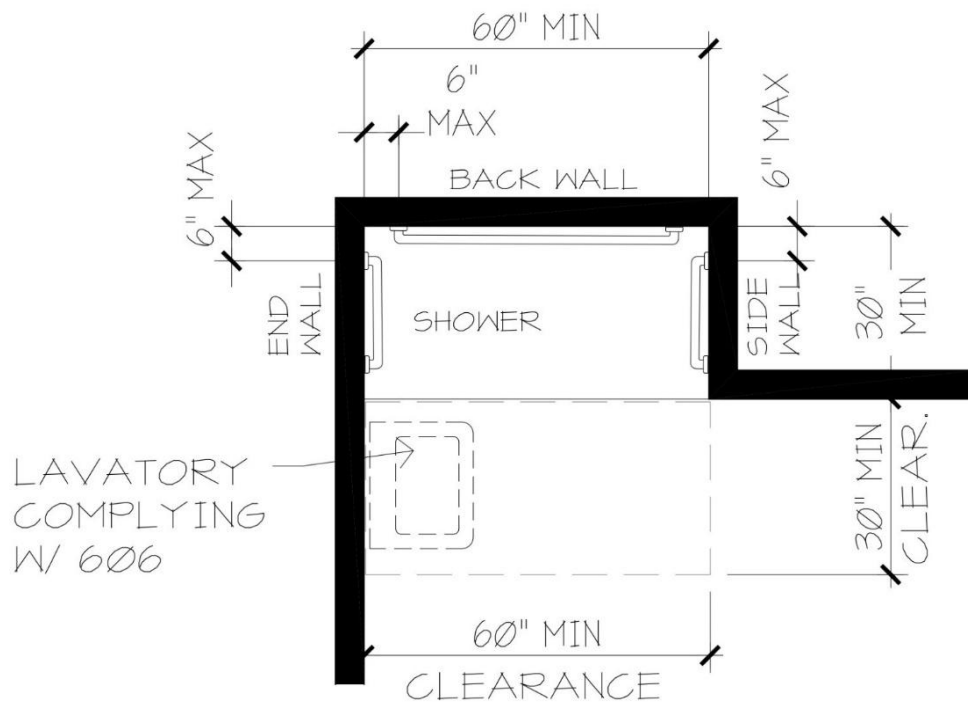


**FIGURE 611.5.5.6 611.5.6**  
**ASSISTED USE WATER CLOSET**  
**FLOOR-MOUNTED SUPPORT POSTS**

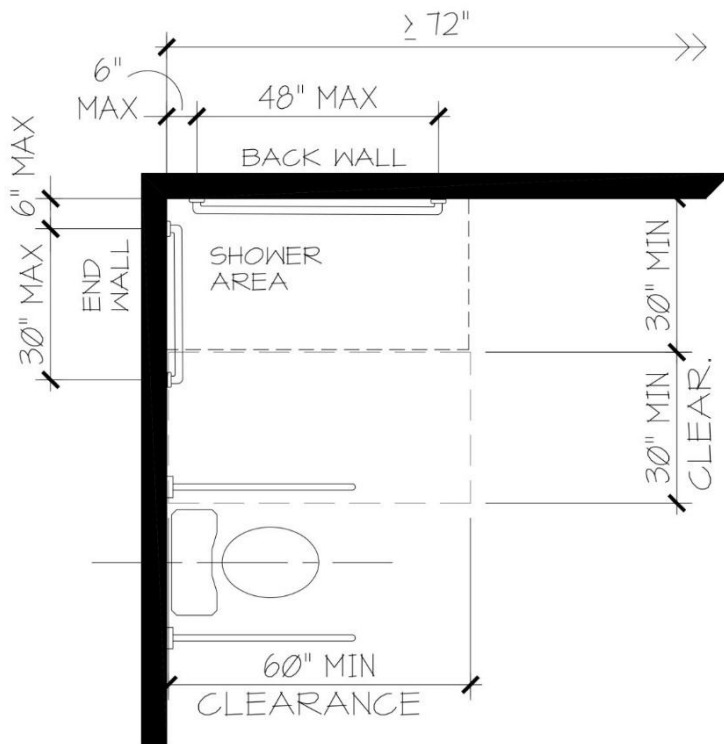
**611.5.8 611.5.6.7 Dispensers.** Toilet paper dispensers shall be mounted on at least one of the swing up grab bars and shall be located at 24 inches (610 mm) minimum to 36 inches (915 mm) maximum measured perpendicular to the rear wall. Dispensers shall not be of a type that control delivery or do not allow continuous paper flow.

**611.6 Lavatories and Sinks.** ~~Where a~~ The lavatory ~~or sink is provided inside the room used for assisted toileting and bathing, it~~ shall comply with Section 606.

**611.7 Showers.** Roll-in showers for assisted bathing shall comply with Section 611.7.

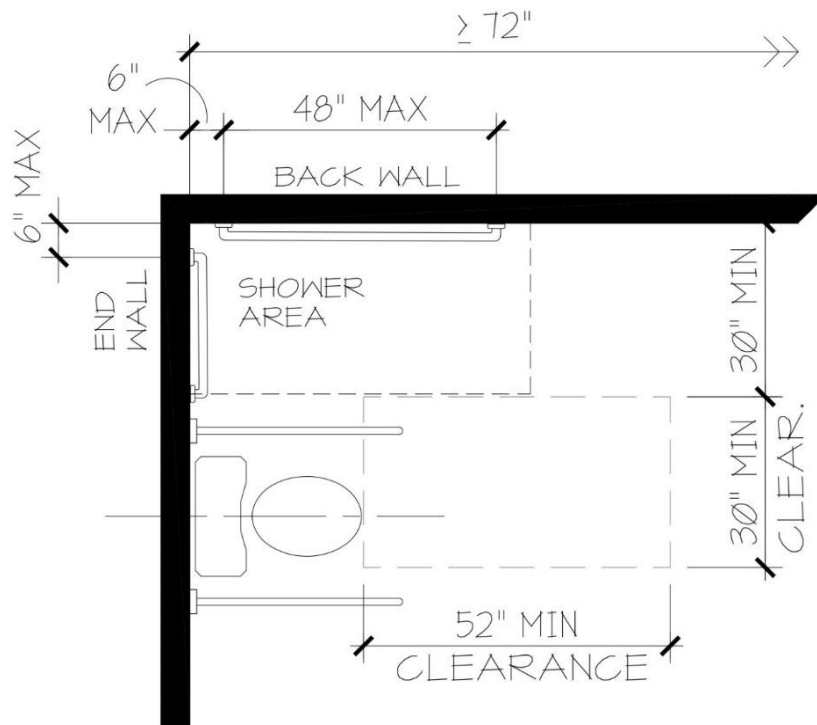


**FIGURE 611.7(A)**  
**ROLL-IN SHOWERS FOR ASSISTED BATHING**  
**OPTION 1**



**FIGURE 611.7(B)**  
**ROLL-IN SHOWERS FOR ASSISTED BATHING**  
**OPTION 2**

Figure should show grab bars as 48" minimum and 30" minimum.



**FIGURE 611.7(C)**  
**ROLL-IN SHOWERS FOR ASSISTED BATHING**  
**OPTION 3**

*Figure should show grab bars as 48" minimum and 30" minimum.*

**611.7.1 Size.** ~~A roll-in shower area for assisted bathing~~ The shower shall have a clear inside dimension of 60 inches (1525 mm) minimum in length and 30 inches (760 mm) minimum in depth, measured at the center point of opposing sides.

**611.7.2 Clearance.** A clearance of 60 inches (1525 mm) minimum in length adjacent to the long side of the shower area, and 30 inches (760 mm) minimum in depth, shall be provided.

**Exceptions:**

1. A lavatory complying with Section 606 shall be permitted at one end of the clearance .
2. Where the shower area exceeds minimum sizes, the ~~clear floor-space~~ clearance shall be placed 30 inches (760 mm) minimum from the back wall and the length shall be parallel to the back wall.

**611.7.3 Seat.** A fixed folding or non-folding wall-mounted seat is not ~~permitted~~ required.

**611.7.4 Grab bars.** Grab bars shall comply with Section 609 and shall be provided in accordance with Section 611.7.4.1

**611.7.4.1 Location.** Horizontal grab bars ~~in roll-in showers for assisted bathing~~ shall be provided on the back wall, end wall and side wall. Grab bars shall extend within 6 inches (150 mm) maximum from adjacent walls.

**Exceptions:**

1. The back-wall grab bar shall not be required to exceed 48 inches (1220 mm) in length.
2. End-wall and side-wall grab bars shall not be required to exceed 30 inches (760 mm) in length.
3. If the back-wall length is 72 inches (1830 mm) or greater, a side-wall grab bar is not required.

**611.7.5 Controls.** ~~The operable parts for the~~ On/off ~~water flow, and~~ temperature ~~adjustment and diverter~~ controls ~~for roll-in showers for assisted bathing~~ shall comply with Section 309.4 and shall ~~comply be~~ located in accordance with all of the following:

1. ~~Installed~~ at a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor,
2. ~~Located~~ either on the end wall or side wall, 18 inches (455 mm) minimum and 48 inches (1220 mm) maximum from the back wall, ~~and~~
3. Located to allow access by a caregiver and minimize reaching through the water stream.

**Exception:** Where the back wall length is 72 inches (1830 mm) or greater, controls are permitted to be located on the back wall at a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor and 27 inches (685 mm) minimum and 60 inches (1525 mm) maximum from the end wall.

**611.7.6 Hand Showers.** A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used both as a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a nonpositive shut-off feature that complies with 309.4. A fixed shower head, in addition to the hand shower shall be permitted. At least one hand shower complying with Section 309.4, Section 608.5 and Section 611.7.6 shall be provided in roll-in showers for assisted bathing.

**611.7.6.1 Hand shower mounts.** The mount to hold the hand shower, shall be located in accordance with the following:

1. At a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor, and
2. On the end wall, back wall or side wall within the shower area.
3. Located to allow access by a caregiver and minimize reaching through the water stream.

**Exception:** The mount to hold the hand shower shall be permitted to be located on a vertical bar provided that the mount is adjustable in height and can be located within the area specified for the fixed mount.

**611.7.7 Thresholds.** Thresholds in ~~roll-in~~ showers ~~for assisted bathing~~ shall comply with the threshold requirements for roll-in type showers in Section 608.6

**611.7.8 Shower enclosures.** Shower ~~area compartment~~ enclosures shall not obstruct access to controls or hand shower mount from outside the shower area. Floor mounted enclosures shall maintain a minimum clear opening width of 41.5 inches (1054 mm) with no added threshold.

**611.7.9 Water Temperature.** ~~Water Temperature shall comply with Section 608.8.~~

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**REASON:** We strongly support the work of the Assisted Toileting and bathing task group. The intent of this proposal is for minor changes for clarity or coordination with other approved changes.

611.3 and 611.4 – not all bathrooms will have a mirror or coat hook. This should be ‘where provided’.

611.5.1– We want to make sure that there is a clear floor space for transfer on one side. The current text would allow the toilet to slide anywhere in the clear floor space.

611.5.3 – The exception for towel bars that can also serve as an extra grab bar is moved from the text into an exception for the clearance. Exception 2 is a reference for the overlap for support posts for the grab bars. The reference seems better than moving the support post up, because they addressed with the grab bars.

611.5.5 – flush controls is moved up with the water closet requirements.

611.5.6 – the reference to 609.2 is for the cross section of the grab bar.

611.5.6.1 through 611.6.5 – added titles

611.5.5.6 (existing #) – not needed; incorporated into 611.5.6.6

611.5.6.6 – This is incorporating the charging paragraph and removing redundant requirements. 609.8 is required in 611.5.6.5.

611.5.6.7 – more appropriate as a subsection grab bars since the dispenser is on the grab bar.

611.6 – The plumbing code required a bathing room to have a lavatory, but it may be outside the room. The revision is to be more accurate and remove redundant language.

611.7 and 611.7.4.1 – the type of shower does not need to be repeated, add a title.

611.7.2 Exception 2 – correct term in ‘clearance’

611.7.3 – while the intent is to allow for a free standing shower seat, there are many new technologies for moving features in bathrooms – so this just clarifies that a fixed or folding seat is not required.

611.7.5 – the changes to controls is coordination with the other showers as modified by 06-47 and 06-62. That specified the types of controls, and separated out requirements for hand showers and shower mounts.

611.7.6, 611.7.6.1 – coordination with the hand showers as modified by 06-47 and 06-62. The exception allows for a vertical bar. Consistent with 611.7.5, the caregiver and user are addressed.

611.7.7 – the requirements in Section 608.6 are for roll-in and transfer showers. The revised text is more precise.

611.7.8 – Hand showers need to be controlled from outside the shower.

