ICC A117.1 Comments on 2nd Draft

Proposal list to the 2017 A117.1 for the 2023 edition – 03-30-2025
Proposal list to the 2017 A117.1 for the 2023 edition – Chapter 1 to 5

Proposal list to the 2017 A117.1 for the 2023 edition – 2nd draft comments

Proposal number	Proponent	Committee Actions	Date	Comment number	Proponent	Requested Action	Committee Action	Date
Editorial								
				E-01-23	Terminology	AS	AS 31-0-1	9-28-23
				2-BC1	Hatfield, FGI	AM		
				E11-24	Terminology	AS	AS 18-1-5	8-15-24
				2-BC1	Ross, NMGCD	AM		
Chapter 1								
01-05	Toji	D 26-1-1	2-2-2023				Final Action AM PC1	
				BC1	Toji, HLAA	Negative	NA	5-9-24
				BC2	Dea, ISA	Negative	NA	5-9-24
				BC3	Schrader, SEGD	Negative	NA	5-9-24
				PC1	Communications	AM	AM 25-0-1	5-9-24
				PC2	Toji, HLAA	AM	NA	5-9-24
				2- BC1	Buuck, NAHB	AM		
01-06	Paarlberg	AM 29-1-1	2-24-2022				Final Action D	
				BC1	Buuck, NAHB	Negative	D -25-6-1	9-28-23
				2-BC1	Hall, ASID	AM		
Chapter 3								
03-04	Mazz	D 27-2-2	4-27-2023				Final Action AM BC2	
				BC1	Pace, HUD	Affirmative	NA	9-14-23
				BC2	Mazz, USA	Negative	AM 16-2-0	9-14-23
				2- BC1	Buuck, NAHB	AM		
				2-BC2	Pace/Scott HUD	AM		
				2-BC3	Schorr ATBCB	AM		

Proposal number	Proponent	Committee Actions	Date	Comment number	Proponent	Requested Action	Committee Action	Date
03-09	Boecker	AM– 20-2-4	4-7-2022				Final Action AFM BC5 and PC3 (see E-01)	
				BC1	Anderson, AHLA	Negative	NA	10-26-23
				BC2	Hall, CSA	Negative	NA	10-26-23
				BC3	Paarlberg, ICC	Negative	Withdraw	10-26-23
				BC4	Gaskins, NACS	Negative	NA	10-26-23
				BC5	Schoonover	Negative	AS 16-14-2 See E-01	10-12-23
				PC1	Steinfeld	AM	NA	10-26-23
				PC2	Schexnayder	AM	NA	10-26-23
				PC3	Terminology	AM	AS 16-14-2See E-01	10-12-23
				Reconsideration	Boecker	AM	AS 8-19-2 failed	9-12-24
				2- BC1	Winkler, ASSP	AM		
				2-BC2	Paarlberg, ICC	D		
03-10	Pitts	Rep 1 AS 29-0-2 Rep 2 AS 30-0-0	4-27-2023		Final Action AM by replacement PC that combined 03-10, 11-07 and 11-21			
				BC1	Paarlberg, ICC	Affirmative	NA	11-9-23
				BC2	Paarlberg, ICC	Affirmative	NA	11-9-23
				PC1	Receptacle	AM	NA	11-9-23
				PC2	Receptacle	AM	NA	11-9-23
				PC3	Terminology	AM	NA	11-9-23
				PC replacement	Receptacle	AM	AS 20-1-4	11-9-23
				2-BC1	Toji, HLAA	AM		
Chapter 4								
04-19	Paarlberg	D 23-1-0	5-19-2022				Final Action AM by BC1	
				BC1	Lescher, NATO	Negative	AM 16-7-4	11-9-23
				2- BC1	Mazz, USA	AM		
				2- BC2	Schorr, ATBCB	AM		

Proposal number	Proponent	Committee Actions	Date	Comment number	Proponent	Requested Action	Committee Action	Date
04-24	Brinkman	AS 28-3-4	6-30-2022				Final Action is AS by committee action	
				BC1	Pace, HUD	Affirmative	Withdrawn	11-9-23
				PC1	Terminology	AM	Withdrawn	4-25-24
				2- BC1	Roether	AM		
				2- BC2	Brinkmann NEII	AM		
				2-BC3	Toji, HLAA	AM		
04-25	Brinkman	Part 1 AM 28-1-2 Part 2 D 29-3-5	6-30-2022				Final action is AFM by BC2	
				BC1	Pace, HUD	Affirmative	Withdrawn	11-9-23
				BC2	Brinkman, NEII	Negative	AS 22-0-3	11-9-23
				PC1	Terminology	AM	Withdrawn	4-25-24
				PC2	Dittman	AM	D 23-0-2	11-9-23
				2- BC1	Brinkmann NEII	AM		
04-33	Brinkman	AM 22-0-3	7-14-2022				Final Action AFM BC2	
				BC1	Pace, HUD	Affirmative	Withdrawn	12-7-23
				BC2	Paarlberg, ICC	Negative	AM 24-0-4	12-7-23
				BC3	Schoonover	Affirmative	NA	12-7-23
				PC1	Terminology	AM	Withdrawn	4-25-24
				2- BC1	Schorr ATBCB	AM		
Chapter 5								
05-08	Paarlberg	AS – 16-6-8	6-16-2022				Final AM PC1	
				PC1	Paarlberg, Windley	AM	AM with 2 modifications 19-0-2	12-7-23
				PC2	Mazz	AM	Withdrawn	12-7-23
				2- BC1	Mazz, USA	AM		
				2- BC2	Schorr, ATBCB	AM		
				2-BC3	Toji, HLAA	AM		
05-10	Paarlberg	AM 15-14-4	7-28-2022				Final Action AFM PC1, PC2, PC3	
				BC1	Buuck, NAHB	Affirmative	NA	12-21-23
				BC2	Paarlberg, ICC	Affirmative	NA	12-21-23
				PC1	Mazz	AM	AM 27-4-5	12-21-23
				PC2	Cooper	AM	AM 25-5-4	12-21-23

Proposal number	Proponent	Committee Actions	Date	Comment number	Proponent	Requested Action	Committee Action	Date
				PC3	Cooper	AM	AM 15-14-2	12-21-23
				2- BC1	Buuck, NAHB	AM		
05-13	Toji	D 25-0-1	2-2-2023				Final Action AM by PC2, PC4, PC5, PC6, PC7	
				BC1	Toji, HLAA	Negative	NA	5-9-24
				BC2	Paarlberg, ICC	Affirmative	NA	5-9-24
				PC1	Sims/Sheehan	AM	Withdrawn	5-9-24
				PC2	Communications	AM	AM 22-1-2	5-9-24
				PC3	Noell-Wagner	AM	AS 6-22-1 -failed	5-9-24
				PC4	Mazz	AM	AM 18-8-3	5-9-24
				PC5	Mazz	AM	AM 24-1-3	5-9-24
				PC6	Peskin, Cooper	AM	AM 23-2-2	5-9-24
				PC7	Paarlberg	AM	AM 25-0-2	5-9-24
				2- BC1	Buuck, NAHB	AM		
				2-BC2	Toji, HLAA	AM		
05-18	Boecker	AS 19-6-5	6-16-2022				Final Action D	
				BC1	Paarlberg, ICC	Negative	D 18-8-2	1-4-24
				BC2	Buuck, NAHB	Affirmative	NA	1-4-24
				BC3	Cooper, SMA	Negative	NA	1-4-24
				PC1	Boecker	AM	Part 1 AM 13-14-3 failed Part 2 AM 24-10-1 (see BC1)	1-4-24
				2- BC1	Ross NMGCD	AM		
05-21	Cooper	D 32-0-2	6-30-2022				Final Action AM by PC1	
				BC1	Cooper, SMA	Negative	NA	1-18-24
				PC1	Cooper, SMA	AM	Part 1 AM 16-8-5 Part 2 AM 13-12-3	1-18-24
				PC2	Zuzick	AM	NA	1-18-24
				2-BC1	Paarlberg, ICC	D		
05-24	Mazz	AS 25-1-4	7-28-2022				Final Action AS	
				BC1	Anderson, AHLA	Negative	D 13-17-3 failed	1-4-24
				BC2	Cooper, SMA	Affirmative	AS 3-28-4 failed	1-4-24
				BC3	McNamara, Target	Negative	NA	1-4-24
				2-BC1	Paarlberg, ICC	D		
Chapter 6								
06-05	Mazz	AS 21-9-1	7-28-2022				Final Action AM by BC1	
				BC1	Paarlberg, ICC	Negative	AS 17-10-3	1-18-24

Proposal number	Proponent	Committee Actions	Date	Comment number	Proponent	Requested Action	Committee Action	Date
				PC1	Skulski	D	NA	1-18-24
				2-BC1	Pace, HUD	AM		
				2-BC2	Buuck, NAHB	AM		
				2-BC3	Paarlberg, ICC	D		
06-07	Paarlberg	D 28-1-0	7-28-2022				Final Action D	
				BC1	Thompson, PMI	Negative	NA	1-18-24
				BC2	Paarlberg, ICC	Negative	AS 12-12-6	1-18-24
				2-BC1	Thompson, PMI	AM		
06-11	Boecker	AS 19-9-5	8-11-2022		Final Action AM BC1 modified			
				BC1	Paarlberg, ICC	Negative	AM	2-25-24
				BC2	Buuck, NAHB	Affirmative	NA	2-25-24
				BC3	Thompson, PMI	Negative	NA	2-25-24
				2-BC1	Buuck, NAHB	AM		
06-13	Pauls	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	8-11-2022; 12-15-2022; 1-5-2023; 1-19-2023				Section 609.9 AM by PC2 Final Action is D for everything other than Section 609.9.	

Proposal number	Proponent	Committee Actions	Date	Comment number	Proponent	Requested Action	Committee Action	Date
		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						
				BC1	Toji, HLAA	Part 1 Negative	NA	2-1-24
				BC2	Pauls	Part 1 Negative	NA	2-1-24
				BC3	Toji, HLAA	Part 2 Negative	NA	2-1-24
				BC4	Pauls	Part 2 Negative	NA	2-1-24
				BC5	Toji, HLAA	Part 3 Negative	NA	2-1-24
				BC6	Pauls	Part 3 Negative	NA	2-1-24
				BC7	Pauls	Part 4 Negative	NA	2-1-24
				BC8	Dain, AIA	Part 4 Affirmative	NA	2-1-24
				BC9	Anderson, AHLA	Part 4 Negative	NA	2-1-24
				BC10	Paarlberg, ICC	Part 4 Negative	NA	2-1-24
				BC11	Gaskins, NACS	Part 4 Negative	NA	2-1-24
				BC12	Buuck, NAHB	Part 4 Affirmative	NA	2-1-24
				BC13	Pauls	Part 5 Affirmative	NA	2-1-24

Proposal number	Proponent	Committee Actions	Date	Comment number	Proponent	Requested Action	Committee Action	Date
				BC14	Dain, AIA	Part 5 Negative	NA	2-1-24
				BC15	Pace, HUD	Part 5 Negative	NA	2-1-24
				BC16	Paarlberg, ICC	Part 5 Negative	AS 24-1	2-29-24
				BC17	Buuck, NAHB	Part 5 Affirmative	NA	2-1-24
				BC18	Thompson, PMI	Part 5 Negative	NA	2-1-24
				BC19	Anderson, AHLA	Part 5 Negative	NA	2-1-24
				BC20	Gasking, NACS	Part 5 Negative	NA	2-1-24
				BC21	Toji, HLAA	Part 6 Negative	NA	2-1-24
				BC22	Pauls	Part 6 Negative	NA	2-1-24
				PC1	Pauls	AM	AS Part 1 6-21-3 fail AS Part 2 5-16-1 fail	2-1-24
				PC2	Buuck, NAHB	AM	AS Part 2 - 22-3	2-1-24
				2-BC1	Pauls	Part 4 AM		
06-15	Mazz	AM 29-3-1	9-8-2022				Final Action AFM by BC1 and AS by PC1	
				BC1	Dain, AIA	Affirmative	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	2-15-24
				PC1	Terminology	AM	AS 29-0	2-29-24
				2-BC1	Mazz, USA	AM		
06-18	Steinfeld	AM 24-2-3	9-8-2022				Final Action D Reconsideration BC2	

Proposal number	Proponent	Committee Actions	Date	Comment number	Proponent	Requested Action	Committee Action	Date
							Final Action AM Reconsideration 1 & 2	
				BC1	Pace, HUD	D	NA	2-15-24
				BC2	Paarlberg, ICC	Affirmative	comment out of order D 22-3 Reconsideration	2-15-24 4-11-24
				Reconsideration 1	Steinfeld	AM 27-2-2	AS 27-2-2	6-20-24
				Reconsideration 2	Steinfeld	AM	AM 22-3-2;16-1-4	6-20-24
				2-BC1	Mazz, USA	AM		
06-20	Mazz	AS 24-0-1	9-8-2022				Final Action AS	
				BC1	Paarlberg, ICC	Affirmative	D 5-20 - failed	2-15-24
				2-BC1	Reed, NGCD	AM		
06-25	Paarlberg	AM 18-3-2	9-22-2022				Final Action AM BC2	
				BC1	Dain, AIA	Negative	NA	2-15-24
				BC2	Paarlberg, ICC	Affirmative	AS 22-1	2-15-24
				2-BC1	Schorr ATBCB	AM		
06-28	Boecker	D 25-2-2	12-1-2022				Final Action AS	
				BC1	Dain, AIA	Negative	NA	2-15-24
				PC1	Toji	AS	AS 13-5	2-15-24
				2-BC1	Gilliland WABO	AM		
				2-BC2	Toji, HLAA	D		
06-29	Boecker	AS 17-6-4	9-22-2022				Final Action AM BC1	
				BC1	Paarlberg, ICC	Affirmative	AS 27-0	2-29-24
				2-BC1	Schorr ATBCB	AM		
06-30	Boecker	D 25-2-2	12-1-2022				Final Action AM by PC1	
				BC1	Pace, HUD	Affirmative	NA	3-14-24
				PC1	Toji	AS	AM 18-4-2	3-14-24
				2-BC1	Gilliland WABO	AM		
				2-BC2	Buuck NAHB	D		
				2-BC3	Toji, HLAA	D		
06-32	Williams	AS 14-10-2	9-22-2022				Final Action AM BC2 and PC1	
				BC1	Dain, AIA	Affirmative		2-29-24
				BC2	Paarlberg, ICC	Negative	AM by BC2 replacement 19-4	2-29-24