611.7.9 – temperature is controlled by the IPC. Section 608.8 was deleted by 06-56-21.

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**Committee Action for Public Comment 1:**

AS 24-2-6

## **REPORT OF HEARING:**

### **Modification (if any):**

**Committee Reason:** This change incorporates other changes approved for bathing. The revisions adds clarity. There was a question about Section 611.5.3 Exception 1 – however the strength requirements is only a safety feature for a towel bar; the towel bar does not serve as a grab bar. The minimum and/or maximum on the grab bar lengths needs to be clarified in Figure 611.7 – have editorial look at this.

**06-84 Carpenter Paarlberg.doc**

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## **06-84 – 2021 Public Comment 2**

**611**

**Proponent:** Marsha Mazz, representing the Terminology Task Group

**Further revise as follows:**

### **SECTION 611 ASSISTED TOILET AND BATHING ROOMS**

**611.2 ~~Clearances~~ Bathing room configurations.** The configuration of the assisted toilet and bathing room shall comply with 611.2.

**611.2.1 Turning Space.** A turning space shall be provided within the room.

**611.2.2 Door Swing.** Doors shall not swing into the bathroom.

**Exception:** Where a clear floor space complying only with Section 305.3 is provided in the room beyond the arc of the door and emergency rescue door hardware, that allows the door to be swung out of the room, is provided.

**611.4 Coat Hooks.** Coat hooks shall be located within one of the applicable reach ranges ~~specified in Section 308~~.

**611.5.1 Maneuvering Clearance width.** Maneuvering Clearance around the water closet shall be 66 inches (1676 mm) minimum. A minimum dimension of 24 inches (609 mm) shall be provided on each side, measured from the centerline of the water closet.

**611.5.2 Maneuvering Clearance depth.** Maneuvering Clearance around the water closet shall be 78 inches (1981 mm) minimum in depth, measured perpendicular from the rear wall.

**611.5.3 Maneuvering Clearance overlap.** The required maneuvering clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, paper dispensers, sanitary napkin receptacles, coat hooks, shelves, accessible routes, clear floor space at other fixtures and the turning space. Towel bars that meet the strength requirements of Section 609.8 shall be permitted to overlap the maneuvering clearance ~~at around~~ the water closet. No other obstructions shall be within the required ~~water closet maneuvering~~ clearance around the water closet.

**611.5.6 Floor-mounted support post.** A floor-mounted support post, used as an alternate means of support for swing up grab bars shall be designed to meet the structural strength requirements of Section 609.8 and shall be permitted to be located within the maneuvering clearance around the water closet provided it meets all of the following:

1. The floor plate and post shall not extend more than 10 inches (254 mm) in depth measured perpendicular to the back wall,
2. The floor plate and post shall not extend more than 5 inches (127 mm) in width, measured from the centerline of the grab bar to either side,
3. The post location shall not block access to the flush controls, and
4. The floor plate and post shall not overlap any other required clear floor space or maneuvering clearances at fixtures or turning space.

**611.7.2 Maneuvering Clearance.** A maneuvering clearance at the shower area of 60 inches (1525 mm) minimum in length adjacent to the long side of the shower area, and 30 inches (760 mm) minimum in depth, shall be provided.

**Exceptions:**

1. A lavatory complying with Section 606 shall be permitted at one end of the maneuvering clearance at the shower area.
2. Where the shower area exceeds minimum sizes, the ~~clear floor space maneuvering clearance at the shower area~~ shall be placed 30 inches (760 mm) minimum from the back wall and the length shall be parallel to the back wall.

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**REASON:** This is part of a proposal from the Terminology task group to define the building blocks so that a reference is not required. This public comment is included here because it was part of new text. Please see the complete proposal for additional information.

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## REPORT OF HEARING:

### Modification (if any):

**611.2 Clearances ~~Bathing room configurations.~~** ~~The configuration of the assisted toilet and bathing room shall comply with 611.2.~~

**611.4 Coat Hooks.** Coat hooks shall be located within one of the ~~applicable~~ reach ranges specified in Section 308.

**Committee Reason:** For Section 611.2, the editorial committee shall come up with a more limited scoping statement. The modification to Section 611.4 will be part of the overall change for building block references. Maneuvering clearance add clarity for requirements and is consistent with previous committee action to related proposals.

06-84

Terminology.doc

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## 06-84 – 2021 1<sup>st</sup> draft Committee Action

Committee Action for First Ballot:

PC1 AS 24-2-6 and PC2 AM 30-1-0

### REPORT OF HEARING:

### Modification (if any):

### Further modify as follows:

**611.2 Clearances ~~Bathing room configurations.~~** ~~The configuration of the assisted toilet and bathing room shall comply with 611.2.~~

**611.4 Coat Hooks.** Coat hooks shall be located within one of the ~~applicable~~ reach ranges specified in Section 308.

### Committee Reason:

PC1 - This change incorporates other changes approved for bathing. The revisions adds clarity. There was a question about Section 611.5.3 Exception 1 – however the strength requirements is only a safety feature for a towel bar; the towel bar does not serve as a grab bar. The minimum and/or maximum on the grab bar lengths needs to be clarified in Figure 611.7 – have editorial look at this.

PC2 - For Section 611.2, the editorial committee shall come up with a more limited scoping statement. The modification to Section 611.4 will be part of the overall change for building block references. Maneuvering clearance add clarity for requirements and is consistent with previous committee action to related proposals.

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## 06-84 – 2021 2<sup>nd</sup> draft Ballot Comment 1

### 611.5.3

**Proponent:** Marsha Mazz USA

**Vote:** negative with comment, AM

### Further revise as follows:

**611.5.3 Maneuvering clearance overlap.** The required maneuvering clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, paper dispensers, sanitary napkin receptacles, coat hooks, shelves, accessible routes, clear floor space or maneuvering clearance at other fixtures, and the turning space provided that the protrusions are necessary for the space to function as intended. No other obstructions shall be within the required maneuvering clearance around the water closet.

**Exception:**

1. Towel bars that meet the strength requirements in Section 609.8 shall be permitted to overlap the maneuvering clearance around the water closet.
2. Floor mounted support posts for swing up grab bars complying with Section 611.5.6.6.

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**REASON:** Just as with the turning space, there must be a limit on the space taken-up by overlapping elements. I am particularly concerned by the thought that multiple 6-inch projections could significantly decrease the space to the point where it is unusable. The proposal below puts the burden on the designer to ensure that added features, such as shelves, are necessary before installed. Although it would be better to quantify protrusion allowances and to specify locations where their impact on usability are minimized, we are unable to offer a revision that would accomplish this objective at this time.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-84 – 2021 2<sup>nd</sup> draft Ballot Comment 2**  
**611.7.5**

**Proponent:** Dan Buuck NAHB

**Vote:** negative with comment, AM

**Further revise as follows:**

**611.7.5 Controls.** Controls for the on/off water flow, temperature and diverter controls shall comply with the operable parts requirements in Section 309.4 and shall be located in accordance with all of the following:

1. At a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor.
2. Either on the end wall or side wall, 18 inches (455 mm) minimum and 48 inches (1220 mm) maximum from the back wall.
3. Located to ~~allow access by a caregiver and~~ minimize reaching through the water stream. **Exception:** Where the back wall length is 72 inches (1830 mm) or greater, controls are permitted to be located on the back wall at a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor and 27 inches (685 mm) minimum and 60 inches (1525 mm) maximum from the end wall.

**REASON:** In Section 611.7.5, the charging language isn't specific if all of the 3 conditions are to be complied with, or only one of the items in the list. It's believed at this writing that all three are required and language is added to clarify this. Also, the language used in item 3, "Located to allow access by a caregiver" is subjective and will be difficult to enforce given the many varying needs of those requiring assistance and how an individual caregiver might provide for those needs. Revised language that just says located to minimize reaching through the water stream is easier to understand and is suggested.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 2:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-84 – 2021 2<sup>nd</sup> draft Committee Action**

**Committee Action for First Ballot:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Further modify as follows:**

**Committee Reason:**

<b>Report for 06-84– 2021</b>		
<b>Committee decision: AS</b>	<b>Committee Vote at Meeting: 31-1-3</b>	<b>Committee Vote on Ballot:39-1-1</b>
<b>REPORT OF HEARING:</b>		
Modification (if any):		
Committee Reason: The committee felt the research for proposal included valid information for assisted transfers. It is appropriate to limit this application locations where people are not strong enough to self-transfer, such as assisted living facilities, nursing homes and rehabilitation facilities. It was requested that the committee look at the language in Section 611.7.4.1 regarding the length of the grab bars – 'minimum' may be confusing.		
<b>Committee decision: PC1 AS and PC2 AM</b>	<b>Committee Vote at Meeting: 24-2-6/30-0-1</b>	<b>Committee Vote on Ballot:</b>
<b>REPORT OF HEARING – FIRST DRAFT</b>		
Modification (if any):		
<b>Further modify as follows:</b>		
<b>611.2 Clearances Bathing room configurations.</b> <del>The configuration of the assisted toilet and bathing room shall comply with 611.2.</del>		
<b>611.4 Coat Hooks.</b> Coat hooks shall be located within one of the applicable reach ranges specified in Section 308.		
Committee Reason: PC1 - This change incorporates other changes approved for bathing. The revisions adds clarity. There was a question about Section 611.5.3 Exception 1 – however the strength requirements is only a safety feature for a towel bar; the towel bar does not serve as a grab bar. The minimum and/or maximum on the grab bar lengths needs to be clarified in Figure 611.7 – have editorial look at this. PC2 - For Section 611.2, the editorial committee shall come up with a more limited scoping statement. The modification to Section 611.4 will be part of the overall change for building block references. Maneuvering clearance add clarity for requirements and is consistent with previous committee action to related proposals.		
<b>Committee decision: AS/AM/D</b>	<b>Committee Vote at Meeting:</b>	<b>Committee Vote on Ballot:</b>
<b>FINAL ACTION:</b>		
Modification (if any):		
Committee Reason:		

## 06-90 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
06-90	Wright-Adult changing	106.2.2 (New), 106.2.4 (New), 106.2.5 (New), 613(New)	AM-26-0-0	5-19-2022 10-12-23 5-23-24	AM PC2 and PC3 approved as Supplement 1 for 2017 ICC A117.1. AM PC4 and PC5

Comment 1 <sup>st</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
<b>PC1</b>	Skulski	AM	NA	10-12-23	
<b>PC2</b>	Wright	AM	AFM 24-0-2	10-12-23	
<b>PC3</b>	Terminology	AM	AFM – 23-0-2	10-12-23	Editorial
<b>PC4</b>	Adult changing work group	AM	AFM – 19-0-2	5-23-24	Added 5-7-2024; new standard IAPMO Z1390
<b>PC5</b>	Paarlberg	AM	AS – 19-0-1	5-23-24	Added 5-7-2024

BC= Ballot Comment, PC= Public comment, **Bold Comment number** is proposed revision below

Comment 2 <sup>nd</sup> draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Buuck, NAHB	AM			

## 06-90 – 2021

106.2.2(New), 106.2.4(New), 106.2.5(New), 613(New)

**Proponent:** Laurel Wright, representing the Adult Changing Facilities work group

Add new text as follows:

**106.2.2 Assistive products for personal hygiene (APPH) that support users – Requirements and test methods.** ISO/FDIS 17966: 2016(E) (International Organization for Standardization, Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland)

**106.2.4 Medical Electrical Equipment - Part 1: General requirements for basic safety and essential performance – IEC 60601-1: 3.2 edition August 2020: International Electrotechnical Commission (IEC) 3 rue de Varembe, PO Box 131, CH-1211 Geneva, Switzerland.**

**106.2.5 Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests: 60601-1-2:2014 + ADM1: 2020 CVS: International Electrotechnical Commission (IEC) 3 rue de Varembe, PO Box 131, CH-1211 Geneva, Switzerland.**

## **SECTION 613**

### **ADULT CHANGING STATIONS**

**613.1 General.** Adult changing stations shall comply with Section 613.2 through 613.4.

**613.2 Safety and performance.** Adult changing stations shall comply with the following standards:

1. ISO 17966 Sections: 5 Materials; 7 Electromagnetic compatibility; 8 Electrical safety; 11 Safety of moving and folding parts; 11.2 Prevention of traps for parts of human body; 16 Static strength, impact, durability; 17 Stability listed in Section 106.2.2.
2. IEC 60601-1 listed in Section 106.2.4.
3. IEC 60601-1-2 listed in Section 106.2.5.