Proposal number	Proponent	Committee Actions	Date	Comment number	Proponent	Requested Action	Committee Action	Date
				PC1	Terminology	AM	Editorial	9-12-24
				2-BC1	Mazz, USA	AM		
06-33	Paarlberg	D 19-2-3	9-22-2022				Final Action AS	3-14-24
				BC1	Paarlberg	Negative	AS 16-8	2-29-24
				PC1	Toji	AS	Out of order	3-14-24
				2-BC1	Hall ASID	AM		
				2-BC2	Roether	AM		
				2-BC3	Schorr ATBCB	AM		
				2-BC4	Mazz USA	AM		
06-40	Hirsch	AM 18-7-5	12-15-22				Final Action – AFM by BC3 and PC1	
				BC1	Anderson, AIA	Negative	NA	3-28-24
				BC2	Dain, AIA	Affirmative	NA	3-28-24
				BC3	Paarlberg, AIA	Negative	AM 26-0-0	3-28-24
				BC4	Buuck, NAHB	Negative	NA	3-28-24
				PC1	Terminology	AM	AM 28-0-2	3-28-24
				PC2	Buuck	AM	AS 11-14-2	3-28-24
				PC3	Stratton	AM	NA	3-28-24
				2-BC1	Buuck, NAHB	AM		
				2-BC2	Schorr, ATBCB	AM		
				2-BC3	Paarlberg, ICC	AM		
06-53	Paarlberg	AM 21-2-2	10-20-22				Final Action AFM by BC1 and PC1	
				BC1	Pace, HUD	Affirmative	AS 16-5-3	3-14-24
				PC1	Mazz, USA	AM	AM 22-7-1	3-14-24
				2-BC1	Mazz USA	AM		
06-58	Anderson – Accessible bathing	AM 26-4-2	11-03-22				Final Action AFM by BC2 and BC3 replacement	
				BC1	Dain, AIA	Affirmative	NA	5-23-24
				BC2	Pace, HUD	Affirmative	AM 20-0-3	3-14-24
				BC3 Replacement	Paarlberg, ICC	Negative	AM 19-0-3	5-23-24
				2-BC1	Mazz USA	AM		
06-82	Steinfeld	AS 22-2-1: D 17-4-3	11-17-2022				Final Action AFM PC1 and PC2	

Proposal number	Proponent	Committee Actions	Date	Comment number	Proponent	Requested Action	Committee Action	Date
				BC1	Pace, HUD	Affirmative	Tabled – NA	4-11-24 6-20-24
				PC1	Steinfeld		AS 21-0-3	6-20-24
				PC2	Steinfeld		AM 21-0-3	6-20-24
				2-BC1	Mazz USA	AM		
06-84	Carpenter-Assisted toileting and bathing	AS-31-1-3	3-24-2022				Final Action AS PC1 and AM PC2	
				BC1	Schoonover	Affirmative	NA	03-28-24
				PC1	Carpenter, Paarlberg	AM	AS 24-2-6	03-28-24
				PC2	Terminology	AM	AM 30-1-0	03-28-24
				2-BC1	Mazz USA	AM		
				2-BC2	Buuck, NAHB	AM		
06-90	Wright-Adult changing	AM-26-0-0	5-19-2022				Final Action AFM PC2 and PC3 2017 Supplement 25-1-2 Final Action AM PC4 and PC5	10-12-23 5-23-24
				PC1	Skulski	AM	NA	10-12-23
				PC2	Wright	AM	AFM 24-0-2	10-12-23
				PC3	Terminology	AM	AFM – 23-0-2	10-12-23
				PC4	Adult changing work group	AM	AFM-19-0-2	5-23-24
				PC5	Paarlberg	AM	AS 5-23-24	5-23-24
				2-BC1	Buuck, NAHB	AM		
Chapter 7								
07-02	Toji	AM 21-2-6	1-19-2023				Final Action is D	
				BC1	Dain, AIA	Negative	D 15-1-3	6-6-24
				BC2	Paarlberg, AIA	Affirmative	AS 7-8-2 failed	6-6-24
				2-BC1	Bentzen, AERBVI	AM		
07-06	Toji	D 23-0-2	2-2-2023				Final Action is D	
				BC1	Toji, AHLAA	Negative	AS 2-16-2 failed	6-6-24
				2-BC1	Bentzen, AERBVI	AM		
07-08	Toji	D 26-0-2	2-2-2023				Final action AM by PC3	
				BC1	Toji, AHLAA	Negative	NA	4-25-24

Proposal number	Proponent	Committee Actions	Date	Comment number	Proponent	Requested Action	Committee Action	Date
				PC1	McCampbell, Peskin	AM	NA	4-25-24
				PC2	Toji, AHLAA	AM	NA	4-25-24
				PC3	Communication task group	AM	AS – 24-4-4	4-25-24
				2-BC1	Bentzen, AERBVI Wangner	AM		
				2-BC2	Schrader, SEGD	AM		
				2-BC3	Hall ASID	AM		
07-19	Toji	D 25-0-1	2-2-2023				Final Action AM by BC2	
				BC1	Sheehan, ACB	Affirmative	NA	6-6-24
				BC2	Bentzen, AERBV	Affirmative	AM 17-7-2	6-6-24
				BC3	Toji, HLAA	Negative	NA	6-6-24
				BC4	Dea, ISA	Negative	NA	6-6-24
				BC5	Schrader, SEGD	Negative	NA	6-6-24
				PC1	Communications	AM	AS 5-14-0 failed	6-6-24
				PC2	Lozano	AM	AM 17-7-2	6-6-24
				Reconsideration	Paarlberg	AM	AS 6-16-1 failed	9-12-24
				2-BC1	Paarlberg	AM		
Chapter 8								
08-06	Mazz	AM 17-5-3	3-16-2023				Final Action AFMPC1	
				BC1	Paarlberg, ICC	Affirmative	AS 8-6-3	5-23-24
				BC2	Buuck, NAHB	Affirmative	NA	5-23-24
				PC1	Buuck, NAHB	AM	NA	5-23-24
				2-BC1	Buuck, NAHB	AM		
Chapter 9								
09-03	Paarlberg	AM 29-1-2	3-2-2023				Final Action AFM BC1 and PC1	
				BC1	Williams, Gillilland, WABO	Affirmative	AS 21-1-1	7-18-24
				PC1	Terminology	AM	Editorial	9-12-24
				PC2	Ditman	AM	NA	7-18-24
				2-BC1	Mazz USA	AM		
09-05	Paarlberg	AS–18-12-1	4-21-2022				Final Action AM PC3 and PC3 reconsideration	
				BC1	Pace, HUD	Affirmative	NA	10-26-23
				PC1	Terminology	AM	Withdrawn	10-26-23
				PC2	Stratton	AM	NA	10-26-23

Proposal number	Proponent	Committee Actions	Date	Comment number	Proponent	Requested Action	Committee Action	Date
							AS 17-1-2	7-18-24
				PC3	Gilliland, Williams	AM	AM 23-5-3	10-26-23
				PC3 reconsideration	Mazz	AM	AFM Part 1 AS 18-1-4; Part 2 AS 2-21-0	8-1-24
				2-BC1	Buuck, NAHB	AM		
Chapter 10								
10-03	Paarlberg	AS 23-6-1	3-2-2023				Final Action AM BC1	
				BC1	Paarlberg, ICC	AM	AS 21-0-1	7-18-24
				2-BC1	Mazz, USA	AM		
Chapter 11								
11-14	Mazz	AS – 23-2-3	4-21-2022				Final Action AM BC1	
				BC1	Paarlberg, ICC	Negative	AS 21-0-0	7-18-24
				2-BC1	Schorr ATBCB	AM		
				2-BC2	Paarlberg, ICC	AM		

EDITORIAL PROPOSALS FROM THE TERMINOLOGY COMMITTEE

Staff Note: The editorial proposals show the approved legislative text. Change numbers are indicated over the revised sections. The red text with ~~strike out~~/underline are proposed revisions. Red text may also indicate existing text that is marked to illustrate consistency throughout the standard. If an editorial proposal affected text in new language, this is also indicated as public comments at that proposal to allow for a complete record for each proposal. If the committee agrees with these editorial items, those public comments will also be approved.

E-01 – 2023 overview

Comment	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
E-01-23	Terminology	AS	AS 31-0-1	9-28-23	between

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Hatfield, PHTA	AM			

E-01 – 2023 Public Comment - Editorial

307.4, 404.2.2, 602.2.5, 602.3.4, 608.2.2.3

Proponent: Marsha Mazz, representing Terminology work group

Further revise as follows:

SECTION 307
PROTRUDING OBJECTS

03-09-2021 AM

307.4 Vertical clearance. Vertical clearance shall be 80 inches (2030 mm) high minimum. Rails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm) high. The leading edge of such rails or barrier shall be located ~~between~~ 10 inches (255 mm) minimum and 27 inches (685 mm) maximum above the floor.

Exception: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

404.2.2 Clear width. Doorways shall have a clear opening width of 32 inches (815 mm) minimum. Clear opening width of doorways with swinging doors shall be measured between the face of door and stop, with the door open 90 degrees. Openings more than 24 inches (610 mm) in depth at doors and doorways without doors shall provide a clear opening width of 36 inches (915 mm) minimum. There shall be no projections into the clear opening width lower than 34 inches (865 mm) above the floor. Projections ~~into the clear opening width between~~ 34 inches (865 mm) minimum and 80 inches (2030 mm) maximum into the clear opening width above the floor shall not exceed 4 inches (100 mm).

Exceptions:

1. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.
2. In alterations, a projection of 5/8 inch (16 mm) maximum into the required clear opening width shall be permitted for the latch side stop.

602.2.5 Water flow. The spout shall provide a flow of water 4 inches (100 mm) minimum in height. The angle of the water stream from spouts within 3 inches (75 mm) of the front of the drinking fountain shall be 30 degrees maximum, and ~~from spouts between~~ 3 inches (75 mm) minimum and 5 inches (125 mm) maximum ~~from~~ spouts to the front of the drinking fountain shall be 15 degrees maximum, measured horizontally relative to the front face of the drinking fountain.

602.3.4 Water flow. The spout shall provide a flow of water 4 inches (100 mm) minimum in height. The angle of the water stream from spouts within 3 inches (75 mm) of the front of the drinking fountain shall be 30 degrees maximum, and ~~from spouts between~~ 3 inches (75 mm) minimum and 5 inches (125 mm) maximum ~~from~~ spouts to the front of the drinking fountain shall be 15 degrees maximum, measured horizontally relative to the front face of the drinking fountain.

06-61-21 AM

608.2.2.3 Seat. An seat complying with Section 610 shall be provided that can be secured at varying distances from the control wall. At least one of the positions will locate the back of the seat ~~between~~ 35 inches (889 mm) minimum and 37 inches (~~889 and~~ 940 mm) maximum from the control wall.

Exception: A seat is not required to be installed in a shower 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 a shower seat.

REASON: This is part of the proposals from the Terminology Work Group. It is assumed that this will be referred to the Editorial committee if the A117.1 committee agrees with the concept. See comments to 03-09 and 06-61 for parts related to new text.

Between is not clear as to if the end points are included or not.

E-01-23 1st draft Committee Action

Committee Action for First Ballot:

REPORT OF HEARING: As Submitted 31-0-1

Modification (if any):

Committee Reason: The modification would be consistent with where ranges are indicated in the standard. This also clarifies that the end points are included in the range.

E-01–23 2nd draft Ballot Comment 1

404.2.2

Proponent: Jennifer Hatfield, PHTA
Vote: negative with comment; AM

Further revise as follows:

404.2.2 Clear opening width. Doorways shall have a clear opening width of 32 inches (815 mm) minimum. Clear opening width of doorways with swinging doors shall be measured between the face of door and stop, with the door open 90 degrees. Openings more than 24 inches (610 mm) in depth at doors and doorways without doors shall provide a clear opening width of 36 inches (915 mm) minimum. There shall be no projections into the clear opening width lower than 34 inches (865 mm) above the floor. Projections into the clear opening width between 34 inches (865 mm) ~~minimum~~ and 80 inches (2030 mm) ~~maximum into the clear opening width~~ above the floor shall not exceed 4 inches (100 mm).

Exceptions:

1. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.
2. In alterations, a projection of 5/8 inch (15.9 mm) maximum into the required clear opening width shall be permitted for the latch side stop.