**613.3 Changing surface.** A changing surface shall be provided and shall comply with Section 613.3.

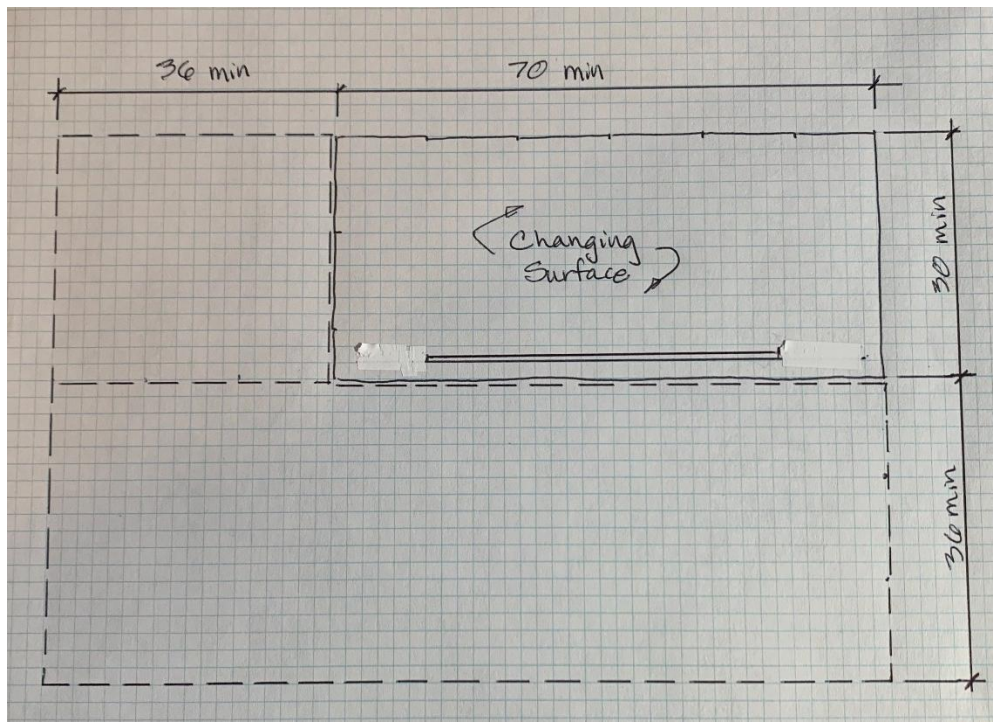
**613.3.1 Size.** The changing surface shall be 70 inches (1778mm) minimum in length and 30 inches (762mm) minimum in width.

**613.3.2 Clearances.** Clearances complying with Sections 613.3.2.1 and 613.3.2.2 shall be provided adjacent to the changing surface, measured when the surface is in the operational position.

**613.3.2.1 Side clearance.** A 36 inch (914mm) deep minimum clearance shall be provided along the length of one long side of the changing surface and shall extend 36 inches (914mm) minimum past the surface on at least one end.

**613.3.2.2 End clearance.** A 36 inch (914mm) deep minimum clearance shall be provided on at least one end of the changing surface and shall extend the width of the changing surface.

**Exception:** A 24 inch (610 mm) deep minimum clearance shall be permitted on at least one end of the changing surface where a clear floor space complying with Section 305.3 is provided within the room outside the clearances for the changing surface.



**Figure 613.3.2**  
**Changing surface and clearances**

**613.3.3 Height adjustability.** The changing surface height shall be continuously adjustable from 17 inches (432mm) minimum to 38 inches (965mm) maximum above the floor as measured to the top of the changing surface.

**Exception:** Where approved by the authority having jurisdiction, a fixed height changing surface shall be permitted and shall be mounted with the top of the changing surface 17 inches (432mm) minimum and 19 inches (483mm) maximum above the floor.

**613.3.3.1 Operation.** Operable controls for height adjustment and, where provided, on and off shall comply with Section 309.4.

**613.3.4 Capacity.** Allowable stresses for materials, fastening mounting devices, and support structure shall support a downward force of not less than 350 lbs. (159 kg) applied to any point on the changing surface.

**613.3.5 Changing surface.** The changing surface shall be comprised of non-porous and durable materials.

**613.3.6 Side rail.** Side rails shall be provided at the changing surface in accordance with Sections 613.3.6.1 and 613.3.6.2.

**613.3.6.1 Size and location.** Side rails shall be a minimum of 2/3 of the length of the changing surface and shall be centered +/- 1 inch (25mm) along the long open sides of the changing surface.

**Exception.** A side rail shall not be required on the long side opposite the side clearance required by Section 613.3.2.1, provided that side abuts a wall or is otherwise protected.



**613.3.6.2 Rail positioning.** Side rails shall be capable of being raised and lowered and, when in the raised position, shall lock in place. The top of the side rail shall extend 5 inches (127mm) minimum above the top of the changing surface. When in the lowered position, the rail shall not obstruct transfer to or from the changing surface.

**613.4 Installation location.** Where provided, adult changing stations shall be installed in accordance with the locations specified in Section 613.4.1, 613.4.2 or 613.4.3.

**Exception:** Where installed in locations specified in Section 613.4.3, side and end clearances compliance with Section 613.3.2 are not required.

**613.4.1. Single user or family or assisted use toilet or bathing room.** Where adult changing stations are provided in a toilet room with only one water closet and one lavatory, or in a family or assisted-use toilet or bathing room, the room shall provide all of the following components:

1. A dispenser for soap complying with Section 308.
2. A hand towel dispenser or hand dryer complying with Table 603.6.
3. A coat hook located in close proximity to the changing surface.
4. A waste receptacle.
5. Signage indicating “Adult Changing Station” provided at the entrance to the room and complying with the visual character requirements in Section 703.2.

**613.4.2 Multi-user toilet or bathing room.** Where adult changing stations are provided in a multi-user toilet or bathing room, the adult changing station shall be located in a compartment that includes all of the following components:

1. Privacy provided by walls, curtains or partitions enclosing the compartment.
2. A turning space complying with Section 304.
3. A lavatory complying with Section 606.
4. A dispenser for soap complying with Section 308.
5. A hand towel dispenser or hand dryer complying with Table 603.6.
6. A coat hook in close proximity to the changing surface.
7. A waste receptacle.
8. Signage indicating “Adult Changing Station” provided at the entrance to the room and complying with the visual character requirements in Section 703.2.

**613.4.3 Room or space other than a toilet room.** Where adult changing stations are provided in a room or space other than a toilet or bathing room and including, but not limited to, nurses’ work areas, therapist work areas, or special education classrooms, the adult changing station shall be located in a compartment or room that includes all of the following components:

1. Privacy provided by walls, curtains or partitions.
2. A turning space complying with Section 304.
3. A lavatory complying with Section 606 or an alcohol-based hand sanitizer dispenser.
4. Where a lavatory is provided in the compartment or room, provide a dispenser for soap.
5. Where a lavatory is provided in the compartment or room, provide a hand towel dispenser or hand dryer complying with Table 603.6.
6. A waste receptacle.

**613.5 Clearances.** An adult changing station and its supporting structure shall not obstruct required clear floor spaces and clearances at accessible elements, maneuvering clearances at doors, or the wheelchair turning spaces.



**REASON:** The purpose of this standard proposal is to develop criteria for adult changing tables and the rooms in which they are installed. This is intended to coordinate with scoping provisions provided to the I-codes in proposals E141-21(AMPC1), E142-21(AMPC 1 and 2), P37-21(AMPC1) and M20-21(AS). This proposal is a result of the meetings held by the Adult Changing Facilities work group set up by the ICC A117.1 committee. The work group met every two weeks to develop this criteria. Participation included work group members and interested parties with a wide range of interests, and included representatives of manufactures of adult changing tables and parents of adult persons with disabilities that need to use adult changing tables. The work group reviewed eighteen proposed state laws, two already adopted, and four guidelines in European, Australian and North American countries for adult changing tables. While there is interest in many states to provide such facilities, investigations by this work group showed either no technical guidance or very inconsistent information and application. The end result currently is limiting access to children with disabilities who have grown up with accessibility in schools and public places since the ADA went into effect, as well as disenabling a significant number of adults with disabilities who have experienced a different type of life-changing event, accidents, injuries or wars.

The following is an impact statement on the benefits of having these facilities in buildings and facilities.

- Limiting access to those who need adult changing stations decreases the community size dramatically. Nationally, the Centers for Disease Control and Prevention (CDC) reports 61 Million adults (26% of the US population) have some form of disability, with 24.1% affected in the areas of mobility, independent living, and self care. Further, each of those folks need assistance, and likely travel with additional family members. Once this population is taken out of the community, businesses are also losing a large potential of support and income. Providing our citizens more opportunities to participate in the community and patronize local establishments strengthens communities, allowing all family members to engage or travel together as one family nucleus. Currently many families have to make the choice to participate in activities outside of the home with only a portion of their family.
- Individually, families from many states are pushing for the adult changing facilities. A national campaign, Changing Spaces, has been activated, with chapters in at least 10 states, advocating for height adjustable changing tables to be required in public places. At least 12 states have proponents actively proposing and working toward legislation, while as many as 18 states have draft language in play. California has already enacted legislation requiring adult changing stations. Maryland has legislation that goes into effect next year. Accepting this proposal will show wide-spread acceptance of the need along with a consistent set of standards across the country for users to rely on.
- We are all part of an aging population and the elderly still want to be able to attend family gatherings and travel in a car to be with relatives. These adult changing facilities would be valued not only by families with adult disabled children but also be aging adult family members.
- Without appropriate changing facilities, families cannot travel more than 30-40 miles from home. Additionally, trips that involve more than a few hours of time are also a risk. As a result, vacations, trips to zoos, aquariums, museums, concerts, and similar events are eliminated.
- The addition of adult changing tables will present a tremendous change in the quality of life for so many people who were unable to get out and participate in many activities before due to the lack of adequate facilities.

The following are reasons for the portions of the proposal dealing with the adult changing table/surface:

The work group compared the recommended changing surface technical requirements with changing tables on the market and verified that the requirements recommended are available from multiple sources. The following are specific to the sections for the changing surface.

### **613.2 Safety and performance.**

Adult changing stations shall comply with the following:

- 1) ISO 17966 Sections: 5 Materials; 7 Electromagnetic compatibility; 8 Electrical safety; 11 Safety of moving and folding parts; 11.2 Prevention of traps for parts of human body; 16 Static strength, impact, durability; 17 Stability;
- 2) IEC 60601-1 Medical electrical equipment – Part 1: General requirements for basic safety and essential performance; and
- 3) IEC 60601-1-2 Collateral Standard: Electromagnetic disturbances.

These standards were referenced because compliance assures changing station' design and operation will provide electrical and mechanical safety, structural strength, durability, safety of moving parts, prevent entrapment of human body parts and side rail safety for people with disabilities and their caregivers.

### **613.3.1 Size.**

ICC A117.1 has requirements for benches to change clothes with a depth of 24" (Section 903.3). The 30" minimum width is thought to be most appropriate for a person laying down. The 70" length is based on the average height of an adult male.

#### **613.3.2.1 Side clearance.**

A 36" deep minimum side clearance along the length of one long open side allows for an accessible route with space to park a wheelchair to support transfer to/from changing surface.

#### **613.2.2.2 End clearance.**

A 36" deep minimum clearance on at least one end of the changing surface allows space for individual to move around the table to manipulate clothing and change the individual. It also allows for the wheelchair to be located at that end while a care giver is changing someone. The exception would allow for a 24" clearance at the end (based on information from Assisted Toileting and Bathing work group and study from the Rothchild's Foundation) if there was another location in the room to move the wheelchair. (The California Code requires 36" deep minimum clearance on both ends of the changing surface.)

### **613.3.3 Height adjustability.**

The 17" lowest height is consistent with the ADA 17" to 19" water closet seat height requirement. The average height of a wheelchair seat is 19" above the floor. Lateral transfer to 17" changing surface height is practical. Adjustable height range is consistent with eight states' (FL, NH, OK, WI, CA, MN, IA, MI) published height requirements.

The exception allows a fixed height surface. Fixed height changing surface is: (1) better than no changing surface; (2) a solution for vandalism of adjustable height adult changing surface.

#### **613.3.3.1 Operation.**

Controls of height adjustment comply with ADA Section 309.4 since operation is by the care giver, not the person on the table. Raising and lowering folding changing surface and side rails are not covered by ADA Section 309.4

### **613.3.4 Capacity.**

"Not less than 350 lbs." was selected as changing surface capacity because it covers 99% of the general population. Six states (FL, IL, MN, NH, OK and WI) of ten listing load capacity, state 350 lbs. One state (CA) of ten listing load capacity, states 300 lbs. Four states (IA, MI, ND and OH) of ten listing load capacity, state 440 lbs.

CDC data for body weight for the time period 2015-2018 indicates the following. For adult males age 20 and over, the data for all males examined (n=5,085) indicated a mean body weight of 199.8 lbs., and a body weight

of 287.2 lbs. at the 95<sup>th</sup> percentile. When this data is analyzed by age range, body weight at 95<sup>th</sup> percentile ranged from 238.0 lbs. for males 80 years and over to 308.5 lbs. for males 30 -39 years of age.

One private sector website offers a body weight percentile calculator, based on the CDC's 2015-2016 NHANES survey. The site specifies that the 99<sup>th</sup> percentile for adult males as being 341.1 lbs.

Specification of capacity at 350 lbs. seems reasonable, to account for clothing and any supplies that need to be available during the changing activity. Additionally, the 350 lbs. capacity offers a factor of safety of 1.21 when applied to the 287.5 lbs., 95<sup>th</sup> percentile figure, and 1.02 when applied to the 341.1 lbs., 99<sup>th</sup> percentile figure.

*Anthropometric Reference Data for Children and Adults: United States, 2015-2018. Analytical and Epidemiological Studies. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.*

*National Health and Nutrition Examination Survey, NHANES 2015-2016. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention cited on website <https://dqydj.com/weight-percentile-calculator-men-women/#:~:text=At%20the%20lowest%20extremes%20for%20adults%2C%20the%201st,for%20men.%20Weight%20alone%20doesn't%20tell%20you%20enough.>*

**613.3.5 Changing surface.** The surface shall be non-porous surface for easy, thorough cleaning. Surface shall be durable to provide multiple years of service under normal conditions of use.

#### **613.3.6.1 Side rail, size and location.**

Relate side rail length to changing surface length without referring to a specific inch dimension. Allows for shorter length changing surfaces and rails.

#### **613.3.6.2 Side rail positioning.**

A side rail is needed on open side of changing surface to prevent person being cared for from rolling off. The 5" minimum height from the top of the side rail to the changing surface is considered a practical height for the caregiver to lean over.

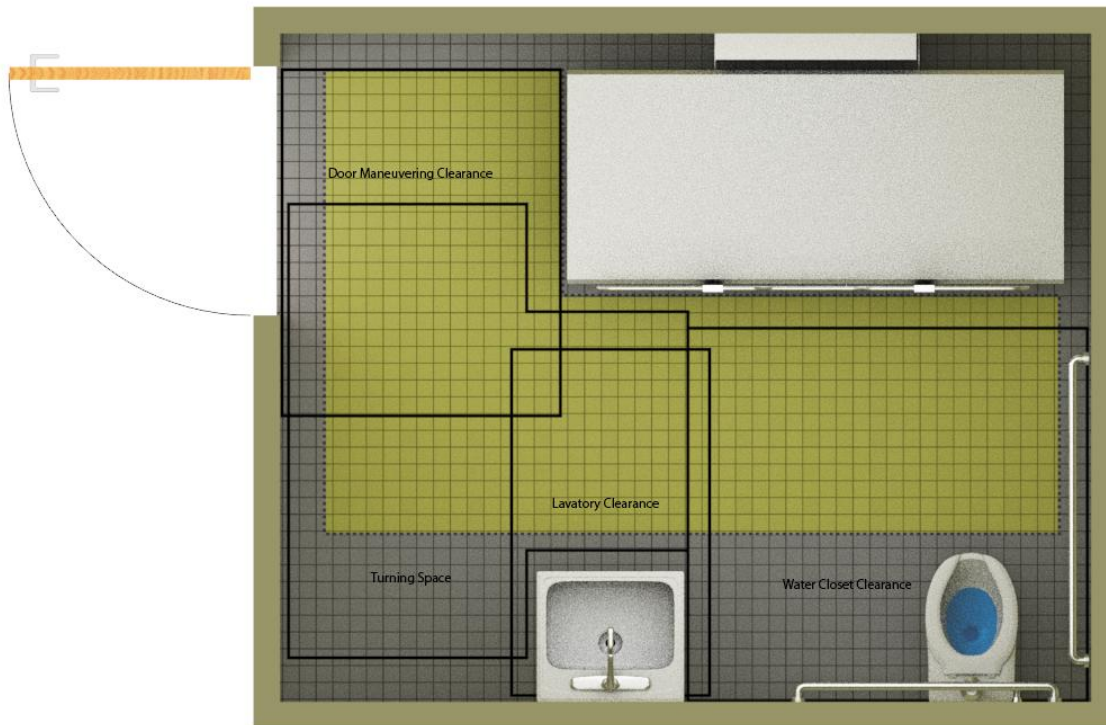
The following are reasons for the portions of the proposal dealing with the room where the adult changing table/surface is located:

#### **613.4 Installation location.**

There currently is no existing technical design criteria for this feature. A need for adult changing facilities has been brought forth in proposed bills in multiple states with differing sets of design criteria. The proposed bills' criteria were reviewed when developing these recommendations to provide a consistent set of technical criteria that meets the minimum needs of care providers for a private changing facility to change the adults with disabilities whom they care for, while at the same time maintaining required clearances at other fixtures in the room.

Consideration was given to the size of the changing surface being recommended by the Table sub-group to ensure that when in the open position, the changing surface does not obstruct the required clearances for toilets, sinks, doors and maneuvering when an adult changing surface is provided. It is necessary to ensure that the adult changing surface does not create a barrier for other persons with disabilities who may come to use the toilet room if the changing surface is folding and left in the open position. In addition to maintaining required clear floor spaces at other fixtures in the room, it was determined that the changing surface could not overlap

the room's turning space because some tables have a base underneath that does not allow for open knee and toe clearance that could otherwise be utilized as part of a turning space.



**Staff note:** The new standards will be provided for the ICC A117.1 committee members to review. The standards are copyrighted, so this will only be available for the committee and in a read only format.

## 06-90 – 2021 Replacement proposal

603.2.2, 613(New), 902.1

**Proponent:** Laurel Wright, representing the Adult Changing Facilities work group

**Replace and revise as follows:**

**603.2.2 Door swing.** Doors shall not swing into the clear floor space or clearance for any fixture.

**EXCEPTIONS:**

1. Doors to a toilet or bathing room for a single occupant, accessed only through a private office and not for common use or public use shall be permitted to swing into the clear floor space, provided the swing of the door can be reversed to comply with Section 603.2.2.
2. Where the room is intended for individual use, family or assisted-use, and a clear floor space is provided within the room outside the arc of the a door swing, ~~the~~ such a door shall not be required to comply with 603.2.2.

### SECTION 902

#### DINING SURFACES AND WORK SURFACES

**902.1 General.** Accessible dining surfaces and work surfaces shall comply with Section 902.

**Exceptions:**

1. Dining surfaces and work surfaces primarily for children's use shall be permitted to comply with Section 902.5.
2. Adult changing surfaces shall not be required to comply this section.

## **SECTION 613**

### **ADULT CHANGING STATIONS**

**613.1 General.** Adult changing stations shall comply with Section 613.2 through 613.4.

**613.2 Installation location.** Where provided, adult changing stations shall be installed in accordance with the locations specified in Section 613.2.1, 613.2.2 or 613.2.3.

**613.2.1. Single user or family or assisted use toilet or bathing room.** Where adult changing stations are provided in a toilet room with only one water closet and one lavatory, or in a family or assisted-use toilet or bathing room, the room shall provide all of the following components:

6. A dispenser for soap complying with Section 308.
7. A hand towel dispenser or hand dryer complying with Table 603.6.
8. A coat hook located in close proximity to the changing surface.
9. A waste receptacle.
10. Signage indicating "Adult Changing Station" provided at the entrance to the room and complying with the visual character requirements in Section 703.2.
11. Signage indicating the weight capacity and instructions for operation of the changing station within the room.

**613.2.2 Multi-user toilet or bathing room.** Where adult changing stations are provided in a multi-user toilet or bathing room, the adult changing station shall be located in a compartment that includes all of the following components:

1. Privacy provided by walls, curtains or partitions enclosing the compartment.
2. A turning space complying with Section 304.
3. A lavatory complying with Section 606.
4. A dispenser for soap complying with Section 308.
5. A hand towel dispenser or hand dryer complying with Table 603.6.
6. A coat hook in close proximity to the changing surface.
7. A waste receptacle.
8. Signage indicating "Adult Changing Station" provided at the entrance to the room and complying with the visual character requirements in Section 703.2.
9. Signage indicating the weight capacity and instructions for operation of the changing station within the compartment.

**613.2.3 Room or space other than a toilet room or bathing room.** Where adult changing stations are provided in a room or space other than a toilet or bathing room and including, but not limited to, nurses' work areas, therapist work areas, or special education classrooms, the adult changing station shall be located in a compartment or room that includes all of the following components:

7. Privacy provided by walls, curtains or partitions.
8. A turning space complying with Section 304.
9. A lavatory complying with Section 606 or an alcohol-based hand sanitizer dispenser.
10. Where a lavatory is provided in the compartment or room, provide a dispenser for soap.
11. Where a lavatory is provided in the compartment or room, provide a hand towel dispenser or hand dryer complying with Table 603.6.



12. A waste receptacle.
13. Signage indicating the weight capacity and instructions for operation of the changing station within the room.

**613.3 Room clearances.** An adult changing station and its supporting structure shall not obstruct required clear floor spaces and clearances at accessible elements, maneuvering clearances at doors, or the wheelchair turning spaces.

**613.4 Changing surface.** A changing surface shall be provided and shall comply with Section 613.4.

**613.4.1 Safety and performance.** Adult changing stations shall comply with the following safety and performance requirements:

1. Protect the user from falling from the changing surface along the open long sides, by means such as retractable safety rails.
2. Provide a belt to secure the user on the changing surface.
3. Protect the user and caregiver from entrapment during operation.
4. Support a weight of not less than 400 lbs. (182 kg) applied to the changing surface
5. Provide a method to prevent tipping such as secured to the floor or wall, or other means.
6. Provide a changing surface that is durable, cleanable, non-absorbent, and resistant to corrosion.
7. Electrical components complying with NFPA 70.
8. Operable controls for height adjustment and, where provided, on and off complying with Section 309.4.

**613.4.2 Size.** The changing surface shall be 70 inches (1778mm) minimum in length and 30 inches (762mm) minimum in width.

**613.4.3 Height adjustability.** The changing surface height shall be adjustable at variable heights from 17 inches (432mm) minimum to 38 inches (965mm) maximum above the floor as measured to the top of the changing surface.

**Exception:** Where the adult changing station is not required by the administrative authority, a fixed height changing surface shall be permitted and shall be mounted with the top of the changing surface 19 inches (483mm) minimum and 23 inches (584 mm) maximum above the floor.

**613.4.4 Clearances.** Clearances complying with Sections 613.4.4.1 and 613.4.4.2 shall be provided adjacent to the changing surface, measured when the surface are in the operational position.

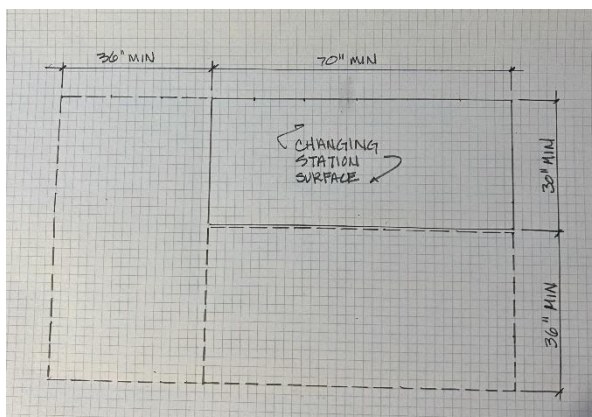
**613.4.4.1 Side clearance.** A 36-inch (914mm) deep minimum side clearance shall be provided along the open long side of the changing surface.

**Exception:** In the raised position, the side rail shall be permitted to overlap the side clearance.

**613.4.4.2 End clearance.** A 36-inch (914mm) wide minimum end clearance shall be provided along the depth of one end of the changing surface. The width of the end clearance shall extend the depth of the changing surface and the side clearance.

**Exceptions:**

1. A 24-inch (610 mm) wide minimum end clearance shall be permitted where a clear floor space complying with Section 305.3 is provided within the room beyond the clearances for the changing surface.
2. Where installed in locations specified in Section 613.2.3, end clearances complying with Section 613.4.4.2 is not required.



**Figure 613.4.4**  
**Changing surface and clearances**

**613.4.5 Side rail.** Where side rails are provided at the changing surface they shall comply with Sections 613.4.5.1 and 613.4.5.2.

**613.4.5.1 Size and location.** Side rails shall be a minimum of  $\frac{2}{3}$  of the length of the changing surface and shall be centered  $\pm 3$  inch (75 mm) along the long open sides of the changing surface.

**613.4.5.2 Rail positioning.** Side rails shall be capable of being raised and lowered. The side rail shall be fixed in place when in the raised position. The top of the side rail shall extend 5 inches (127mm) minimum above the top of the changing surface.