REASON: Typically, a clear width (windows and doors) in the code has a minimum width and height – this code (ICC A117.1) lacks a minimum height for the door product. Therefore, you are guessing at what height you can go because the main limit is based upon whether you have a door closer or door stop in this section under
Exceptions – 1.
The code user would go to Section 307.4, Vertical Clearance, to figure out what they may want for a minimum door height. *We recognize this section is now called Headroom Clearance.*
Presuming Figure 307.4 is remaining the same but for renaming it headroom clearance, that

illustration and the exception allows doors closers/stops to be 78” above the floor. The current proposed modification may get interpreted by some inspectors that doors must also be 80” in height to make rooms for the door closers/stops when attached to them, but A117.1 does not specifically say a door must be a minimum height of 80 inches. The proposed changes in comment E-01-2023-AM simply makes it more difficult to read and understand what is being required. We believe the current A117.1 language is clearer and recommend reverting back to it.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

E-01-2023 2nd draft Committee Action

Committee Action for First Ballot: AS/AM/D

REPORT OF HEARING:

Modification (if any):
Further modify as follows:

Committee Reason:

E-01 Terminology.doc

Report for *E-01-2023*		
Committee decision: AS	***Committee Vote at Meeting: 31-0-1***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any):		
Committee Reason: The modification would be consistent with where ranges are indicated in the standard. This also clarifies that the end points are included in the range.		
Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

E-11 – 2023 overview

Comment	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
E-11-23	Terminology	AS	AS 18-1-5	8-15-24	Building blocks

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Ross, NMGCD	AM			

E-11 – 2024 Public Comment - Editorial

Section Number

Proponent: Marsha Mazz, representing Terminology work group

Further revise as follows:

~~**105.5 Floor or floor surface.** The terms floor or floor surface refer to the finish floor surface or ground surface, as applicable.~~

107.5 Defined terms.

Building blocks: The core components of an accessible and usable building or facility.

Clear floor space: The *building block* that is the minimum space to accommodate one person using a wheelchair or other mobility device.

Door maneuvering clearance: The minimum space for a person to access and use a door, doorway or gate.

Floor surface. The *building block* that is the minimum criteria for finish floor or ground surface.

Knee and toe clearance: The *building block* that is the volume of space required by knee clearance and toe clearance combined.

> **Knee clearance:** The *building block* that is the volume of space required for a person seated in a wheelchair to position or maneuver their knees beneath an element.
>
> **Toe clearance:** The *building block* that is the volume of space required for a person seated in a wheelchair to position or maneuver their toes beneath an element.

Maneuvering clearance: The minimum space for a person using a wheelchair or other mobility device to access an accessible element (see also 'Door maneuvering clearance').

03-16-2021 AM

Operable part: The *building block* that is a ~~A~~ component of an element used to insert or withdraw objects, or to activate, deactivate, control or adjust the element ~~(see Section 309).~~

Protruding object: The *building block* that describes the extent of leading edges of objects on circulation path.

Reach range: The *building block* that describes the extent of unobstructed and obstructed forward and side reaches to an element.

Turning space: The *building block* that is a space for a person using a wheelchair or other mobility device to turn around.

CHAPTER 3

BUILDING BLOCKS

SECTION 301
GENERAL

301.1 Scope. The provisions of Chapter 3 shall apply where required by the scoping provisions adopted by the administrative authority or by Chapters 4 through 11.

301.2 Building blocks. The *building blocks*, where required by this standard, shall comply with the following:

1. *Floor surfaces* shall comply with Section 302.
2. Changes in level in *floor surfaces* shall comply with Section 303.
3. *Turning spaces* shall comply with Section 304.
4. *Clear floor spaces* shall comply with Section 305.
5. *Knee and toe clearance* shall comply with Section 306
6. *Protruding objects* on circulation paths shall comply with Section 307.
7. *Reach ranges* shall comply with Section 308.
8. *Operable parts* shall comply with Section 309.

301.2 Overlap. Unless otherwise specified, *clear floor space*s, *maneuvering clearances* at fixtures, *door maneuvering clearance*s ~~at doors~~, and *turning space*s shall be permitted to overlap.

SECTION 302
FLOOR SURFACES

302.1 General. *Floor surfaces* shall be stable, firm, and slip resistant, and shall comply with Section 302. ~~Changes in level in *floor surfaces* shall comply with Section 303.~~

SECTION 303
CHANGES IN LEVEL

303.1 General. Changes in level in *floor surfaces* shall comply with Section 303.

SECTION 304
TURNING SPACE

304.1 General. A *turning space* shall comply with Section 304.

SECTION 305
CLEAR FLOOR SPACE

305.1 General. A *clear floor space* shall comply with Section 305.

SECTION 306
KNEE AND TOE CLEARANCE

306.1 General. Where space beneath an element is included as part of the *clear floor space* at an element, *maneuvering clearance* at an element, or a *turning space*, the *knee and toe clearance* at that space shall comply with Section 306. Additional space shall not be prohibited beneath an element, but shall not be considered as part of the *clear floor space* or *turning space*.

SECTION 307
PROTRUDING OBJECTS

307.1 General. Protruding objects on circulation paths shall comply with Section 307.

SECTION 308
REACH RANGES

308.1 General. *Reach range*s shall comply with Section 308.

SECTION 309
OPERABLE PARTS

03-10-2021 AM/AFM Combined PC

309.1 General. *Operable part*s shall comply with Section 309.

Exceptions: The *operable parts* of the following items are not required to comply with Section 309:

1. Receptacle outlets serving a dedicated use.
2. Floor receptacle outlets.
3. HVAC diffusers.
4. Controls mounted on ceiling fans.
5. Where redundant controls other than light switches are provided for a single element, one control in each space shall not be required to comply with this section.

6. Reset buttons and shut-offs serving appliances, piping and plumbing fixtures.
7. Electrical panelboards shall not be required to comply with Section 309.4.
8. Emergency aid devices, such as fire department hose connections, valve controls, gauges, police call boxes and annunciator panels shall not be required to comply with this section provided that they are used only for emergencies by emergency personnel acting in their official capacity.
9. Receptacle outlets serving counters in kitchens shall not be required to comply with Section 309 where they comply with Section 804.6.

SECTION 401
GENERAL

401.1 Scope. Accessible routes required by the scoping provisions adopted by the administrative authority shall comply with the applicable provisions of Chapter 4. Where *building blocks* are required in this chapter, they shall comply with the applicable provisions of Chapter 3.

SECTION 501
GENERAL

501.1 Scope. General site and building elements required to be accessible by the scoping provisions adopted by the administrative authority shall comply with the applicable provisions of Chapter 5. Where *building blocks* are required in this chapter, they shall comply with the applicable provisions of Chapter 3.

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. Where *building blocks* are required in this chapter, they shall comply with the applicable provisions of Chapter 3.

SECTION 701
GENERAL

701.1 Scope. Communications elements and features required to be accessible by the scoping provisions adopted by the administrative authority shall comply with the applicable provisions of Chapter 7. Where *building blocks* are required in this chapter, they shall comply with the applicable provisions of Chapter 3.

SECTION 801
GENERAL

801.1 Scope. Special rooms and spaces required to be accessible by the scoping provisions adopted by the administrative authority shall comply with the applicable provisions of Chapter 8. 801.1 Special rooms and spaces required to be accessible by the scoping provisions adopted by the administrative authority shall comply with the applicable provisions of Chapter 8. Where *building blocks* are required in this chapter, they shall comply with the applicable provisions of Chapter 3.

SECTION 901
GENERAL

901.1 Scope. Furnishings and equipment required to be accessible by the scoping provisions adopted by the administrative authority shall comply with the applicable provisions of Chapter 9. Where *building blocks* are required in this chapter, they shall comply with the applicable provisions of Chapter 3.

SECTION 1001
GENERAL

1001.1 Scope. Recreational facilities required to be accessible by the scoping provisions adopted by the administrative authority shall comply with the applicable provisions of Chapter 10. Where *building blocks* are required in this chapter, they shall comply with the applicable provisions of Chapter 3.

SECTION 1101
GENERAL

1101.1 Scoping. Dwelling units and sleeping units required by the scoping provisions adopted by the administrative authority to be Accessible units, Type A units, Type B units, Type C (Visitable) units or units with accessible communication features shall comply with the applicable provisions of Chapter 11. Where *building blocks* are required in this chapter, they shall comply with the applicable provisions of Chapter 3.

REASON:

The current concept of building blocks is to provide basic requirements in a set, so that we would not have to repeat the requirements multiple times in the code. The committee has already approved editorial proposals aimed as using the correct terminology in the standard. The committee approved E7 earlier this cycle to clarify terminology related to maneuvering clearance at fixture. E4 included coordinating elevator requirements with the terminology for reach ranges and operable parts. E9 clarified the difference between a ‘clear floor space’ building block and clearances for access that were different than 30”x52”.

The intent is to clarify the application of the building blocks in the standard. This will happen tin three ways:

1) Requirements for each building block will be referenced in Section 301.2.
2) A pointer back to Section 301.2 will be added into the first section of each chapter.
3) The 'building blocks' in Chapter 3 will be defined and the definitions italicized in the standard.

This is in addition to the current references at the beginning of each building block section in Chapter 3.

Having the definitions italicized will provide an additional hint to users for when a word has a specific meaning in the standard. This will also aid the committee in the development to use the correct term and to be consistent in the document in the future.

The intent of this proposal is to improve understanding without requiring a generic reference every time a building block is used in requirements.

The current text is inconsistent in references back to the building blocks. While the building blocks are used over 650 times, only about 15% has a reference. The table is a quick review of the draft at this point. Most of the references back to the main building blocks were added in the draft. Other references are to clarify that a piece of the building block is not being included, like the reach but not the 5 lbs. force for circuit breakers. The use of operable parts/controls/or specific elements is extremely inconsistent – to this is very difficult to check. Clarification will be part of the next step in the editorial committee's work.

105.5. This change also addresses an current issue with 'floor surface'. The clarification for 'floor surface' is currently under Section 105 Conventions, and it is often missed that this applies to finished floor or ground. Making this a definition will make this easier to find. It is already a building block.

A report from the editorial committee will indicate where a generic reference will be removed and the work italicized, and where the term is used without a reference by showing the term italicized. This should also have the additional benefit to make it more obvious when a reference is to limit the application – such as where only the reach, but not the force is applicable for operable parts.

phrase	used	With reference
Floor surfaces	44	8
Turning spaces	79	10 (4 to be specific to T-turn)
Clear floor spaces	213	23 (several for limitation to not require alcove)

Knee and toe clearance	29	18
Protruding objects	10	8 (half saying 'not complying with 307)
Reach ranges	18	8
Operable parts/controls	80/177	27/18 (most to specify where only part of 309 applies)

E-11-2024 1st draft Committee Action

Committee Action for First Ballot: AS 18-1-5

REPORT OF HEARING:

Modification (if any):

Committee Reason: The committee agreed that this approach will address the concern for application of the building blocks throughout the standard. The addition of Section 301.2 and the added sentence in the first section of each chapter is a generic reference. The definitions and italicizing those will provide an additional back up indication. This should also help using consistent language in the long run. The editorial committee will provide a report on where this will remove references added into the standard. It was requested that the editorial committee watch for 'floor' to see where this should be 'floor surface' as defined.
The 2nd sentence of Section 302.1 is deleted as redundant.

E-11 Terminology.doc

E-11 – 2024 2nd draft Ballot Comment 1

107.5

Proponent: Stan Ross NMGCD
Vote: negative with comment; AM

Further revise as follows:
building blocks: The core components of an *accessible* and usable building or *facility* as applicable in Chapter 3.

REASON: Many of the definitions use *building block* in their definition. And then when we go to see the *building block* definition it gives no further information about what a *building block* actually means. This *building block* definition is useless and frustrating for those unfamiliar with

the standard. The following sentence is used at the start of some chapters, "Where *building blocks* are required in this chapter, they shall comply with the applicable provisions of Chapter 3," and this reference should be used in *building block* definition to give the reader some direction.
See below definitions that use *building block* and yet provide no further information or direction that is helpful to those unfamiliar with the standard:

Proposed Modification from Editorial committee

Further revise as follows:
building blocks: The core components of an *accessible* and usable building or *facility* ~~as applicable in Chapter 3~~ (see Chapter 3).

Reason: The committee expressed before that a specific reference in a definition was not appropriate. However, the modification should address the proponents concern and would be consistent with the committee's decision for the other building block definitions. Also, Section 301.2 further describes which elements are building blocks.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

E-11-2023 2nd 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 *E-11-2023*		
Committee decision: AS	***Committee Vote at Meeting: 18-1-5***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any):		
Committee Reason: The committee agreed that this approach will address the concern for application of the building blocks throughout the standard. The addition of Section 301.2 and the added sentence in the first section of each chapter is a generic reference. The definitions and italicizing those will provide an additional back up indication. This should also help using consistent language in the long run. The editorial committee will provide a report on where this will remove references added		

into the standard. It was requested that the editorial committee watch for 'floor' to see where this should be 'floor surface' as defined. The 2nd sentence of Section 302.1 is deleted as redundant.

Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

CHAPTER 1
APPLICATION AND ADMINISTRATION

Proposal list to the 2017 A117.1 for the 2023 edition – 9-12-2024

01-05 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
01-05	Toji	107.5	D 26-1-1	2-2-2023 5-9-2024	Addendum 2-8-2022 Communications - 01-05, 05-13, 07-08 and 07-19 Final Action AM PC1

Comment 1st draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Toji, HLAA	Negative with comment	**NA**	5-9-2024	PC2
BC2	Dea, ISA	Negative with comment	**NA**	5-9-2024	PC1
BC3	Schrader, SEGD	Negative with comment	**NA**	5-9-2024	PC1
PC1	Communications	AM	AS 25-0-1	5-9-2024	
PC2	Toji, HLAA	AM	NA	5-9-2024	

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

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

01-05 – 2021
107.5

Proponent: Sharon Toji, Access Communications

Revise as follows:

SECTION 107
DEFINITIONS

107.5 Defined terms.

dark: when used in the standard in reference to contrast of adjoining finishes of architectural elements, dark means colors with very low light reflectance values (LRV), approaching black.

light: when used in the standard in reference to contrast of adjoining finishes of architectural elements, light means colors with very high light reflectance values (LRV), approaching white.

light reflectance value (LRV): A figure from 0-100 given to a surface that represents the amount of visible light it reflects when illuminated by a light source with pure white reflecting 100% of the light that hits it, and pure black absorbing all the light and reflecting none or 0.

REASON: Since we have been not been able as a committee to reach an agreement on contrast I believe that at the very least, presuming we don't reach any agreement for change during this session, we should include a definition for the words "dark" and "light." There are actually dictionary definitions for each. For instance, the Oxford English Dictionary defines dark, when used in reference to colors as follows: "dark (of a color or object) not reflecting much light; approaching black in shade." The example given is 'dark green'. Light is defined as follows: "light -an area of something that is brighter or paler than its surroundings. not dark. (of a color) pale. The color example provided is 'her eyes were light blue'.

Although dictionary definitions are supposed to be considered when terms are not defined, I believe we need to emphasize these definitions and by doing so, the actual words in the standard as well. In my experience, many designers and even inspectors, when queried as to why they believe it is acceptable to use or approve two colors very close in light reflectance, such as white on light gray for signs, state that one of them is "darker" than the other, and thus meets the standard, even though the standard does not include comparative terms. Even Aries Arditi in his article suggesting we abandon many of our signage standards strongly criticizes our current text referring to contrast because it is so vague as to be meaningless. As an example, he shows two barely contrasting light colors and maintains that one of them is "dark" since it is darker than the other and would therefore comply with our current standard.

Since I have included the dictionary references to light reflection by specifically referring to the technical term "light reflectance value" and its acronym LRV because that is commonly used in

reference to contrast for signs, I have also included a definition for the term Light Reflectance Value and its acronym.

We are alone among many countries that now have accessibility standards that include signs, in not referring specifically to light reflectance values to judge contrast. Contrast is accepted almost universally as one of the two most important requirements for sign accessibility, along with character size. Although the difficulty in coming up with measurable standards that will meet the needs of a large percentage of vision impaired people is acknowledged as difficult due to the many combinations and variations in vision, and controversial as well, because of the desires of designers to have free rein with color and the burdens and difficulties with measuring LRV when it is not provided by manufacturers of the materials used in the signs, no other country has considered these to be insurmountable obstacles. Other than our lack of a measurable contrast standard, we have, as far as I can determine, the best, most detailed, and most intelligent signage standard in the world! At least we must define our terms.

Here are pdf references to articles about accessibility standards and contrast, including references to some specific standards as well as suggestions for our standard (see the report from NIBS, the National Institute of Building Sciences, Version 6, May 11, 2015, "Design Guideline for the Visual Environment"). Two of our delegates, Marsha Mazz and Eunice Noell-Waggoner were members of the committee who worked on the NIBS report and I made extensive comments to the committee after reading the earliest version, which appear to have been integrated to some extent in their final report and publication. They recommend a difference between the low and high LRV numbers for most signs of 50, and also refer to the requirement for 70 percent minimum contrast. This has added an authoritative U.S. source for the use of LRVs or at least a reference to them in the definitions, for our contrast standard.

Here are documents and articles that document the use of LRV to measure contrast in support of disabled access from around the world. The NIBS report is included, which refers to much of that material. There is an extensive article that mentions some of our efforts here, but documents that we do not have a measurable standard. There are two articles in German, which I did read in the original. The Google translation will be accurate if you do not read German, but you will need to break up the articles into several parts. One of those articles is especially interested in contrast for stair striping due to the high percentage of accidents on stairs.

https://www.nibs.org/files/pdfs/NIBS_LVDP_Guidelines_2015.pdf

https://www.anec.eu/images/Publications/technical-studies/ANEC-final-report-1503-1700-Lenoir-et-al.pdf

https://nullbarriere.de/din32975.htm

https://www.pro-retina.de/system/files/artikel/broschure_barrierefrei_2019ua_1_0.pdf

Staff note: Light reflectance value is currently not used in the code. This term is in the Toji change 05-13, 07-08 and 07-19.

01-05 – 2021 Modification

Proponent: William Conner

Further revise as follows:

light reflectance value (LRV): ~~A figure from 0-100 given to a surface that represents the amount of visible light it reflects when illuminated by a light source with pure white reflecting 100% of the light that hits it, and pure black absorbing all the light and reflecting none or 0.~~
A measure of visible and usable light that is reflected from a surface when illuminated by a light source. A surface with an LRV of 100% reflects all the light striking it. A surface with an LRV of 0% reflects no light.

Reason: I support the definition and changes it relates to but believe the definition of LRV is not as accurate or clear as it could be. The proposed definition suggested there were surfaces with LRVs of 100% and 0% which there are not. The most pure whites have an LRV of around 85% and the best blacks around 5%

Committee Action: Disapproval 26-1-1

REPORT OF HEARING:

Modification (if any):

Committee Reason: The Communications task group needs additional time for development of LRV requirements.

107.5 Toji.doc

01-05 – 2021 Ballot Comments

BALLOT COMMENT 1- FIRST DRAFT: Proponent: Sharon Toji, Hearing Loss Association of America
Desired Action: Negative with comment
Modification:
Reason: These definitions are essential to the understanding of contrast. This modification represents a clarification to the original text.
BALLOT COMMENT 2- FIRST DRAFT: Proponent: Glenn Dea, ISA

Desired Action: Negative with comment
Modification:
Reason: The ISA supports and participated in development of a consensus modification recommended for approval by the Communications Task Group at its July 26, 2023 meeting.
BALLOT COMMENT 3- FIRST DRAFT: Proponent: Jessica Schrader, Society for Experiential Graphic Design
Desired Action: Negative with comment
Modification:
Reason: SEGD supports and participated in development of a consensus modification for approval by the Communications Task Group at its meeting held on July 26, 2023.

01-05 – 2021 Public Comment 1
107.5

Proponent: Sharon Toji, representing the Communications Task Group

Further revise as follows:

SECTION 107
DEFINITIONS

107.5 Defined terms.

dark: ~~when used in the standard in reference to contrast of adjoining finishes of architectural elements, dark means colors~~ Surfaces with very low light reflectance values (LRV), approaching pure black.

light: ~~when used in the standard in reference to contrast of adjoining finishes of architectural elements, light means colors~~ Surfaces with very high light reflectance values (LRV), approaching pure white.

light reflectance value (LRV): ~~A figure from 0-100 given to a surface that represents the amount of visible light it reflects when illuminated by a light source with pure white reflecting 100% of the light that hits it, and pure black absorbing all the light and reflecting none or 0.~~
A value from 0 to 100 points representing the proportion of visible light reflected by a surface, weighted for the sensitivity to light of the human eye, with a value of 0 points for pure black and a value of 100 points for pure white. LRV is equivalent to CIE tristimulus value Y.

International Commission on Illumination (CIE) tristimulus value Y: The ratio of the luminance of a surface to that of a perfectly diffusing white surface, when illuminated and viewed under specific spectral and geometric conditions of measurement.

REASON: These modifications to the proposed definitions for the terms "light", "dark", and "light reflectance value (LRV)" result from discussions within the Communications Task Group and the Terminology Task Group. These consensus modifications were recommended for approval by the Communications Task Group at its July 26, 2023 meeting.

Users of the ICC A117.1 Standard include manufacturers and testing agencies who measure the color and appearance of materials. Metrics related to the luminance of materials, as perceived by the human eye, include the tristimulus Y value, the ß (beta) reflectance or luminance factor, and the L* perceptual lightness value.

The Communications Task Group reviewed information shared with the International Sign Association in November 2022 by Steffen Jenkel, committee manager of the ISO/TC 59/SC 16 "Accessibility and usability of the built environment" committee, regarding ISO 21542:2021 and this committee electing to define the term "light reflectance value (LRV)" in terms of the International Commission on Illumination (CIE) tristimulus Y value:

> *[...] "ISO 21542:2021 Building construction—Accessibility and usability of the built environment includes a definition for the term "light reflectance value (LRV)" that differs from what was formerly stated in ISO 21542:2011."*
>
> Basis for the changes was the research made by the members of the working group responsible for the revision of ISO 21542:2011 and particularly the discussion with specialists in ergonomics as well as vision and colour from CIE (International Commission on Illumination). It was found that it is not correct to use the reflectance value in the contrast formula since the visual response of persons never increases linearly along with the reflectance value. At CIE, the Luminance factor, Y , was introduced to correct this. This Y value, therefore, has also been introduced to ISO 21542 to formulas defining contrast. And the reflectance value has been corrected to luminance or luminance factor.»
>
> In ISO 21542:2011, the term LRV is rather a simple averaged spectral reflectance throughout the visible range (in %). This means LRV is a physical characteristic of a surface of an object but not visually meaningful quantity. A visually meaning quantity needs a correction by spectral visual sensitivity function V(l). The CIE Y tristiumulus value is the one resulted in this correction because y(l) is identical to V(l).
>
> *Source: Steffen Jenkel, Committee manager of ISO/TC 59/SC 16. Spanish Association for Standardization, UNE*
> *Email communication dated November 15, 2022 with International Sign Association*

Gregorio Feigusch and Isabella Tiziana Steffan are authors of two papers that discussed in detail contrast metrics in use by accessibility standards including ISO 21542:2011 and ISO 21542:2021 *fn1 *fn2. These persons provided written commentary shared with the Communications Task Group in support of defining the term "light reflectance value (LRV)" in terms of the CIE tristimulus Y value.

Additionally, Jim Leland, ASTM subcommittee chair of E12.01Terminology of ASTM Committee E12 on Color and Appearance provided comment shared with the Communications Task Group that also contributed to development of these modifications to the proposed definitions for the terms "light", "dark", and "light reflectance value (LRV)".

Footnotes

*fn1 **Good Lighting and Visual Contrast to Improve Accessibility in the Built Environment-A Literature Study**. Gregorio Feigusch, Isabella Tiziana Steffan, and Doris Ossberger. Proceedings of the 21st Congress of the International Ergonomics Association (IEA 2021), 2021, Online ISBN 978-3-030-74605-6

*fn2 **Accessibility and Visual Contrast: A Proposal for a Better Evaluation of This Physical Quantity**. Gregorio Feigusch and Isabella Tiziana Steffan. Proceedings of the 20th Congress of the International Ergonomics Association (IEA 2018), 2019,pp 1642 - 1648

Committee Action on Public Comment 1: AM 25-0-1

REPORT OF HEARING:

Modification (if any):

~~**International Commission on Illumination (**~~**CIE**~~**)**~~ **tristimulus value Y:** The ratio of the luminance of a surface to that of a perfectly diffusing white surface, when illuminated and viewed under specific spectral and geometric conditions of measurement as defined by the International Commission in Illumination (CIE).

Committee Reason: These definitions for dark, light and LRV, are used in the signage and stair striping sections in the code. The definition for 'CIE tristimulus value Y' is the French version of LRV. Editorial revision to 'CIE tristimulus value Y' for consistency with the term used in the definition for LRV.

01-05 Communications.doc

01-05 – 2021 Public Comment 2

107.5

Proponent: Sharon Toji

Further revise as follows:

SECTION 107
DEFINITIONS

107.5 Defined terms.

dark: when used in the standard in reference to contrast of adjoining finishes of architectural elements, dark means ~~colors~~ colored surfaces with very low light reflectance values (LRV), approaching pure black.

light: when used in the standard in reference to contrast of adjoining finishes of architectural elements, light means ~~colors~~ colored surfaces with very high light reflectance values (LRV), approaching pure white.

light reflectance value (LRV): ~~A figure from 0-100 given to a surface that represents the amount of visible light it reflects when illuminated by a light source with pure white reflecting 100% of the light that hits it, and pure black absorbing all the light and reflecting none or 0.~~
A value from 0 to 100 points representing the proportion of visible light reflected by a surface, weighted for the sensitivity to light of the human eye, with a value of 0 points for pure black and a value of 100 points for pure white. LRV as used in this document is equivalent to CIE tristimulus value Y.

International Commission on Illumination (CIE) tristimulus value Y: The ratio of the luminance of a surface to that of a perfectly diffusing white surface, when illuminated and viewed under specific spectral and geometric conditions of measurement.

REASON: Clarifications to dark/light definition language. Clarifications to LRV definition language. Adopts terminology used by Illuminating Engineering Society (IES)

Committee Action on Public Comment 2: No action

REPORT OF HEARING:

Modification (if any):

Committee Reason: See PC1

01-05 Toji.doc

01-05 – 2021 1st draft Committee Action

Committee Action for First Ballot: AM by PC1 - 25-0-1

REPORT OF HEARING:

Modification (if any):
Further modify as follows:

~~**International Commission on Illumination (**~~**CIE**~~**)**~~ **tristimulus value Y:** The ratio of the luminance of a surface to that of a perfectly diffusing white surface, when illuminated and viewed under specific spectral and geometric conditions of measurement as defined by the International Commission in Illumination (CIE).

Committee Reason: PC1 - These definitions for dark, light and LRV, are used in the signage and stair striping sections in the code. The definition for 'CIE tristimulus value Y' is the French version of LRV. Editorial revision to 'CIE tristimulus value Y' for consistency with the term used in the definition for LRV.