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**REASON:** The purpose of this standard proposal is to develop criteria for adult changing tables and the rooms in which they are installed. This is intended to coordinate with scoping provisions provided to the I-codes in proposals E141-21(AMPC1), E142-21(AMPC 1 and 2), P37-21(AMPC1) and M20-21(AS). This proposal is a result of the meetings held by the Adult Changing Facilities work group set up by the ICC A117.1 committee. The work group met from August 2020 to December of 2021 to develop this criteria. They have met several times in 2022 to improve the proposal based on comments from the full A117.1 committee.

Participation included work group members and interested parties with a wide range of interests, and included representatives of manufacturers of adult changing tables and parents of adult persons with disabilities that need to use adult changing tables. The work group reviewed eighteen proposed state laws, two already adopted, and four guidelines in European, Australian and North American countries for adult changing tables. While there is interest in many states to provide such facilities, investigations by this work group showed either no technical guidance or very inconsistent information and application. The end result currently is limiting access to children with disabilities who have grown up with accessibility in schools and public places since the ADA



went into effect, as well as disabling a significant number of adults with disabilities who have experienced a different type of life-changing event, accidents, injuries or wars.

The following is an impact statement on the benefits of having these facilities in buildings and facilities.

- Limiting access to those who need adult changing stations decreases the community size dramatically. Nationally, the Centers for Disease Control and Prevention (CDC) reports 61 Million adults (26% of the US population) have some form of disability, with 24.1% affected in the areas of mobility, independent living, and self care. Further, each of those folks need assistance, and likely travel with additional family members. Once this population is taken out of the community, businesses are also losing a large potential of support and income. Providing our citizens more opportunities to participate in the community and patronize local establishments strengthens communities, allowing all family members to engage or travel together as one family nucleus. Currently many families have to make the choice to participate in activities outside of the home with only a portion of their family.
- Individually, families from many states are pushing for the adult changing facilities. A national campaign, Changing Spaces, has been activated, with chapters in at least 10 states, advocating for height adjustable changing tables to be required in public places. At least 12 states have proponents actively proposing and working toward legislation, while as many as 18 states have draft language in play. California has already enacted legislation requiring adult changing stations. Maryland has legislation that goes into effect next year. Accepting this proposal will show wide-spread acceptance of the need along with a consistent set of standards across the country for users to rely on.
- We are all part of an aging population and the elderly still want to be able to attend family gatherings and travel in a car to be with relatives. These adult changing facilities would be valued not only by families with adult disabled children but also be aging adult family members.
- Without appropriate changing facilities, families cannot travel more than 30-40 miles from home. Additionally, trips that involve more than a few hours of time are also a risk. As a result, vacations, trips to zoos, aquariums, museums, concerts, and similar events are eliminated.
- The addition of adult changing tables will present a tremendous change in the quality of life for so many people who were unable to get out and participate in many activities before due to the lack of adequate facilities.

The following are reasons for the portions of the proposal dealing with the adult changing table/surface:

The work group compared the recommended changing surface technical requirements with changing tables on the market and verified that the requirements recommended are available from multiple sources. The following are specific to the sections for the changing surface.

**603.2.2 Door swing** (to family or assisted-use toilet room) – (see also 613.3) Similar to a single occupant bathroom, it is assumed that persons using this room will enter the room and lock the door. Therefore, the door can swing over clear floor spaces provided that the a wheelchair space is located past the swing of the door.

**902.1 General** (Work surface) – (see also 613.2) Some tables are wall mounted and could provide knee and toe clearances, however to achieve desired weight capacity and stability, there are many options with a center post or an x-brace system that need to be permitted. Therefore, adult changing surfaces, while a work surface for a care provider, is not also required to be an accessible work surface due to the potential lack of knee and toe clearances.

**613 Adult changing stations and 613.1 General** – This is a new section for the technical criteria for adult change stations. The IBC and the Appendix will include locations where these should be required for public

access so that parents can change their adult children. For use and safety, these provisions will also apply where adult changing facilities are provided voluntarily.

There currently is no existing technical design criteria for adult changing facilities. A need for adult changing facilities has been brought forth in proposed bills in multiple states with differing sets of design criteria. The proposed bills' criteria were reviewed when developing these recommendations to provide a consistent set of technical criteria that meets the minimum needs of care providers for a private changing facility to change the adults with disabilities whom they care for, while at the same time maintaining required clearances at other fixtures in the room.

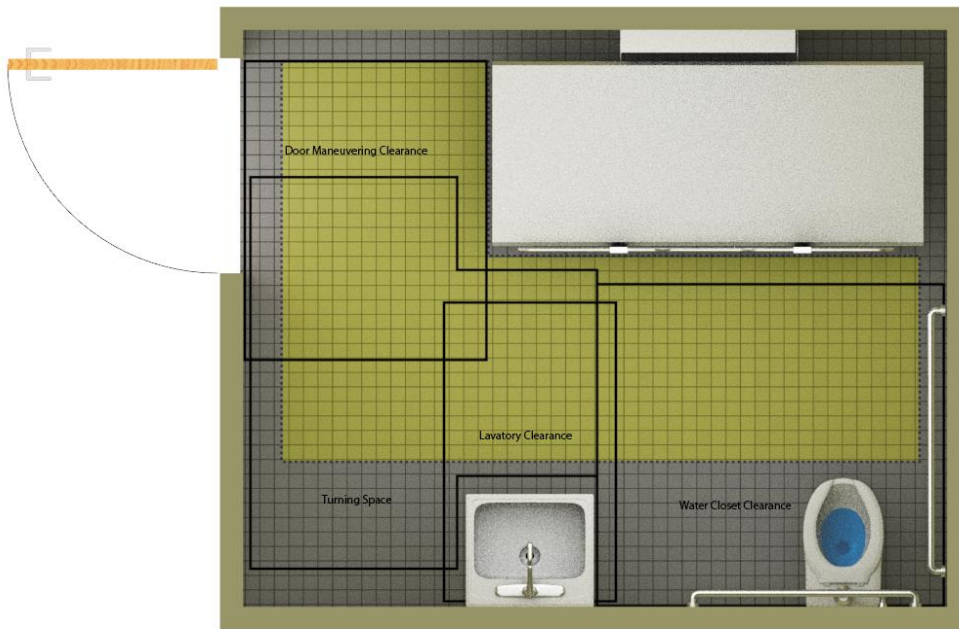
**613.1.2 Installation location** – Where adult changing facilities are required, they will be provided in a separate toilet room (613.2.1). Where provided, but not required, they can be in a separate toilet room (613.2.1, in a bathroom in a separate stall (613.2.2) or in a private area (613.2.3). The work group felt that that there should be additional allowances for locations where the persons with disabilities are cared for in areas such as special education classrooms or in school nurses' offices where the primary care giver is not family members. The intent is to allow the adult changing tables in the locations that best serves the situation where these are provided voluntarily.

**613.2.1. Single user or family or assisted use toilet or bathing room.** – In a private bathroom, to allow for sanitation of the table, the user and the care giver, along with the fixtures (lavatory, water closet), the room will include soap, towels and a garbage can. There will be a coat hook in the room. Signage outside to identify the room and instructions for the table operation inside the room are required.

**613.2.2 Multi-user toilet or bathing room.** Where a table is provided in a multi-stall bathroom, the table will be in a private area. Within that area will be a lavatory with soap and a hand dryer, or hand towel dispenser. A garbage can is required. Signage to identify the room outside and instructions for the table operation are required.

**613.2.3 Room or space other than a toilet room or bathing room.** These are primarily for, but not limited to, nurses' work areas, therapist work areas, or special education classrooms. Privacy is required. Within that area if the room has a lavatory, also provide soap and a hand dryer, or hand towel dispenser. There is the option for a hand sanitizer. A garbage can is required. Instructions for the table operation are required.

**613.3 Room clearances.** Consideration was given to the size of the changing surface being recommended by the Table sub-group to ensure that when in the open position, the changing surface does not obstruct the required clearances for toilets, sinks, doors and maneuvering when an adult changing surface is provided. It is necessary to ensure that the adult changing surface does not create a barrier for other persons with disabilities who may come to use the toilet room if the changing surface is folding and left in the open position. (A folding table is permitted, but the intent is that when the table is down, it will not be necessary to lift the table to access the other fixtures.) In addition to maintaining required clear floor spaces at other fixtures in the room, it was determined that the changing surface could not overlap the room's turning space because some tables have a base underneath that does not allow for open knee and toe clearance that could otherwise be utilized as part of a turning space.



**613.2 Safety and performance.** The committee has applied to work with IAPMO to develop a standard specific to adult changing. This list is the performance criteria to use for safety until this standard is finished.

Item 1 and 2 - Both a safety belt and a side rail will be required. The side rail prevents the user from rolling off the changing surface. The belt secures the user in place and, from the commentary received from Jennifer and other parents, is a necessary secondary item that prevents the user from rolling around on the surface. Not all users may require it, but from the comments received so far, having a belt to secure the user allows the caretaker to be more free in his/her movements/administrations during the changing process. Side rails are required by six states (FL, IA, IL, MI, MN, WI) and a safety belt is required in five states (FL, IA, IL, MI, MN) of the eleven states listing changing station requirements. A safety belt is included on four adult, adjustable height changing station models of the twelve products from six manufacturers the Adult Changing Station Task Force surveyed.

Item 3, 4 and 5– Consideration of possible entrapment, capacity and no tipping are important safety issues.

“Not less than 350 lbs.” was originally selected as changing surface capacity because it covers 99% of the general population. Six states (FL, IL, MN, NH, OK and WI) of ten listing load capacity, state 350 lbs. One state (CA) of ten listing load capacity, states 300 lbs. Four states (IA, MI, ND and OH) of ten listing load capacity, state 440 lbs.

One private sector website offers a body weight percentile calculator, based on the CDC’s 2015-2016 NHANES survey. The site specifies that the 99<sup>th</sup> percentile for adult males as being 341.1 lbs.

It is suggested that the weight capacity of the adult-size, adjustable height changing station should be “not less than 400 lbs. (182 kg)”. Commentary from parents of adult children who use adjustable height changing stations to change their children indicated that additional weight beyond the users’ weight is placed on the

changing station surface. First, the care giver will apply pressure to the changing surface during the changing process. Second, the care giver may add equipment to the changing surface that is needed during the changing process. Third, the care giver may lie on the changing surface to calm down their agitated child while another caregiver performs the changing process. The weight capacities of twelve adult-size, adjustable height changing station models, from six manufacturers, on the market surveyed by the Adult Changing Station Task Force shows the following:

- Under 400 lbs., 2
- 400 lbs., 1
- 440 lbs., 8
- 500 lbs., 1

Item 6 – This is common language for surfaces that need to be cleanable for sanitation reasons. The surface shall be non-porous surface for easy, thorough cleaning. Surface shall be durable to provide multiple years of service under normal conditions of use.

Item 7 – NFPA 70 is the National Electrical Code and will reduce the chance of accidental shock.

Item 8 – the controls to operate the height of the table are for the caregiver and should be places where it is best to serve their needs for a smooth operation of the changing surface. This may not be on the side or over the table.

**613.4.2 Size.** ICC A117.1 has requirements for benches to change clothes with a depth of 24” (Section 903.3). The 30” minimum width is thought to be most appropriate for a person laying down. The 70” length is based on the average height of an adult male.

**613.4.3 Height adjustability.** The 17” lowest height is consistent with the ADA 17” to 19” water closet seat height requirement. The average height of a wheelchair seat is 19” above the floor. Lateral transfer to 17” changing surface height is practical. Adjustable height range is consistent with eight states’ (FL, NH, OK, WI, CA, MN, IA, MI) published height requirements.

“Adjustable at variable heights” will allow for reasonable transitions.

Reasons for 38” Maximum Height Adjustability - The maximum height of twelve adult-size, adjustable height changing station models, from six manufacturers, on the market surveyed by the Adult Changing Station Task Force shows 9 of the 12 meet this height requirement.

The maximum height of states’ requirements surveyed shows the following:

- 38” (1) CA
- 34” (7) FL, IA, MI, NH, OH, OK, WI
- 28” (1) MN
- No height listed (5) GA, IL, PA, TX, VI

The 38” maximum adjustable height suggested is consistent with a majority of the adult-size, adjustable height changing station models on the market offering a higher maximum height than is stated in majority of U.S. States’ requirements.

The exception allows a fixed height surface where tables are provided voluntarily. Fixed height changing surface is: (1) better than no changing surface; (2) a solution for vandalism of adjustable height adult changing surface; (3) a significant reduction in cost that should encourage additional tables where needed (such as in every special education classroom in a school). The 19” to 23” is based on new information for the Access Board about the range of wheelchair seat heights.

**613.4.4 Clearances.** Folding tables are not prohibited, so the clearance are required when the table is in its operational position.

**613.4.4.1 Side clearance.** A 36" deep minimum side clearance along the length of one long open side allows for an accessible route with space to park a wheelchair to support transfer to/from changing surface.

The exception allows for side rails to be inbound or outbound of the of the changing surface. When the side rails are down, they should not obstruct the transfer to the table.

**613.4.4.2 End clearance.** A 36" deep minimum clearance on at least one end of the changing surface allows space for caregiver to move around the table to manipulate clothing and change the user. It also allows for the wheelchair to be located at that end while a care giver is changing someone.

Exception 1 would allow for a 24" clearance at the end (based on information from Assisted Toileting and Bathing work group and study from the Rothchild's Foundation) if there is another location in the room to move the wheelchair. (The California Code requires 36" deep minimum clearance on both ends of the changing surface.)

Exception 2 allows for tables in nurses' work areas, therapist work areas, or special education classrooms to be located in an alcove where necessary.

#### **613.4.5 Side rail,**

**613.4.5.1 Size and location.** Relate side rail length to changing surface length without referring to a specific inch dimension.

**613.3.6.2 Side rail positioning.** A side rail is needed on open side of changing surface to prevent person being cared for from rolling off. The 5" minimum height from the top of the side rail to the changing surface is considered a practical height for the caregiver to lean over.

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Committee Action: As Modified 26-0-0

#### **REPORT OF HEARING:**

**Modification (if any):** Motion to delete 613.4.1 passed 26-3-0

#### **Further revise as follows:**

~~**613.4.1 Safety and performance.** Adult changing stations shall comply with the following safety and performance requirements:~~

- ~~1. Protect the user from falling from the changing surface along the open long sides, by means such as retractable safety rails.~~
- ~~2. Provide a belt to secure the user on the changing surface.~~
- ~~3. Protect the user and caregiver from entrapment during operation.~~
- ~~4. Support a weight of not less than 400 lbs. (182 kg) applied to the changing surface~~
- ~~5. Provide a method to prevent tipping such as secured to the floor or wall, or other means.~~
- ~~6. Provide a changing surface that is durable, cleanable, non-absorbent, and resistant to corrosion.~~
- ~~7. Electrical components complying with NFPA 70.~~
- ~~8. Operable controls for height adjustment and, where provided, on and off complying with Section 309.4.~~

**613.4.3 Height adjustability.** The changing surface height shall be adjustable at variable heights from 17 inches (432mm) minimum to 38 inches (965mm) maximum above the floor as measured to the top of the changing surface.



**Exception:** Where the ~~changing surface~~ adult changing station is not required by the administrative authority, a fixed height changing surface shall be permitted and shall be mounted with the top of the changing surface 19 inches (483mm) minimum and 23 inches (584 mm) maximum above the floor.

**Committee Reason:** The first modification deleted Section 613.4.1 due to concerns that some of the item were not in enforceable language (e.g. # 3 and 5). Item 1 is addressed in Section 614.4.5. Item 8 needed some editorial cleanup on the language.

The modification to Section 613.4.3 was because the adult changing station is required by the codes, not the surface itself. This is editorial.

The replacement proposal developed by the Adult Changing Station Committee was approved because it brought requirements in for the changing table that would provide appropriate guidance for these facilities. The committee worked to address concerns raised by the A117.1 committee during the original presentation to the committee at the March 10 presentation. Laurel Wright's presentation explained the development and resources used by the task group to develop criteria.

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## 06-90 – 2021 Public Comment 1

### 613.4.3 (New)

**Proponent:** Jennifer Skulski, Skulski Consulting LLC

**Support the committee action with the following related comment.**

**613.4.3 Height adjustability.** The changing surface height shall be adjustable at variable heights from 17 inches (432mm) minimum to 38 inches (965mm) maximum above the floor as measured to the top of the changing surface.

**Exception:** Where the adult changing station is not required by the administrative authority, a fixed height changing surface shall be permitted and shall be mounted with the top of the changing surface 19 inches (483mm) minimum and 23 inches (584 mm) maximum above the floor.

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**REASON:** Over the last three years, we have conducted accessibility assessments in public parks where every mechanically adjustable changing table was rendered inoperable within 12 months of installation. Either through excessive force, heavy use, or malicious intent, the mechanically adjustable changing tables have not been able to withstand the unsupervised public park restroom setting. Thank you for allowing for the exception of a fixed height changing surface. This will be especially helpful in public park settings like playgrounds and splash pads that experience a high volume of hard use and vandalism.

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**Committee Action for Public Comment 1:**

No action

### REPORT OF HEARING:

**Modification (if any):**

**Committee Reason:**

06-90 Skulski.doc

## 06-90 – 2021 Public Comment 2

### 102.1

**Proponent:** Laurel Wright, representing the Adult Changing Station Task Group

**Revise as follows:**

Further modify as follows:

**613.3.4 Capacity.** Allowable stresses for materials, fastening mounting devices, and support structure shall support a downward force of not less than 400 lbs. (182 kg) applied to any point on the changing surface.

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**REASON:** A 350 lbs. capacity was in the original proposal, but was removed in the replacement proposal. The reason statement for the replacement indicates why 400 lbs. would be more appropriate. IAPMO is developing a safety standard for adult changing tables, that may address this, but until this standard is ready, we feel that this requirement should be reinstated.

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**Committee Action for Public Comment 2:** AFM 24-0-2

- modification 1 to delete point load and change to capacity - 21-2-3;
- modification 2 to delete ‘allowable stresses for’ - 23-1-5;
- modification 3 – change ‘capacity’ to ‘live load’ – 9-16-4
- modification 4 – change ‘capacity’ to ‘user weight’ – 26-1-2

### REPORT OF HEARING:

**Modification (if any):**

**Further modify PC2 with the following:**

**613.4.2 Capacity.** ~~Allowable stresses for~~ materials, fastening mounting devices, and support structure shall support a user weight ~~downward force of not less than~~ 400 lbs. (182 kg) minimum ~~applied to any point on the changing surface.~~

**Committee Reason:** The modifications are intended to clarify what loads are required for this product. This will be consistent with terminology used by manufacturers where specifying their product. The committee felt it was necessary to include this weight requirement while they work on the development of the IAPMO safety standard for this product.

06-90 Wright.doc

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## 06-90 – 2021 Public Comment 3

### 613

**Proponent:** Marsha Mazz, representing Terminology Work Group

**Further revise as follows:**



## SECTION 616 ADULT CHANGING STATIONS

**616.2.1. Single user or family or assisted use toilet or bathing room.** Where adult changing stations are provided in a toilet room with only one water closet and one lavatory, or in a family or assisted-use toilet or bathing room, the room shall provide all of the following components:

1. A dispenser for soap ~~complying with Section 308~~ located within the applicable reach range.
2. A hand towel dispenser or hand dryer complying with Table 603.6.
3. A coat hook located in close proximity to the changing surface.
4. A waste receptacle.
5. Signage indicating “Adult Changing Station” provided at the entrance to the room and complying with the visual character requirements in Section 703.2.
6. Signage indicating the weight capacity and instructions for operation of the changing station within the room.

**616.2.2 Multi-user toilet or bathing room.** Where adult changing stations are provided in a multi-user toilet or bathing room, the adult changing station shall be located in a compartment that includes all of the following components:

1. Privacy provided by walls, curtains or partitions enclosing the compartment.
2. A turning space ~~complying with Section 304.~~
3. A lavatory complying with Section 606.
4. A dispenser for soap ~~complying with Section 308~~ located within the applicable reach range.
5. A hand towel dispenser or hand dryer complying with Table 603.6.
6. A coat hook in close proximity to the changing surface.
7. A waste receptacle.
8. Signage indicating “Adult Changing Station” provided at the entrance to the room and complying with the visual character requirements in Section 703.2.
9. Signage indicating the weight capacity and instructions for operation of the changing station within the compartment.

**616.2.3 Room or space other than a toilet room or bathing room.** Where adult changing stations are provided in a room or space other than a toilet or bathing room and including, but not limited to, nurses’ work areas, therapist work areas, or special education classrooms, the adult changing station shall be located in a compartment or room that includes all of the following components:

1. Privacy provided by walls, curtains or partitions.
2. A turning space ~~complying with Section 304.~~
3. A lavatory complying with Section 606 or an alcohol-based hand sanitizer dispenser.
4. A dispenser for soap ~~complying with Section 308~~ located within the application reach range.
5. Where a lavatory is provided in the compartment or room, provide a hand towel dispenser or hand dryer complying with Table 603.6.
6. A waste receptacle.
7. Signage indicating the weight capacity and instructions for operation of the changing station within the room.

**616.3 Room ~~clearances configurations~~.** An adult changing station and its supporting structure shall not obstruct required clear floor spaces and maneuvering clearances at ~~accessible elements~~ fixtures, maneuvering clearances at the adult changing stations, maneuvering clearances at doors, or the ~~wheelchair~~ turning spaces.

**616.4.3 Maneuvering Clearances.** Maneuvering Clearances at the adult changing surface and complying with Sections 616.4.4.1 and 616.4.4.2 shall be provided. ~~adjacent to the changing surface, and~~ Such

maneuvering clearances shall be measured ~~when~~ where the adult changing surface ~~are~~ is in the operational position.

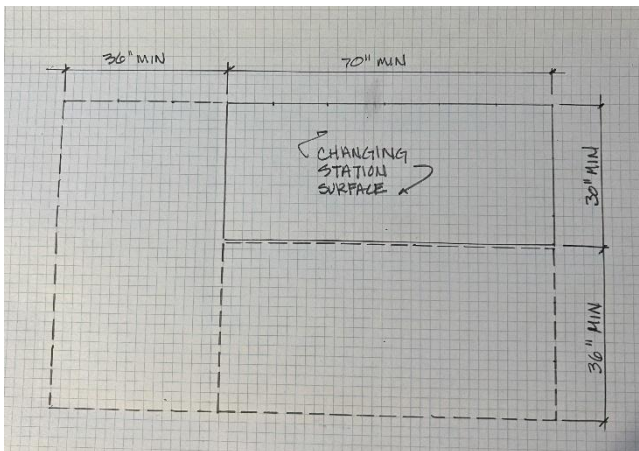
**616.4.3.1 Side maneuvering clearance.** A 36-inch (914mm) deep minimum side maneuvering clearance at the adult changing surface shall be provided along the open long side of the adult changing surface.

**Exception:** In the raised position, the side rail shall be permitted to overlap the side clearance.

**616.4.3.2 End maneuvering clearance.** A 36-inch (914mm) wide minimum end maneuvering clearance at the adult changing surface shall be provided along the depth of one end of the changing surface. The width of the end maneuvering clearance shall extend the depth of the changing surface and the side maneuvering clearance.

**Exceptions:**

3. A 24-inch (610 mm) wide minimum end maneuvering clearance shall be permitted where a clear floor space complying with Section 305.3 is provided within the room beyond the maneuvering clearances for the changing surface.
4. Where installed in locations specified in Section 616.2.3, end maneuvering clearances complying with Section 616.4.3.2 is not required.



6-90-2021 AM

Figure 616.4

Size and maneuvering clearances at the adult Changing surface ~~and clearances~~

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**REASON:** This is part of a proposal from the Terminology task group to define the building blocks so that a reference is not required. This public comment is included here because it was part of new text. Please see the complete proposal for additional information.

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**Committee Action for Public Comment 3:** AS 23-0-2

**REPORT OF HEARING:**

**Modification (if any):**

**Replace PC3 and further revise as follows:**

**616.3 Room clearances configurations.** An adult changing station and its supporting structure shall not obstruct required clear floor spaces and maneuvering clearances at accessible elements fixtures, maneuvering clearances at the adult changing stations, maneuvering clearances at doors, or the wheelchair turning spaces.

**616.4.3 Maneuvering Clearances.** Maneuvering Clearances at the adult changing surface and complying with Sections 616.4.4.1 and 616.4.4.2 shall be provided. ~~adjacent to the changing surface, and~~ Such maneuvering clearances shall be measured ~~when~~ where the adult changing surface ~~are~~ is in the operational position.

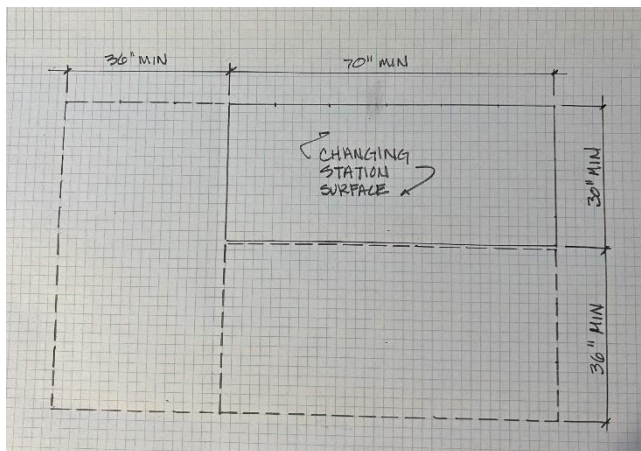
**616.4.3.1 Side maneuvering clearance.** A 36-inch (914mm) deep minimum side maneuvering clearance shall be provided along the open long side of the adult changing surface.