01-05 – 2021 2nd draft Ballot Comment 1

107.5

Proponent: Dan Buuck NAHB
Vote: affirmative with comment; AM

Further revise as follows:
~~**CIE tristimulus value Y:** The ratio of the luminance of a surface to that of a perfectly diffusing white surface, when illuminated and viewed under specific spectral and geometric conditions of measurement as defined by the International Commission in Illumination (CIE). (See Light Reflectance Value (LRV))~~

light reflectance value (LRV): A value from 0 to 100 points representing the proportion of visible light reflected by a surface, weighted for the sensitivity to light of the human eye, with a value of 0 points for pure black and a value of 100 points for pure white. ~~*LRV* is equivalent to *CIE tristimulus value Y.*~~

REASON: The last sentence of the definition for light reflectance value (LRV) is commentary and not needed to comply with or enforce the standard. The term CIE tristimulus value Y is only used in the definition for LRV, therefore the definition can be deleted.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

01-05-2021 2nd 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 *01-05– 2021*		
Committee decision: D	***Committee Vote at Meeting: 26-1-1***	***Committee Vote on Ballot:40-3-2***
REPORT OF HEARING: Modification (if any):		
Committee Reason: The Communications task group needs additional time for development of LRV requirements.		
Committee decision: AM PC1	***Committee Vote at Meeting: 25-0-1***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any): ~~**International Commission on Illumination (**~~**CIE**~~**)**~~ **tristimulus value Y:** The ratio of the luminance of a surface to that of a perfectly diffusing white surface, when illuminated and viewed under specific spectral and geometric conditions of measurement as defined by the International Commission in Illumination (CIE).		
Committee Reason: These definitions for dark, light and LRV, are used in the signage and stair striping sections in the code. The definition for 'CIE tristimulus value Y' is the French version of LRV. Editorial revision to 'CIE tristimulus value Y' for consistency with the term used in the definition for LRV.		
Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

01-06 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
01-06	Paarlberg	107.5	AM-29-1-1	2-24-2022 9-28-2023	Final Action D

Comment 1st draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Buuck, NAHB	Negative	D 25-6-1	9-28-23	

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

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Hall, ASID	AM			

01-06 – 2021
107.5

Proponent: Kimberly Paarlberg, representing ICC

Revise as follows:

SECTION 107
DEFINITIONS

107.5 Defined terms.

transfer device: Equipment designed to facilitate the transfer of a person from a wheelchair or other mobility aide to and from an amusement ride seat.

wheelchair charging area: A clear floor area where people with disabilities can recharge their ~~wheelchair~~ batteries for wheelchairs or other mobility aide.

wheelchair space: A space for a single wheelchair or other mobility aide and its occupant.

wheelchair space locations: A space for a minimum of a single wheelchair or other mobility aide and the associated companion seating. Wheelchair space locations can contain multiple wheelchair spaces and associated companion seating.

REASON: The standard has been expanded to include other mobility devices. That should be addressed in the definitions.

Committee Action: Approved as Modified (Vote: 29-1-1)

REPORT OF HEARING:
Modification (if any):

Further modify:
transfer device: Equipment designed to facilitate the transfer of a person from a wheelchair or other mobility ~~aide~~ device to and from an amusement ride seat.

wheelchair charging area: A clear floor area where people with disabilities can recharge their batteries for wheelchairs or other mobility ~~aide~~ devices.

wheelchair space: A space for a single wheelchair or other mobility ~~aide~~ device and its ~~occupant~~ user.

wheelchair space locations: A space for a minimum of a single wheelchair or other mobility ~~aide~~ device and the associated companion seating. Wheelchair space locations can contain multiple wheelchair spaces and associated companion seating.

Committee Reason: The modification to change 'aide' to 'device' is to use the term more commonly found in the 2010 ADA standard. The modification to change 'occupant' to 'user' is a more appropriate term to use with both 'wheelchairs' and the other devices, such as scooters. The committee agreed that the changes in the definitions would help make it clear that the wheelchair spaces could be used by a variety of individuals. The sizes are set elsewhere in the standard. Expanding the definition to acknowledge other devices, which may be larger than the space required by the standard, does not mean that the standard will now require those spaces to be larger.

107.5 Paarlberg.doc

01-06 – 2021 Ballot Comments

BALLOT COMMENT 1- FIRST DRAFT:
Proponent: **Dan Buuck representing NAHB**
Desired Action: Negative with Comment
Modification:
Reason: I understand that this is "only" a definition change, but I am concerned that it may be interpreted to require larger clear floor spaces in some instances. The definition for "wheelchair charging area" states that it is an area where people can recharge their device. Where a user wants to charge a larger wheeled mobility device but cannot make use of a standard clear floor space, it could lead to unnecessary complaints or lawsuits. It is important to note that the market will produce any size device for many types of public

space and outdoor uses. I do not think it is this committee's intent to provide space for all of these devices.

01-06 – 2021 1st draft Committee Action

Committee Action for First Ballot: Disapproval 25-6-1

REPORT OF HEARING:

Modification (if any):

Committee Reason: Adding 'mobility devices' could be misread to require sizes other than those specified in the requirements.

01-06 – 2021 2nd draft Ballot Comment 1

107.5

Proponent: Angeline Arandanas Hall ASID
Vote: negative with comment; AM

Further revise as follows:

wheelchair charging area: A clear floor area where people with disabilities can recharge their wheelchair batteries.

Staff note: This definition was not proposed to be deleted in this proposal. However, the editorial committee was proposing to delete the definition and revise the only location where it is used. The editorial committee was suggestion that Section 1102.15.4 use the term 'wheelchair charging station', which is the term used for the referenced technical criteria in Section 906. If a definition is needed, it should be for 'charging station'.

REASON: The removal of the term "wheelchair charging area" from "Section 107.5 Defined terms" takes away the necessary clarification about the charging of wheelchair batteries, as it relates to the "wheelchair charging area". Neither Section 802.10.3.1 nor Section 906 nor Section 1102.15.4 provide this specific clarification.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

01-06-2021 2nd 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 *01-06– 2021*		
Committee decision: AM	***Committee Vote at Meeting: 29-1-1***	***Committee Vote on Ballot:39-1-1***
REPORT OF HEARING: Modification (if any): **Further modify:** **transfer device:** Equipment designed to facilitate the transfer of a person from a wheelchair or other mobility ~~aide~~ device to and from an amusement ride seat. **wheelchair charging area:** A clear floor area where people with disabilities can recharge their batteries for wheelchairs or other mobility ~~aide~~ devices. **wheelchair space:** A space for a single wheelchair or other mobility ~~aide~~ device and its ~~occupant~~ user. **wheelchair space locations:** A space for a minimum of a single wheelchair or other mobility ~~aide~~ device and the associated companion seating. Wheelchair space locations can contain multiple wheelchair spaces and associated companion seating.		
Committee Reason: The modification to change 'aide' to 'device' is to use the term more commonly found in the 2010 ADA standard. The modification to change 'occupant' to 'user' is a more appropriate term to use with both 'wheelchairs' and the other devices, such as scooters. The committee agreed that the changes in the definitions would help make it clear that the wheelchair spaces could be used by a variety of individuals. The sizes are set elsewhere in the standard. Expanding the definition to acknowledge other devices, which may be larger than the space required by the standard, does not mean that the standard will now require those spaces to be larger.		
Committee decision: D	***Committee Vote at Meeting: 25-6-1***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any):		
Committee Reason: Adding 'mobility devices' could be misread to require sizes other than those specified in the requirements.		
Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

ICC A117.1 COMMITTEE ACTION REPORT CHAPTER 2

SCOPING

No change were proposed for Chapter 2.

CHAPTER 3
BUILDING BLOCKS

03-04 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
03-04	Mazz	Various	D 27-2-2	4-27-2023 9-14-2023	Changes in level Final Action AM BC2

Comment 1st draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Pace, HUD	Affirmative	NA	9-14-2023	
BC2	Mazz, USA	Negative	AM 16-2-0	9-14-2023	

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

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Buuck, NAHB	AM			
BC2	Pace/Scott HUD	AM			Metric conversion across standard discussed previously. Technically not within the scope of this change.
BC3	Schorr ATBCB	AM			

03-04 – 2021

304.3, 305.2, 404.2.3.1, 405.7.1, 406.2.1, 406.3.1, 502.5, 503.4, 802.2, 805.5.1, 1002.4.2, 1009.2.2, 1009.2.3.1, 1009.2.3.2, 1009.4.1, 1009.5.2

Proponent: Marsha Mazz, representing United Spinal Association

Revise as follows:

SECTION 304
TURNING SPACE

304.3 Size <u>and slope</u>. Turning spaces shall comply with Section 304.3.1or 304.3.2. <u>Circular turning spaces shall not have slopes steeper than 1:48 measured along the diameter and along a line 90 degrees to the diameter. The base and arms of T-turns shall not have slopes steeper than 1:48 measured along the length and width.</u>

SECTION 305
CLEAR FLOOR SPACE

305.2 Floor surfaces. Floor surfaces of a clear floor space shall comply with Section 302. Changes in level shall not be permitted within the clear floor space.

Exception: Running and cross slopes ~~Slopes~~ not steeper than 1:48 shall be permitted.

SECTION 404
DOORS, DOORWAYS AND GATES

404.2.3.1 Floor surface. The floor surface within the maneuvering clearances shall have ~~a~~ running and cross slopes ~~slope~~ not steeper than 1:48 and shall comply with Section 302.

SECTION 405
RAMPS

405.7.1 Slope. Landings shall have running and cross slopes ~~a slope~~ not steeper than 1:48 and shall comply with Section 302.

SECTION 406
CURB RAMPS AND BLENDED TRANSITIONS

406.2.1 Landings. A landing 48 inches (1220 mm) minimum by 48 inches (1220 mm) minimum shall be provided at the top of a curb ramp. The landing shall be permitted to overlap ~~pedestrian routes and clear spaces~~ other walking surfaces. Where the landing is constrained at the back-of-sidewalk, the landing shall be 48 inches (1220 mm) minimum by 60 inches (1525 mm) minimum. The 60-inch (1525 mm) dimension shall be provided in the direction of the curb ramp run. The ~~slope~~ running and cross slopes of landings shall not be steeper than1:48 ~~maximum in all directions~~.

406.3.1 Landing. A landing 48 inches (1220 mm) minimum by 48 inches (1220 mm) minimum shall be provided at the bottom of a curb ramp. The landing shall be permitted to overlap ~~pedestrian routes and clear spaces~~ other walking surfaces. Where the landing is constrained on two or more sides, the landing shall be 48 inches (1220 mm) minimum by 60 inches (1525 mm) minimum. The ~~60 inches~~ 60-inch (1525 mm) dimension shall be provided in the direction of the pedestrian street crossing. The ~~slope~~ running and cross slopes of landings shall not be steeper than 1:48 ~~maximum in all directions~~.

SECTION 502
PARKING SPACES

502.5 Floor surfaces. Parking spaces and access aisles shall comply with Section 302 and shall not have surface slopes ~~not~~ steeper than 1:48 measured along their length and width. Access aisles shall be at the same level as the parking spaces they serve.

SECTION 503

PASSENGER LOADING ZONES

503.4 Floor surfaces. Vehicle pull-up spaces and access aisles serving them shall comply with Section 302 and shall not have surface slopes ~~not~~ steeper than 1:48 measured along their length and width. Access aisles shall be at the same level as the vehicle pull-up space they serve.

SECTION 802
ASSEMBLY AREAS

802.2 Floor surfaces. The floor surface of wheelchair space locations shall not have ~~a slope~~ running and cross slopes ~~not~~ steeper than 1:48 and shall comply with Section 302.

SECTION 805
TRANSPORTATION FACTILITIE

805.5.1 Slope. Rail platforms shall not ~~exceed a slope~~ have running and cross slopes steeper than ~~of~~ 1:48 ~~in all directions~~.

Exception: Where platforms serve vehicles operating on existing track or track laid in existing roadway, the slope of the platform parallel to the track shall be permitted to be equal to the slope (grade) of the roadway or existing track.

SECTION 1002
AMUSEMENT RIDES

1002.4.2 Slope. The floor surface of wheelchair spaces shall not have ~~a slope~~ running and cross slopes ~~not~~ steeper than 1:48 when in the load and unload position.

SECTION 1009
SWIMMING POOLS, WADING POOLS, HOT TUBS AND SPAS

1009.2.2 Seat location. In the raised position, the centerline of the seat shall be located over the deck and 16 inches (405 mm) minimum from the edge of the pool. The deck surface between the centerline of the seat and the pool edge shall not have ~~a slope~~ running and cross slopes ~~not~~ steeper than 1:48.

1009.2.3 Clear deck space.

1009.2.3.1 New buildings and facilities. In new buildings and facilities, on the side of the seat opposite the water, a clear deck space shall be provided parallel with the seat. The space shall be 36 inches (915 mm) minimum in width and shall extend forward 52 inches (1320 mm) minimum from a line located 12 inches (305 mm) behind the rear edge of the seat. The clear deck space shall not have ~~a slope~~ running and cross slopes ~~not~~ steeper than 1:48.

1009.2.3.2 Existing buildings and facilities. In existing buildings and facilities, on the side of the seat opposite the water, a clear deck space shall be provided parallel with the seat. The

space shall be 36 inches (915 mm) minimum in width and shall extend forward 48 inches (1220 mm) minimum from a line located 12 inches (305 mm) behind the rear edge of the seat. The clear deck space shall not have ~~a slope~~ running and cross slopes ~~not~~ steeper than 1:48.

1009.4.1 Clear deck space. A clear deck space of 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum ~~with a slope not steeper than 1:48~~ shall be provided at the base of the transfer wall. The clear deck space shall not have running and cross slopes steeper than 1:48. Where one grab bar is provided, the clear deck space shall be centered on the grab bar. Where two grab bars are provided, the clear deck space shall be centered on the clearance between the grab bars.

1009.5.2 Transfer space. A transfer space of 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum ~~with a slope not steeper than 1:48~~ shall be provided at the base of the transfer platform surface. The transfer space shall not have running and cross slopes steeper than 1:48. The transfer space shall be centered along a 24-inch (610 mm) minimum side of the transfer platform. The side of the transfer platform serving the transfer space shall be unobstructed.

REASON: This proposal attempts to accomplish four things:

1. It establishes a new standard for measuring the slope in turning spaces. This requirement would apply wherever a turning space is required;
2. It clarifies how slopes are to be measured in sections that already limit the slope but, that are ambiguous as to where that slope is to be measured;
3. In Sections 406.2.1 and 406.3.1 we are proposing to revise the requirement that the slope measurement be taken "in all directions". We are requesting this change this because a 2% slope in *all* directions results in a maximum slope closer to 3 % (2 times the square root of 2) or 2.8 which is more than that allowed in any *one* direction.
4. For the sake of clarity, we propose to conform the format where the requirements limiting slope are written differently.

For the most part, we have elected to require that measurements be taken along the "running slope" and "cross slope" because these terms are defined in the Standard:

"running slope: The slope that is parallel to the direction of travel"

"cross slope: The slope that is perpendicular to the direction of travel".

These terms work well when the direction of travel is readily identifiable. For a few spaces, such as parking spaces and their access aisles, the direction of travel is less observable. Consequently, for these few spaces, we would specify that the measurements be measured along the "length and width" of the spaces.

Committee Action: Disapproval 27-2-2
AS 8-22-2

REPORT OF HEARING:

Modification (if any):

Committee Reason: It was suggested in "two perpendicular directions" rather than "running and cross slope" would be easier to understand. "Running and cross slope" is confusing on surfaces where travel direction is in multiple directions. The description of the circular turning space, mathematically does not address this the way the proponent stated was the intent. The base of the T-turn is not addressed in the proposal. This should be addressed in the task group dealing with changes of elevation in a comprehensive manner.

406.2.1-MAZZ.doc

03-04 – 2021 Ballot Comments

BALLOT COMMENT 1- FIRST DRAFT: Proponent: Rex Pace, HUD
Desired Action: Affirmative with comment
Modification:
Reason: The proposal is a step in the right direction and begins to achieve a more workable requirement for turning spaces on exterior surfaces with respect to the current obligation of assessing slopes in all directions. However, more refinement is needed for an effective requirement.
BALLOT COMMENT 2- FIRST DRAFT: Proponent: Marsha Mazz, USA
Desired Action: Negative with comment
Modification:
Reason: Approve as Submitted. This issue did not get a fair hearing because it was assigned to a task group on surfaces that never met and it was disapproved because time ran out.

03-04 – 2021 1st draft Committee Action

Committee Action for First Ballot: BC2 AM 16-2-0

- Mod to 304.3 – 10-11-3
- Mod 2 to 304.3 – 18-2-0

REPORT OF HEARING:

Modification (if any):

Further modify as follow:

SECTION 304
TURNING SPACE

304.3 Size and slope. Turning spaces shall comply with Section 304.3.1or 304.3.2. Circular turning spaces shall not have slopes steeper than 1:48 measured along ~~the~~ any diameter and along ~~a line~~ the diameter 90 degrees to the first diameter. The base and arms of T-turns shall not have slopes steeper than 1:48 measured along the length and width.

Staff note: Coordination needed between 304.3 and 304.2. There is a conflict between no change in elevation and allowing for a slope.

Committee Reason: The modification was to clarify the direction of the slope measurements for a turning space. The remainder of the change would clarify that the slope can run in both directions – not just one direction.

03-04 – 2021 2nd draft Ballot Comment 1

305.2, 404.2.3.1, 405.7.1, 406.2.1, 406.3.1, 802.2, 805.5.1, 1002.4.2,1009.2.2, 1009.2.3.1, 1009.2.3.2, 1009.4.1, 1109.5.2

Proponent: Dan Buuck NAHB
Vote: affirmative with comment; AM

Further revise as follows:
305.2 Floor surfaces. *Floor surface*s of a *clear floor space* shall comply with Section 302. Changes in level shall comply with Section 303 within the *clear floor space*.

> **Exception:** *Running slope* ~~and~~ or *cross slope* not steeper than one unit vertical in 48 inches horizontal (2 percent slope) shall be permitted.

404.2.3.1 Floor surface. The *floor surface* within the *maneuvering clearance*s shall have *running slope* ~~and~~ or *cross slope* not steeper than one unit vertical in 48 inches horizontal (2 percent slope).

405.7.1 Slope. *Landing*s shall have *running slope* ~~and~~ or *cross slope* not steeper than one unit vertical in 48 inches horizontal (2 percent slope) and shall comply with *floor surfaces*.

406.2.1 Landings. A *landing* 48 inches (1220 mm) minimum by 48 inches (1220 mm) minimum shall be provided at the top of a *curb ramp*. The *landing* shall be permitted to overlap other walking surfaces. Where the *landing* is constrained at the back-of-sidewalk, the *landing* shall be 48 inches (1220 mm) minimum by 60 inches (1525 mm) minimum. The 60-inch (1525 mm) dimension shall be provided in the direction of the curb ramp run. The *running slope* ~~and~~ or *cross slope* of *landing*s shall not be steeper than one unit vertical in 48 inches horizontal (2 percent slope).

406.3.1 Landing. A *landing* 48 inches (1220 mm) minimum by 48 inches (1220 mm) minimum shall be provided at the bottom of a *curb ramp*. The *landing* shall be permitted to overlap other walking surfaces. Where the *landing* is constrained on two or more sides, the *landing* shall be 48 inches (1220 mm) minimum by 60 inches (1525 mm) minimum. The 60-inch (1525 mm) dimension shall be provided in the direction of the pedestrian street crossing. The *running slope* ~~and~~ or *cross slope* of *landing*s shall not be steeper than one unit vertical in 48 inches horizontal (2 percent slope).

802.2 Floor surfaces. The floor surface of wheelchair space locations shall not have running slope ~~and~~ or cross slope steeper than one unit vertical in 48 inches horizontal (2 percent slope).

805.5.1 Slope. Rail platforms shall not have *running slope* ~~and~~ or *cross slope* steeper than one unit vertical in 48 inches horizontal (2 percent slope).

Exception: Where platforms serve vehicles operating on existing track or track laid in existing roadway, the slope of the platform parallel to the track shall be permitted to be equal to the slope (grade) of the roadway or existing track.

1002.4.2 Slope. The floor surface of wheelchair spaces shall not have running slope ~~and~~ or cross slope steeper than one unit vertical in 48 inches horizontal (2 percent slope) when in the load and unload position.

1009.2.2 Seat location. In the raised position, the centerline of the seat shall be located over the deck and 16 inches (405 mm) minimum from the edge of the pool. The deck surface between the centerline of the seat and the pool edge shall not have *running slope* ~~and~~ or *cross slope* steeper than one unit vertical in 48 inches horizontal (2 percent slope).

Exception: Changes in level complying with Section 303.3 shall be permitted between the centerline of the seat and the pool edge to limit water from entering the pool area.

1009.2.3.1 New buildings and facilities. In new buildings and *facilities*, on the side of the seat opposite the water, a clear deck space shall be provided parallel with the seat. The space shall be 36 inches (915 mm) minimum in width and shall extend forward 52 inches (1320 mm) minimum from a line located 12 inches (305 mm) behind the rear edge of the seat. The clear deck space shall not have *running slope* ~~and~~ or *cross slope* steeper than one unit vertical in 48 inches horizontal (2 percent slope).

1009.2.3.2 Existing buildings and facilities. In *existing buildings* and *facilities*, on the side of the seat opposite the water, a clear deck space shall be provided parallel with the seat. The space shall be 36 inches (915 mm) minimum in width and shall extend forward 48 inches (1220 mm) minimum from a line located 12 inches (305 mm) behind the rear edge of the seat. The clear deck space shall not have *running slope* ~~and~~ or *cross slope* steeper than one unit vertical in 48 inches horizontal (2 percent slope).

1009.4.1 Clear deck space. A clear deck space of 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum shall be provided at the base of the transfer wall. The clear deck space shall not have *running slope* ~~and~~ or *cross slope* steeper than one unit vertical in 48 inches horizontal (2 percent slope). Where one grab bar is provided, the clear deck space shall be centered on the grab bar. Where two grab bars are provided, the clear deck space shall be centered on the clearance between the grab bars.

1009.5.2 Transfer space. A transfer space of 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum shall be provided at the base of the transfer platform surface. The transfer space shall not have *running slope* ~~and~~ or *cross slope* steeper than one unit vertical in 48 inches horizontal (2 percent slope). The transfer space shall be centered along a 24-inch (610 mm) minimum side of the transfer platform. The side of the transfer platform serving the transfer space shall be unobstructed.

REASON: The text that says “shall not have running slope and cross slope steeper” makes it read as if these are cumulative in some way. This revision uses the word “or” to clarify that the maximum running slope applies to each direction separately.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

03-04 – 2021 2nd draft Ballot Comment 2
504.4

Proponent: Rex Pace/Scott Windley HUD
Vote: affirmative with comment; AM

Further revise as follows:
504.4 Floor surfaces. Vehicle pull-up spaces and access aisles serving them shall comply with *floor surfaces* and shall not have surface slopes steeper than one unit vertical in 48 inches horizontal (~~2~~ 2.1 percent slope) measured along their length and width. Access aisles shall be at the same level as the vehicle pull-up space they serve.

REASON: Technically, there is a slight discrepancy between 1:48 and 2%. The percentage for 1:48 is 2.08% or, if rounded up, 2.1%. To help avoid having perfectly acceptable surfaces being redone because they are not perfectly 2% slope we are submitting a proposed modification.

Staff note: Metric conversion across standard was discussed previously. Technically not within the scope of this change.

Committee Action on 2nd draft Ballot Comment 2: AS/AM/D

REPORT OF HEARING:

Modification (if any):

Committee Reason:

03-04 – 2021 2nd draft Ballot Comment 3
406.2.1, 406.3.1

Proponent: Josh Schorr ATBCB
Vote: affirmative with comment; AM

Further revise as follows:
406.2.1 Landings. A *landing* 48 inches (1220 mm) minimum by 48 inches (1220 mm) minimum shall be provided at the top of a *curb ramp*. ~~The *landing* shall be permitted to overlap other walking surfaces.~~ Where the *landing* is constrained at the back-of-sidewalk, the *landing* shall be 48 inches (1220 mm) minimum by 60 inches (1525 mm) minimum. The 60-inch (1525 mm) dimension shall be provided in the direction of the curb ramp run. The *running slope* and *cross slope* of *landing*s shall not be steeper than one unit vertical in 48 inches horizontal (2 percent slope).

406.3.1 Landing. A *landing* 48 inches (1220 mm) minimum by 48 inches (1220 mm) minimum shall be provided at the bottom of a *curb ramp*. ~~The *landing* shall be permitted to overlap other walking surfaces.~~ Where the *landing* is constrained on two or more sides, the *landing* shall be 48 inches (1220 mm) minimum by 60 inches (1525 mm) minimum. The 60-inch (1525 mm) dimension shall be provided in the direction of the pedestrian street crossing. The *running slope* and *cross slope* of *landing*s shall not be steeper than one unit vertical in 48 inches horizontal (2 percent slope).

REASON: Adding this language will only cause confusion for other landings, such as for (non-curb) ramps. All landings are permitted to overlap other walking surfaces – if that's called out specifically here, it implies that it is not permissible at other types of landings.

Committee Action on 2nd draft Ballot Comment 3: AS/AM/D

REPORT OF HEARING:

Modification (if any):

Committee Reason:

03-04-2021 2nd 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 *03-04– 2021*		
Committee decision: D	***Committee Vote at Meeting: 27-2-2***	***Committee Vote on Ballot: 41-2-2***
REPORT OF HEARING: Modification (if any):		
Committee Reason: It was suggested in “two perpendicular directions” rather than “running and cross slope” would be easier to understand. “Running and cross slope” is confusing on surfaces where travel direction is in multiple directions. The description of the circular turning space, mathematically does not address this the way the proponent stated was the intent. The base of the T-turn is not addressed in the proposal. This should be addressed in the task group dealing with changes of elevation in a comprehensive manner.		
Committee decision: AM BC2	***Committee Vote at Meeting: 16-2-0***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any): **SECTION 304** **TURNING SPACE** **304.3 Size and slope.** Turning spaces shall comply with Section 304.3.1or 304.3.2. Circular turning spaces shall not have slopes steeper than 1:48 measured along ~~the~~ any diameter and along ~~a line~~ the diameter 90 degrees to the first diameter. The base and arms of T-turns shall not have slopes steeper than 1:48 measured along the length and width. Staff note: Coordination needed between 304.3 and 304.2. There is a conflict between no change in elevation and allowing for a slope.		
Committee Reason: The modification was to clarify the direction of the slope measurements for a turning space. The remainder of the change would clarify that the slope can run in both directions – not just one direction.		
Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

03-09 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
03-09	Boecker	307.4	AM– 20-2-4	4-7-2022 10-26-23	Final Action AFM BC5 and PC3

Comment 1st draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Anderson, AHLA	Negative	NA	10-26-2023	
BC2	Hall, CSA	Negative	NA	10-26-2023	
BC3	Paarlberg, ICC	Negative	W	10-26-2023	
BC4	Gaskins, NACS	Negative	NA	10-26-2023	
BC5	Schoonover	Negative	AS 16-14-2	10-12-2023	Editorial – E-01
PC1	Steinfeld	AM	NA	10-26-2023	Outside of scope
PC2	Schexnayder	AM	NA	10-26-2023	
PC3	Terminology	AM	AS 16-14-2	10-12-2023	Editorial – E-01
Reconsideration	Boecker, Lescher, Paarlberg	AM	AS 8-19-2 failed	9-12-2024	

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

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Winkler, ASSP	AM			
BC2	Paarlberg, ICC	D			

03-09 – 2021

307.4

Proponent: Gene Boecker, Code Consultants, Inc.

Revise as follows:

SECTION 307
PROTRUDING OBJECTS

307.4 Vertical clearance. Vertical clearance shall be 80 inches (2030 mm) minimum. Rails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm). The leading edge of such rails or barrier shall be located between 10 inches (255 mm) and 27 inches (685 mm) ~~maximum~~ above the floor. Where the clear distance between vertical supports for a horizontal element is greater than 12 inches (305 mm), an intermediate horizontal element shall be provided at a height between 10 inches (255 mm) and 18 inches (455 mm) above the floor.

Exception: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

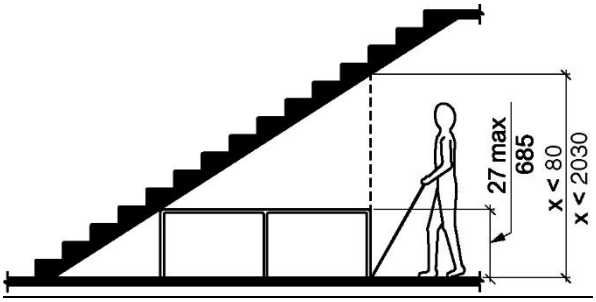


FIGURE 307.4
REDUCED VERTICAL CLEARANCE

REASON: This includes two changes. The first is a minimum height for a horizontal element. A height of 10 inches was proposed based on several factors. It should be high enough that it cannot be mistaken for a step on a stair. It should be high enough that it can be relatively seen by seeing people and not confused with the floor surface. And, it should be of a height that acts as a barrier to dogs. Which is also the reason for the second proposal.

The second part of this is a recommendation for an intermediate horizontal rail when a higher rail is used. As currently written, a single horizontal rail at 27 inches would be acceptable. However, service dogs can step over low elements or walk under a single rail at 27 inches in height. A dimension of 18 inches is proposed as the maximum separation between horizontal elements. That way, if a cane detectable horizontal flat bar is placed at 20 inches in height, an intermediate would be required. Any height between the two would be acceptable. If the top element is at a handrail height of 36 inches only a single intermediate handrail would be required. This is similar to the guard requirements in the building code for areas that are not open to the public (e.g., loading docks, industrial/utility areas) so the design concept would not be new (IBC 1015.4, exception 4 – which uses a 21-inch sphere limitation).

Committee Action: Approved as Modified (Vote: 20-2-4)

REPORT OF HEARING:
Modification (if any):

Further modify as follows:

307.4 Vertical clearance. Vertical clearance shall be 80 inches (2030 mm) minimum. Rails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm). The leading edge of such rails or barrier shall be located between 10 inches (255 mm) and 27 inches (685 mm) above the floor. ~~Where the clear distance between vertical supports for a horizontal element is greater than 12 inches (305 mm), an intermediate horizontal element shall be provided at a height between 10 inches (255 mm) and 18 inches (455 mm) above the floor.~~

Exception: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

Committee Reason:
The modification to delete the last sentence of Section 307.4 is because there are many good options to make a barrier detectable at lower levels (e.g., 2nd bar are curb height, permanent seating) that would not comply with the proposed language. The proposal to add a lower end for the barriers would stop the allowances for barriers such as platforms that are step height or curbs on the floor that are tripping hazard or could be misinterpreted by person with visual impairments looking for the stairway. It was suggested that a possible modification would be "~~between~~ 10 inches minimum and 27 inches maximum" to pick up both ends of the range.

307.4-BOECKER.doc

03-09 – 2021 Ballot Comments

BALLOT COMMENT 1- FIRST DRAFT:
Proponent: Doug Anderson, AHLA
Desired Action: Negative with Comment
Modification:
Reason: Not sure where the 10" came from. Using 4" from the 4" max sphere rule would be tied to a relevant requirement.
BALLOT COMMENT 2- FIRST DRAFT:
Proponent: Dennis Hall representing CSA
Desired Action: Negative with Comment
Modification:
*Reason:*10" Rail is a tripping hazard and needs visual contrast with walking surface
BALLOT COMMENT 3- FIRST DRAFT:
Proponent: Kim Paarlberg representing ICC
Desired Action: Negative with comment
Modification: See Ballot Comment 3
BALLOT COMMENT 4- FIRST DRAFT:
Proponent: M. Bradley Gaskins representing NACS
Desired Action: Negative with Comment
Modification:
Reason: No justification for the 10" dimension. While I understand the idea it creates many situation where a protruding object is now created where one did not exist before. Example. Retail shelves where the lowest shelf protrudes further that than the upper shelves by 1" This is below the minimum 10" Objects that protrude 3 1/2" from the lower shelf is now a protruding object at 4 ½" from the first shelf above 10". This situation as exists would never be confused for a step which is the purpose of the proposal.
BALLOT COMMENT 5- FIRST DRAFT:
Proponent: Ken Schoonover, Individual Member

Desired Action: Affirmative with comment
Modification: See Ballot Comment 5

03-09– 2021 Ballot Comment 3
307.4

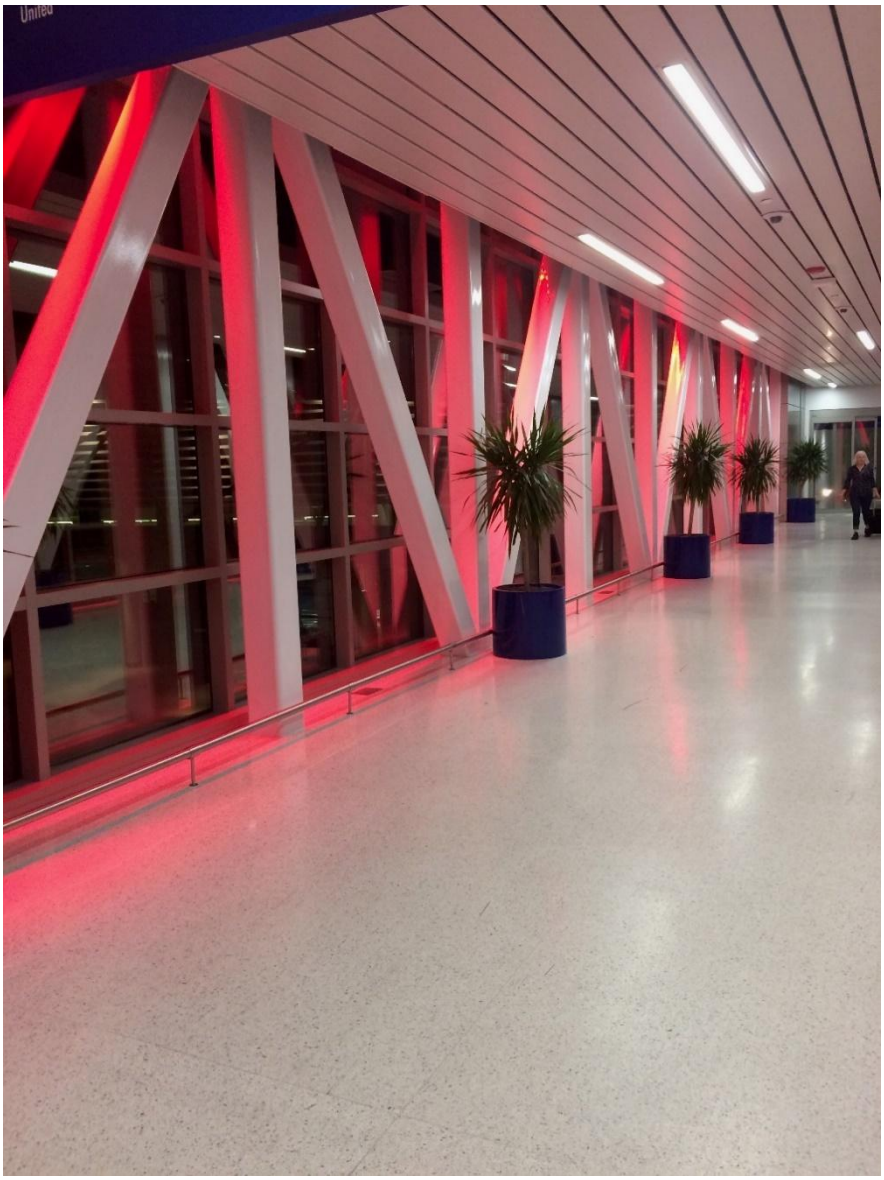
Proponent: Kimberly Paarlberg, ICC

Further modify as follows:

307.4 Vertical clearance. Vertical clearance shall be 80 inches (2030 mm) minimum. Rails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm). The leading edge of such rails or other barriers ~~barrier~~ shall detectable ~~located between 10 inches (255 mm) and~~ 27 inches (685 mm) maximum above the floor. Low rails, curbs or platforms utilized as barriers that are located where they can be tripping hazard shall not be less than 10 inches (255 mm) minimum measured vertically above the floor surface.

Exception: Door closers and doorstops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

REASON: While I understand the intent low curbs or rails that are tripping hazards, I believe that this could be read to prohibit a wall because it goes below 10". 'Between' prohibits items at 10" and 27". I have also see low curbs be used parallel to a walking surface to keep people from stepping under cross beams on a walkway that work very well, and this would be prohibited by the approved revised text. I would suggest a compromise that I feel meets the intent of the original proposal.



Committee Action for Ballot Comment 3: Withdrawn

REPORT OF HEARING:

Modification (if any):

Committee Reason:

03-09 Paarlberg.doc

03-09 – 2021 Ballot Comment 5

307.4

Proponent: Ken Schoonover, self

Further revise as follows:

307.4 Vertical clearance. Vertical clearance shall be 80 inches (2030 mm) minimum. Rails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm). The leading edge of such rails or barrier shall be located ~~between~~ 10 inches (255 mm) minimum and 27 inches (685 mm) maximum above the floor.

Exception: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

REASON: Further modify the proposal for consistency with how a range of dimensions are specified, as follows:

"The leading edge of such rails or barrier shall be located ~~between~~ 10 inches (255 mm) minimum and 27 inches (685 mm) maximum above the floor."

Committee Action for Ballot Comment 5: AS 16-14-2- See committee action on E-01

REPORT OF HEARING:

Modification (if any):

Committee Reason: Editorial and consistent with committee action on E-01.

03-09 Schoonover.doc

03-09 – 2021 Public Comment 1

307.4

Proponent: Edward Steinfeld, IDEA Center, University at Buffalo, representing RESNA

Replace with the following:

SECTION 307
PROTRUDING OBJECTS

307.4 Vertical clearance. Vertical clearance shall be 80 inches (2030 mm) minimum. Rails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm). The leading edge of such rails or barrier shall be located 27 inches (685 mm) maximum above the floor. If the leading edge or such rails or barriers is less then 24 inches (610 mm) high such rail or barrier shall have a visual contrast of dark-on-light or light-on-dark from the adjacent surfaces.

Exception: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

REASON: All pedestrians are at risk in these conditions. The intent of the proposal is well meaning but overly complex, overly restrictive, and likely to be ineffective. As written, it can be interpreted to allow a barrier of 10 in. which can easily be missed, especially if it is a color that blends into the surroundings in a dimly lit area. It also can be interpreted to mean that there has to be a balustrade or grill of some sorts between 10 in. and 27 in. which is more protection than actually needed where there is no drop off. There is no need for an intermediate railing if the high railing is visible. The proposed modification simplifies the requirement, provides more flexibility in design, and adds the requirement for visibility, which is crucial for safety. The proposed text is similar to the stair visual contrast in Section 504.6.

Committee Action for Public Comment 1: No Action - Contrast is outside of scope of this change.

REPORT OF HEARING:

Modification (if any):

Committee Reason:

03-09 Steinfeld.doc

03-09 – 2021 Public Comment 2

307.4

Proponent: Chris Schexnayder

Further revise as follows:

SECTION 307
PROTRUDING OBJECTS

307.4 Vertical clearance. Vertical clearance shall be 80 inches (2030 mm) minimum. Rails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm). The leading edge of such rails or barrier shall be located between ~~10~~ 4 inches (255 mm) and 27 inches (685 mm) maximum above the floor.

Exception: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

REASON: There has never been any guidance in the standards as to what is the minimum height of a cane detection barrier. If it changes to 10"; there will be tons of non-compliant conditions all over the country. Recommend 4" as one method is to bolt a 4" angle iron to the floor.

Committee Action for Public Comment 2: No action

REPORT OF HEARING:

Modification (if any):

Committee Reason:

03-09 Schexnayder.doc

03-09 – 2021 Public Comment 3
307.4

Proponent: Marsha Mazz, representing Terminology Work Group

Further revise as follows:

SECTION 307
PROTRUDING OBJECTS

307.4 Vertical clearance. Vertical clearance shall be 80 inches (2030 mm) high minimum. Rails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm) high. The leading edge of such rails or barrier shall be located ~~between~~ 10 inches (255 mm) minimum and 27 inches (685 mm) maximum above the floor.

Exception: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

REASON: This is part of a proposal from the Terminology task group to replace 'between' in the standard. Between is not clear as to if the end points are included or not.

This same issue includes Sections 307.4, 404.2.2, 602.2.5, 602.3.4, and new 608.2.2.3.

Committee Action for Public Comment 3: AS 16-14-2- See committee action on E-01

REPORT OF HEARING:

Modification (if any):

Committee Reason: Editorial and consistent with committee action on E-01.