**Exception:** In the raised position, the side rail shall be permitted to overlap the side clearance.

**616.4.3.2 End maneuvering clearance.** A 36-inch (914mm) wide minimum end maneuvering clearance shall be provided along the depth of one end of the changing surface. The width of the end maneuvering clearance shall extend the depth of the changing surface and the side maneuvering clearance.

**Exceptions:**

1. A 24-inch (610 mm) wide minimum end maneuvering clearance shall be permitted where a clear floor space complying with Section 305.3 is provided within the room beyond the maneuvering clearances for the changing surface.
2. Where installed in locations specified in Section 616.2.3, end maneuvering clearances complying with Section 616.4.3.2 is not required.



6-90-2021 AM

Figure 616.4

Size and maneuvering clearances at the adult Changing surface ~~and clearances~~

**Committee Reason:** The editorial committee is still working on the building blocks references which would include the PC3 revisions for 616.2.1, 616.2.2 and 616.2.3. These items are removed from this public comment at this time. The building blocks can be addressed for the 2024 ICC A117.1.

What is remaining are the Terminology committee's suggestions for consistent use for spaces around fixtures to call them 'maneuvering clearances' to separate them from 'clear floor space' and to provide consistency throughout the standard.

06-90

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**Committee Action for First Ballot:** AFM by PC2 and PC3 24-0-2

### REPORT OF HEARING:

**Modification (if any):**  
**Further modify as follows:**

**613.3 Room ~~clearances configurations~~.** An adult changing station and its supporting structure shall not obstruct required clear floor spaces and maneuvering clearances at ~~accessible elements~~ fixtures, maneuvering clearances at the adult changing stations, maneuvering clearances at doors, or the ~~wheelchair~~ turning spaces.

**613.4.2 Capacity.** Materials, fastening mounting devices, and support structure shall support a user weight of 400 lbs. (182 kg) minimum.  
*(renumber subsequent sections)*

**613.4.3 Maneuvering Clearances.** Maneuvering Clearances ~~at the adult changing surface and~~ complying with Sections 616.4.4.1 and 616.4.4.2 shall be provided. ~~adjacent to the changing surface, and~~ Such maneuvering clearances shall be measured ~~when~~ where the adult changing surface ~~are~~ is in the operational position.

**613.4.3.1 Side maneuvering clearance.** A 36-inch (914mm) deep minimum side maneuvering clearance shall be provided along the open long side of the adult changing surface.

**Exception:** In the raised position, the side rail shall be permitted to overlap the side clearance.

**613.4.3.2 End maneuvering clearance.** A 36-inch (914mm) wide minimum end maneuvering clearance shall be provided along the depth of one end of the changing surface. The width of the end maneuvering clearance shall extend the depth of the changing surface and the side maneuvering clearance.

**Exceptions:**

1. A 24-inch (610 mm) wide minimum end maneuvering clearance shall be permitted where a clear floor space complying with Section 305.3 is provided within the room beyond the maneuvering clearances for the changing surface.
2. Where installed in locations specified in Section 616.2.3, end maneuvering clearances complying with Section 616.4.3.2 is not required.

### Figure 616.4

Size and maneuvering clearances at the adult Changing surface ~~and clearances~~

### Committee Reason:

PC2- The modifications are intended to clarify what loads are required for this product. This will be consistent with terminology used by manufacturers where specifying their product. The committee felt it was necessary to include this weight requirement while they work on the development of the IAPMO safety standard for this product.

PC3 - The editorial committee is still working on the building blocks references which would include the PC3 revisions for 616.2.1, 616.2.2 and 616.2.3. These items are removed from this public comment at this time. The building blocks can be addressed for the 2024 ICC A117.1.

What is remaining are the Terminology committee's suggestions for consistent use for spaces around fixtures to call them 'maneuvering clearances' to separate them from 'clear floor space' and to provide consistency throughout the standard.

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The section related to Adult Changing Stations was approved as Supplement 1 to the 2017 ICC A117.1. The purpose of this public comment is coordination with IAPMO Z1390.

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## 06-90 – 2021 Public Comment 4

### 105.2.12(New), 613

**Proponent:** Laurel Wright, representing the Adult Changing Station Task Group

**Revise as follows:**

**106.2.12 Standard for Assistive Tables** IAPMO Z1390-2024 IAPMO 4755 E. Philadelphia St., Ontario, CA 91761

### SECTION 613

#### ADULT CHANGING STATIONS

**613.1 General.** Adult changing stations shall comply with Sections 613.2 through 613.4. Adult changing stations include the assistive table and the maneuvering clearances. The Assistive Table shall comply with IAPMO Z1390 listed in Section 106.2.14.

**613.2 Installation location.** Where provided, adult changing stations shall be installed in accordance with the locations specified in Section 613.2.1, 613.2.2 or 613.2.3.

**613.2.1. Single-user or family or assisted-use toilet or bathing room.** Where adult changing stations are provided in a toilet room with only one water closet and one lavatory, or in a family or assisted-use toilet or bathing room, the room shall provide all of the following components:

1. A dispenser for soap complying with Section 308.
2. A hand towel dispenser or hand dryer complying with Table 603.6.
3. A coat hook located in close proximity to the changing surface.
4. A waste receptacle.
5. Signage indicating "Adult Changing Station" provided at the entrance to the room and complying with the visual character requirements in Section 703.2.
6. Assistive table markings and operating instructions shall comply with IAPMO Z1390 listed in Section 106.2.14. ~~Signage indicating the weight capacity and instructions for operation of the changing station within the room.~~

**613.2.2 Multiuser toilet or bathing room.** Where adult changing stations are provided in a multiuser toilet or bathing room, the adult changing station shall be located in a compartment that includes all of the following components:

1. Privacy provided by walls, curtains or partitions enclosing the compartment.
2. A turning space complying with Section 304.
3. A lavatory complying with Section 606.
4. A dispenser for soap complying with Section 308.
5. A hand towel dispenser or hand dryer complying with Table 603.6.
6. A coat hook in close proximity to the changing surface.
7. A waste receptacle.
8. Signage indicating “Adult Changing Station” provided at the entrance to the room and complying with the visual character requirements in Section 703.2.

9. Assistive table markings and operating instructions shall comply with IAPMO Z1390 listed in Section 106.2.14. Signage indicating the weight capacity and instructions for operation of the changing station within the compartment.

**613.2.3 Room or space other than a toilet room or bathing room.** Where adult changing stations are provided in a room or space other than a toilet or bathing room and including, but not limited to, nurses’ work areas, therapist work areas, or special education classrooms, the adult changing station shall be located in a compartment or room that includes all of the following components:

1. Privacy provided by walls, curtains or partitions.
2. A turning space complying with Section 304.
3. A lavatory complying with Section 606 or an alcohol-based hand sanitizer dispenser.
4. Where a lavatory is provided in the compartment or room, provide a dispenser for soap.
5. Where a lavatory is provided in the compartment or room, provide a hand towel dispenser or hand dryer complying with Table 603.6.
6. A waste receptacle.
7. Assistive table markings and operating instructions shall comply with IAPMO Z1390 listed in Section 106.2.14. Signage indicating the weight capacity and instructions for operation of the changing station within the room.

**613.3 Room configurations.** The assistive table ~~An adult changing station and its supporting structure~~ shall not obstruct required clear floor spaces and maneuvering clearances at fixtures, maneuvering clearances ~~at~~ of the adult changing stations, maneuvering clearances at doors, or the turning spaces.

~~**613.4 Changing surface.** A changing surface shall be provided and shall comply with Section 613.4.~~

**613.4 613.4.1 Size.** The ~~changing surface assistive table~~ shall be 70 inches (1778 mm) minimum in length and 30 inches (762 mm) minimum in width.

**613.5 Static Load.** The assistive table shall sustain a minimum static load equal to or greater than 400 pounds (182 kg).

~~**613.4.2 Capacity.** Materials, fastening mounting devices and support structure shall support a user weight of not less than 400 pounds (182 kg).~~

**613.6 613.4.3 Height adjustability.** The changing surface height shall be adjustable ~~at variable heights from 17 inches (432mm) minimum to 38 inches (965mm) maximum above the floor as measured to the top of the changing surface~~ in accordance with IAPMO Z1390 listed in Section 106.2.14.

**Exception:** Where the adult changing station is not required by the administrative authority, a fixed height ~~changing surface assistive table~~ shall be permitted and shall comply with IAPMO Z1390 and shall be mounted with the top of the changing surface 19 inches (483mm) minimum and 23 inches (584 mm) maximum above the floor.



**613.7 613.4.4 Maneuvering clearances.** Maneuvering clearances at the changing surface of the assistive table shall comply ~~adult changing surface complying~~ with Sections 613.7.1 ~~613.4.4.1~~ and 613.7.2 ~~613.4.4.2 shall be provided~~. Such maneuvering clearances shall be measured ~~where~~ when the ~~adult~~ changing surface is in the operational position.

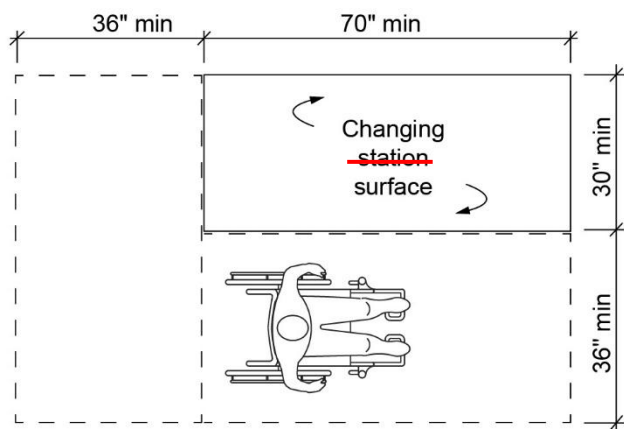
**~~613.4.4.1~~ 613.7.1 Side maneuvering clearance.** A side maneuvering clearance 36 inches (914 mm) minimum in depth shall be provided ~~at the adult changing surface~~ along the open long side of the changing surface.

**Exception:** In the raised position, the side rail shall be permitted to overlap the side maneuvering clearance.

**~~613.4.4.2~~ 613.7.2 End maneuvering clearance.** An end maneuvering clearance 36 inches (914 mm) minimum in width shall be provided along the depth of one end of the changing surface. The depth of the end maneuvering clearance shall extend the depth of the changing surface and the side maneuvering clearance.

**Exceptions:**

1. An end maneuvering clearance 24 inches (610 mm) minimum in width shall be permitted where a clear floor space complying with Section 305.3 is provided within the room beyond the maneuvering clearances for the changing surface.
2. Where installed in locations specified in Section 613.2.3, end maneuvering clearances complying with Section ~~613.4.4.2~~ 613.7.2 are not required.



**105.2.12(New), 613**

(Change the note on the table to “changing ~~station~~ surface of the assistive table)

**Figure 613.7**

**Size and maneuvering clearances at the ~~adult~~ changing surface of the assistive table.**

**613.8 Safety restraint systems.** Side rails and lap belts or harnesses shall be provided in accordance with IAPMO Z1390 listed in Section 106.2.14.

**~~613.4.5 Side rail.~~** ~~Where side rails are provided at the changing surface they shall comply with Sections 613.4.5.1 and 613.4.5.2.~~

**~~613.4.5.1 Size and location.~~** ~~Side rails shall be a minimum of 2/3 of the length of the changing surface and shall be centered +/- 3 inch (75 mm) along the long open sides of the changing surface.~~



~~613.4.5.2 Rail positioning. Side rails shall be capable of being raised and lowered. The side rail shall be fixed in place when in the raised position. The top of the side rail shall extend 5 inches (127mm) minimum above the top of the changing surface.~~

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**REASON:** The purpose of this modification is coordination with the IAPMO Z1390 standard.

The following is a list of the sections and the associated sections in the IAPMO standard.