03-09 Terminology.doc

03-09 – 2021 Reconsideration
307.4

Proponent: Gene Boecker, Matt Lescher, Kim Paarlberg

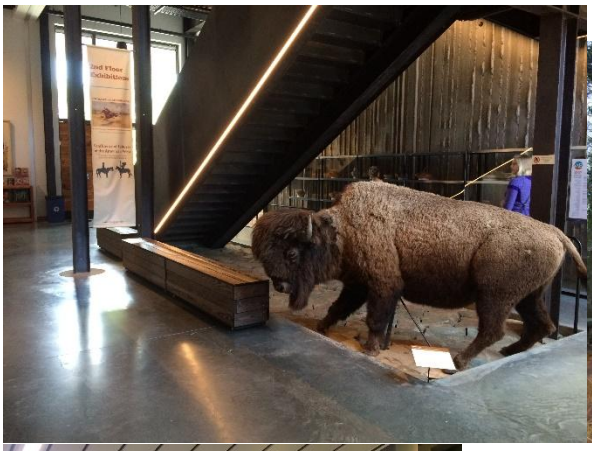
Further revise as follows:

SECTION 307
PROTRUDING OBJECTS

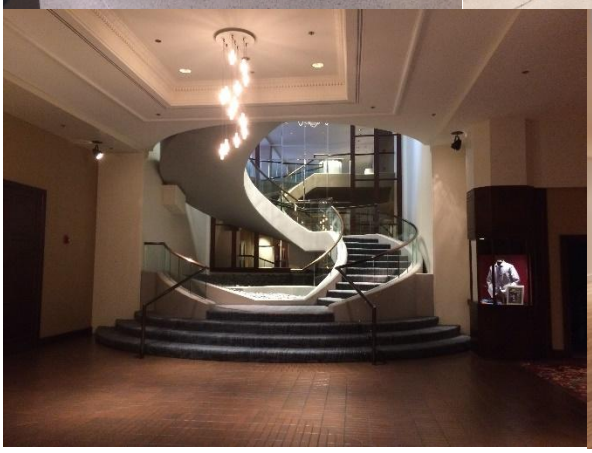
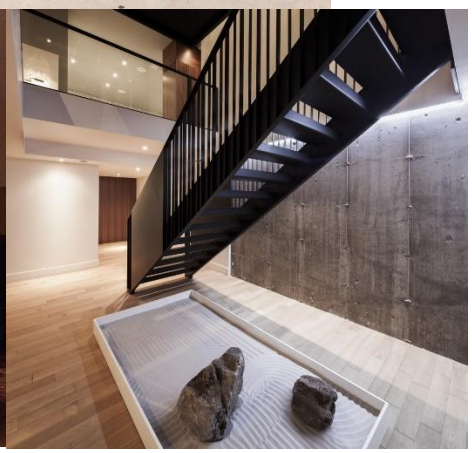
307.4 Vertical clearance. Vertical clearance shall be 80 inches (2030 mm) minimum. Rails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm). The leading edge of such rails or other barriers ~~barrier~~ shall be detectable and ~~located 10 inches~~ ~~(255 mm) minimum and~~ 27 inches (685 mm) maximum above the floor. Low rails, curbs or platforms utilized as barriers that are located where they can be tripping hazard shall not be less than 10 inches (255 mm) minimum measured vertically above the floor surface.

Exception: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

REASON:
Reason: The committee vote was split and stated that they felt the 10 inches might prohibit many current options that are reasonable. Therefore, we are asking for reconsideration as a compromise.
There are two concerns with the approved text.
1) By setting a minimum and maximum for a barrier, this will be read that a wall under a stairway is not permitted – that rail is required.
2) There is no justification for the 10 inches as the correct height. And it will prohibit current options that to meet the intent of the text.
The intent of this proposal is to allow for other options where acceptable. If they are located in a location where they would be a tripping hazard, they would be held to the 10 inches. This should address the concern where a platform or curb is incorrectly perceived as the bottom step of a stairway.





Committee Action for Reconsideration: AS 8-19-2 failed

REPORT OF HEARING: While the committee agreed that there was some confusion with the new language, the still felt the 10 inch bottom limit would help eliminate the low level rails and

barriers that were not sufficient to stop people from moving under a stairway or other overhead obstruction. Something to clarify in the future might be for exactly what is a circulation path.

Modification (if any):

Committee Reason:.

03-09 Terminology.doc

03-09 – 2021 1st draft Committee Action

Committee Action for First Ballot: AM by BC5 and PC3 16-14-2

REPORT OF HEARING:

Modification (if any):

307.4 Vertical clearance. Vertical clearance shall be 80 inches (2030 mm) high minimum. Rails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm) high. The leading edge of such rails or barrier shall be located ~~between~~ 10 inches (255 mm) minimum and 27 inches (685 mm) maximum above the floor.

Exception: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

Committee Reason: The modifications in BC5 and PC3 are editorial and consistent with E-01. The committee felt that no lower limit for detectability of barriers is a hazard. There were concerns raised that the 10" minimum would result in prohibiting many current options that are reasonable.

03-09 – 2021 2nd draft Ballot Comment 1

307.4

Proponent: Mary Winkler ASSP
Vote: negative with comment; AM

Further revise as follows:

307.4 Headroom clearance: Headroom clearance shall be 80 inches (2030 mm) high minimum. Rails or other barriers shall be provided where the headroom clearance is less than 80 inches (2030 mm) high. The leading edge of such rails or barrier shall be located at ~~10 inches (255 mm) minimum and~~ 27 inches (685) ~~maximum~~ minimum and 42 inches (1067 mm) maximum above the floor, with a midrail located between 10 inches (255 mm) minimum and 19 inches (483 mm) maximum above the floor.

REASON: A 10” minimum rail is a safety issue and trip hazard for all. Many severe injuries have occurred when rails are placed at 10” above the floor. They are not easily seen.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

03-09 – 2021 2nd draft Ballot Comment 2

307.4

Proponent: Kimberly Paarlberg, ICC
Vote: negative with comment; D

Request disapproval.

Staff note – disapproval of this item would restore the following original text.

307.4 Headroom clearance. Headroom clearance shall be 80 inches (2030 mm) minimum in height. Rails or other barriers shall be provided where the headroom clearance is less than 80 inches (2030 mm) high. The leading edge of such rails or barrier shall be located ~~10 inches (255 mm) minimum and~~ 27 inches (685 mm) maximum above the floor.

Exception: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

REASON: At this point I am not making another suggestion because a technical change will require another review period. I understand the issue, however, there are multiple solutions that are working that would not meet this new 10” criteria. During discussions some people felt that ‘headroom clearance’ should be applied to anyplace that people could walk – including outside where grass is under a stairway. And this is not just stairways. How can the committee say this is the right solution when we are not even agreeing on where this is applicable? This needs to be more fully reviewed and addressed next cycle.

Committee Action on 2nd draft Ballot Comment 2: AS/AM/D

REPORT OF HEARING:

Modification (if any):

Committee Reason:

03-09-2021 2nd 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 *03-09– 2021*		
Committee decision: AM	***Committee Vote at Meeting:*** 20-2-4	***Committee Vote on Ballot:35-5-1***
REPORT OF HEARING: Modification (if any): **Further modify as follows:** **307.4 Vertical clearance**. Vertical clearance shall be 80 inches (2030 mm) minimum. Rails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm). The leading edge of such rails or barrier shall be located between 10 inches (255 mm) and 27 inches (685 mm) maximum above the floor. ~~Where the clear distance between vertical supports for a horizontal element is greater than 12 inches (305 mm), an intermediate horizontal element shall be provided at a height between 10 inches (255 mm) and 18 inches (455 mm) above the floor.~~ **Exception**: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.		
Committee Reason: The modification to delete the last sentence of Section 307.4 is because there are many good options to make a barrier detectable at lower levels (e.g., 2nd bar are curb height, permanent seating) that would not comply with the proposed language. The proposal to add a lower end for the barriers would stop the allowances for barriers such as platforms that are step height or curbs on the floor that are tripping hazard or could be misinterpreted by person with visual impairments looking for the stairway. It was suggested that a possible modification would be "~~between~~ 10 inches minimum and 27 inches maximum" to pick up both ends of the range.		
Committee decision: AFM BC5 and PC3	***Committee Vote at Meeting: 16-14-2***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any):		
Committee Reason: The modifications in BC5 and PC3 are editorial and consistent with E-01. The committee felt that no lower limit for detectability of barriers is a hazard. There were concerns raised that the 10" minimum would result in prohibiting many current options that are reasonable.		
Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

03-10 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
03-10	Pitts	309.1	Rep 1 AS 29-0-2 Rep 2 AS 30-0-0	4-27-2023 11-9-2023	Reach over counter Final Action AFM by replacement PC that combined 03-10, 11-07 and 11-21

Comment	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Paarlberg, ICC	Affirmative	NA	11-9-2023	
BC2	Paarlberg, ICC	Affirmative	NA	11-9-2023	
PC1	Receptacle	AM	NA	11-9-2023	
PC2	Receptacle	AM	NA	11-9-2023	
PC3	Terminology	AM	NA	11-9-2023	Editorial
PC replacement	Receptacle	AM	AS 20-1-4	11-9-2023	Combined 03-10, 11-07 and 11-21

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

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Toji, HLAA	AM			

03-10 – 2021

309.1

Proponent: Ashley Pitts, Jensen Hughes, Inc.

Revise as follows:

SECTION 309
OPERABLE PARTS

309.1 General. Operable parts shall comply with Section 309.

Exceptions:

1. Receptacle outlets serving a dedicated use.
2. Where two or more receptacle outlets are provided in a kitchen above a length of countertop that is uninterrupted by a sink or appliance, one receptacle outlet shall not be required to comply with this section.

3. In a kitchen, where a clear floor space for a parallel approach cannot be located at a countertop in a corner between appliances, receptacle outlets over the counter-top shall not be required to comply with this section provided that the countertop area does not exceed 9 square feet (0.835 m2) maximum.

4. In a kitchen in an Accessible or Type A dwelling unit or sleeping unit, freestanding or slide-in appliances are not considered to impact the reach depth to receptacle outlets, switches or controls over the countertop.

~~4~~5. Floor receptacle outlets.

~~5~~6. HVAC diffusers.

~~6~~7. Controls mounted on ceiling fans.

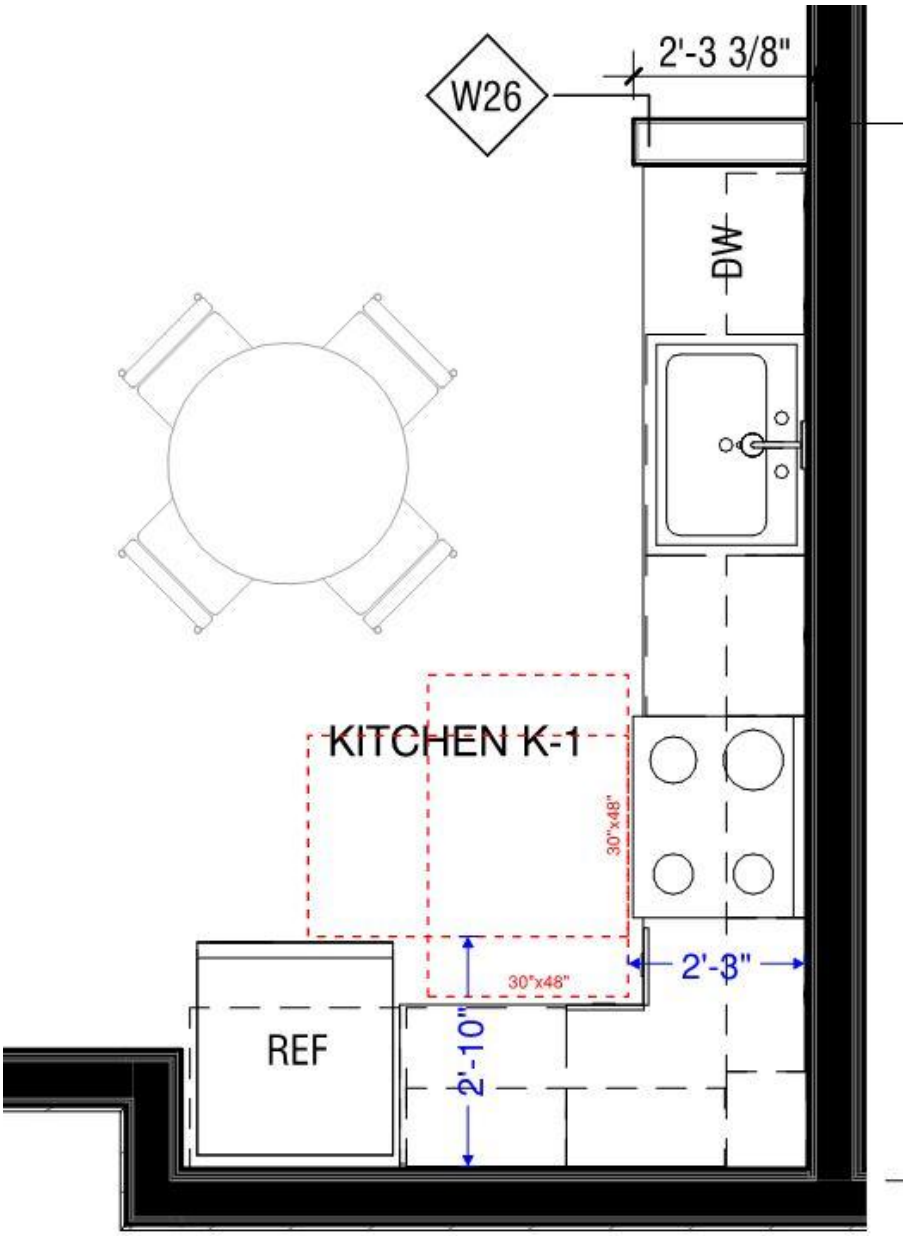
~~7~~8. Where redundant controls other than light switches are provided for a single element, one control in each space shall not be required to comply with this section.