- 613.2.1, 612.2.2, 613.2.3 - IAPMO Z1390 Section 6 Markings.
- 613.4 - Matches IAPMO Z1390 for people 75+ to 1,000lbs.
- IAPMO Z1390 has smaller dimensions for tables intended solely for people ranging from 50 to 75 lbs. The minimum width is 26.5 in, and the minimum length is 53.5 in. Reducing the requirements for the product that matches the user will make it less expensive for manufacturers to produce, hopefully resulting in lower prices for schools, etc., to ensure these products are affordable.
- Based on anthropometric data, these users have different requirements, reflected in the table size and body entrapment dimensions (e.g., finger, foot, head, genitalia, and arms). Having children and adolescents on a table intended for adults could result in entrapment.
- 613.5 - Z1390 uses static load for testing purposes. Aligned terminology to achieve the 400 pound minimum. See Section 613.5. Z1390 Design Sections: 4.2, 4.3, 4.21 and Performance Sections: 5.15.
- 614.8 - IAPMO Z1390 Side Rail Design Sections: Section 4.19 Safety Restraint Systems, 4.19.2 Side Rails, 4.20 Entrapment Safety (4.20.2 to 4.20.5) and Performance Sections: 5.13.2 Side Rails Performance, 5.14 Entrapment Tests (5.14.1 to 5.14.4.1)

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**Committee Action for Public Comment 4:**

**REPORT OF HEARING:** AFM – 19-0-2

**Modification (if any):**

**Further modify as follows:**

**613.1 General.** Adult changing stations shall comply with Sections 613.2 through 613.4. Adult changing stations include ~~the~~ an assistive table and the maneuvering clearances. The Assistive Table shall comply with IAPMO Z1390.

**613.5 Static Load.** The assistive table shall sustain a 400 pounds (182 kg) minimum static load ~~equal to or greater than 400 pounds (182 kg).~~

**Committee Reason:** The modifications to Section 613.1 and 613.4 were to match standard formatting; and ruled by the chair as editorial. Public comment 4 was approved as primarily for coordination with IAPMO Z1390. The standard addresses a much larger range of tables than what is desired for the adult changing table in A117.1, so the text remaining appropriately limits the application of IAPMP Z1390.

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## 06-90 – 2021 Public Comment 5

### 613

**Proponent:** Kimberly Paarlberg, ICC

**Further revise as follows:**

**603.2.2 Door swing.** Doors shall not swing into the clear floor space or clearance for any fixture.

**Exceptions:**

1. Doors to a toilet or bathing room for a single occupant, accessed only through a private office and not for common use or public use shall be permitted to swing into the clear floor space, provided the swing of the door can be reversed to comply with Section 603.2.2.
2. Where the room is intended for individual use, family or assisted-use companion, and a clear floor space is provided within the room outside the arc of a door swing, such a door shall not be required to comply with 603.2.2.

## **SECTION 613 ADULT CHANGING STATIONS**

**613.2.1. Single-user or family or assisted-use companion toilet or bathing room.** Where adult changing stations are provided in a toilet room with only one water closet and one lavatory, or in a family or assisted-use companion toilet or bathing room, the room shall provide all of the following components:

1. A dispenser for soap complying with Section 308.
2. A hand towel dispenser or hand dryer complying with Table 603.6.
3. A coat hook located in close proximity to the changing surface.
4. A waste receptacle.
5. Signage indicating “Adult Changing Station” provided at the entrance to the room and complying with the visual character requirements in Section 703.2.
6. Signage indicating the weight capacity and instructions for operation of the changing station within the room.

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**REASON:** ICC proposals E126-24 has added four definitions to clarify the application off assisted toileting and bathing and the family/assisted use toilet and bathing rooms. The result is that the name has been changed to “family or companion toilet or bathing room”. This standard should be coordinated with that change.

E126-24 IBC - <https://www.cdpaccess.com/proposal/9853/29224/code/>  
E126-24 IPC - <https://www.cdpaccess.com/proposal/10705/30908/code/>

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**Committee Action for Public Comment 5:**

**REPORT OF HEARING: AS 19-0-1**

**Modification (if any):**

**Committee Reason:** This coordinates the terminology for family or companion toilet or bathing room that will be revised in the 2027 IBC.

**06-90 Paarlberg.doc**

## 06-90 – 2021 1<sup>st</sup> draft Committee Action

Committee Action for First Ballot: AFM PC4 and PC5

PC4 AFM – 19-0-2

PC5 AS 19-0-1

### REPORT OF HEARING:

Modification (if any):

PC4 –

Further modify as follows:

**613.1 General.** Adult changing stations shall comply with Sections 613.2 through 613.4. Adult changing stations include ~~the~~ an assistive table and the maneuvering clearances. The Assistive Table shall comply with IAPMO Z1390.

**613.5 Static Load.** The assistive table shall sustain a 400 pounds (182 kg) minimum static load ~~equal to or greater than 400 pounds (182 kg).~~

### Committee Reason:

**PC4** The modifications to Section 613.1 and 613.4 were to match standard formatting; and ruled by the chair as editorial. Public comment 4 was approved as primarily for coordination with IAPMO Z1390. The standard addresses a much larger range of tables than what is desired for the adult changing table in A117.1, so the text remaining appropriately limits the application of IAPMP Z1390.

**PC5** This coordinates the terminology for family or companion toilet or bathing room that will be revised in the 2027 IBC.

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## 06-90 – 2021 2<sup>nd</sup> draft Ballot Comment 1

### 615.6

**Proponent:** Dan Buuck, NAHB

**Vote:** affirmative with comment, AM

### Further revise as follows:

**615.6 Height adjustability.** The changing surface height shall be adjustable in accordance with IAPMO Z1390.

**Exception:** ~~Where the adult changing station is not required by the administrative authority,~~ Where a fixed height assistive table ~~shall be~~ is permitted ~~and it~~ shall comply with IAPMO Z1390 listed in Section 106.2.14.

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**REASON:** The language in the exception “Where the adult changing station is not required by the administrative authority” doesn’t make sense. If an ACS isn’t required by the AHJ, presumably by IBC chapter 11, then the provisions of the standard wouldn’t apply. A revision is provided to clarify the exception.

Staff Note: This text is in the 2024 IBC.

**1110.4 Adult changing stations.** Where provided, adult changing stations shall be accessible. Where required, adult changing stations shall be accessible and shall comply with Sections 1110.4.1 through 1110.4.4.

**1110.4.1 Where required.** Not fewer than one adult changing station shall be provided in the following locations:

1. In assembly and mercantile occupancies, where family or assisted-use toilet or bathing rooms are required to comply with Section 1110.2.1.
2. In Group B occupancies providing educational *facilities* for students above the 12th grade, where an aggregate of 12 or more male and female water closets are required to serve the classrooms and lecture halls.
3. In Group E occupancies, where a room or space used for assembly purposes requires an aggregate of six or more male and female water closets for that room or space.
4. In highway rest stops and highway service plazas.

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**Committee Action on 2<sup>nd</sup> draft Ballot Comment 1:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Committee Reason:**

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**06-90 – 2021 2<sup>nd</sup> draft Committee Action**

**Committee Action for First Ballot:** AS/AM/D

**REPORT OF HEARING:**

**Modification (if any):**

**Further modify as follows:**

**Committee Reason:**

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**Report for 06-90-2021**

**Committee decision:** AM

**Committee Vote at Meeting:** 26-0-0

**Committee Vote on Ballot:** 39-0-2

**REPORT OF HEARING:**

Modification (if any):

**Further revise as follows:**

**613.4.1 Safety and performance.** Adult changing stations shall comply with the following safety and performance requirements:

1. — Protect the user from falling from the changing surface along the open long sides, by means such as retractable safety rails.
2. — Provide a belt to secure the user on the changing surface.
3. — Protect the user and caregiver from entrapment during operation.
4. — Support a weight of not less than 400 lbs. (182 kg) applied to the changing surface
5. — Provide a method to prevent tipping such as secured to the floor or wall, or other means.
6. — Provide a changing surface that is durable, cleanable, non-absorbent, and resistant to corrosion.
7. — Electrical components complying with NFPA 70.
8. — Operable controls for height adjustment and, where provided, on and off complying with Section 309.4.

**613.4.3 Height adjustability.** The changing surface height shall be adjustable at variable heights from 17 inches (432mm) minimum to 38 inches (965mm) maximum above the floor as measured to the top of the changing surface.

**Exception:** Where the ~~changing surface~~ **adult changing station** is not required by the administrative authority, a fixed height changing surface shall be permitted and shall be mounted with the top of the changing surface 19 inches (483mm) minimum and 23 inches (584 mm) maximum above the floor.

**Committee Reason:** The first modification deleted Section 613.4.1 due to concerns that some of the item were not in enforceable language (e.g. # 3 and 5). Item 1 is addressed in Section 614.4.5. Item 8 needed some editorial cleanup on the language.

The modification to Section 613.4.3 was because the adult changing station is required by the codes, not the surface itself. This is editorial.

## Report for 06-90-2021

The replacement proposal developed by the Adult Changing Station Committee was approved because it brought requirements in for the changing table that would provide appropriate guidance for these facilities. The committee worked to address concerns raised by the A117.1 committee during the original presentation to the committee at the March 10 presentation. Laurel Wright's presentation explained the development and resources used by the task group to develop criteria.

**Committee decision: AFM by PC2 and PC3**

**Committee Vote at Meeting: 24-0-2**  
**PC3 replacement AS 23-0-2**  
**PC2 as modified 24-0-2**

**Committee Vote on Ballot:**

### REPORT OF HEARING – FIRST DRAFT

Modification (if any):

**Further modify as follows:**

**613.3 Room clearances-configurations.** An adult changing station and its supporting structure shall not obstruct required clear floor spaces and maneuvering clearances at accessible elements fixtures, maneuvering clearances at the adult changing stations, maneuvering clearances at doors, or the wheelchair turning spaces.

613.4.2 Capacity. Materials, fastening mounting devices, and support structure shall support a user weight of 400 lbs. (182 kg) minimum.  
(renumber subsequent sections)

**613.4.3 Maneuvering Clearances.** Maneuvering Clearances at the adult changing surface and complying with Sections 616.4.4.1 and 616.4.4.2 shall be provided, adjacent to the changing surface, and Such maneuvering clearances shall be measured when where the adult changing surface are is in the operational position.

**613.4.3.1 Side maneuvering clearance.** A 36-inch (914mm) deep minimum side maneuvering clearance shall be provided along the open long side of the adult changing surface.

**Exception:** In the raised position, the side rail shall be permitted to overlap the side clearance.

**613.4.3.2 End maneuvering clearance.** A 36-inch (914mm) wide minimum end maneuvering clearance shall be provided along the depth of one end of the changing surface. The width of the end maneuvering clearance shall extend the depth of the changing surface and the side maneuvering clearance.

**Exceptions:**

1. A 24-inch (610 mm) wide minimum end maneuvering clearance shall be permitted where a clear floor space complying with Section 305.3 is provided within the room beyond the maneuvering clearances for the changing surface.
2. Where installed in locations specified in Section 616.2.3, end maneuvering clearances complying with Section 616.4.3.2 is not required.

**Figure 616.4**

**Size and maneuvering clearances at the adult Changing surface and clearances**

Committee Reason:

PC2- The modifications are intended to clarify what loads are required for this product. This will be consistent with terminology used by manufacturers where specifying their product. The committee felt it was necessary to include this weight requirement while they work on the development of the IAPMO safety standard for this product.

PC3 - The editorial committee is still working on the building blocks references which would include the PC3 revisions for 616.2.1, 616.2.2 and 616.2.3. These items are removed from this public comment at this time. The building blocks can be addressed for the 2024 ICC A117.1.

What is remaining are the Terminology committee's suggestions for consistent use for spaces around fixtures to call them 'maneuvering clearances' to separate them from 'clear floor space' and to provide consistency throughout the standard.

**Committee decision: AFM PC4 and PC5**

**Committee Vote at Meeting:**  
PC4 AFM – 19-0-2  
PC5 AS 19-0-1

**Committee Vote on Ballot:**

### REPORT OF HEARING – FIRST DRAFT

Modification (if any):

**PC4 - Further modify as follows:**

**613.1 General.** Adult changing stations shall comply with Sections 613.2 through 613.4. Adult changing stations include ~~the~~ an assistive table and the maneuvering clearances. The Assistive Table shall comply with IAPMO Z1390.

**613.5 Static Load.** The assistive table shall sustain a 400 pounds (182 kg) minimum static load ~~equal to or greater than 400 pounds (182 kg).~~

Committee Reason:

**PC4** The modifications to Section 613.1 and 613.4 were to match standard formatting; and ruled by the chair as editorial. Public comment 4 was approved as primarily for coordination with IAPMO Z1390. The standard addresses a much larger range of tables

**Report for 06-90-2021**

than what is desired for the adult changing table in A117.1, so the text remaining appropriately limits the application of IAPMP Z1390.

**PC5** This coordinates the terminology for family or companion toilet or bathing room that will be revised in the 2027 IBC.

**Committee decision:** AS/AM/D**Committee Vote at Meeting:****Committee Vote on Ballot:****FINAL ACTION:**

Modification (if any):

Committee Reason: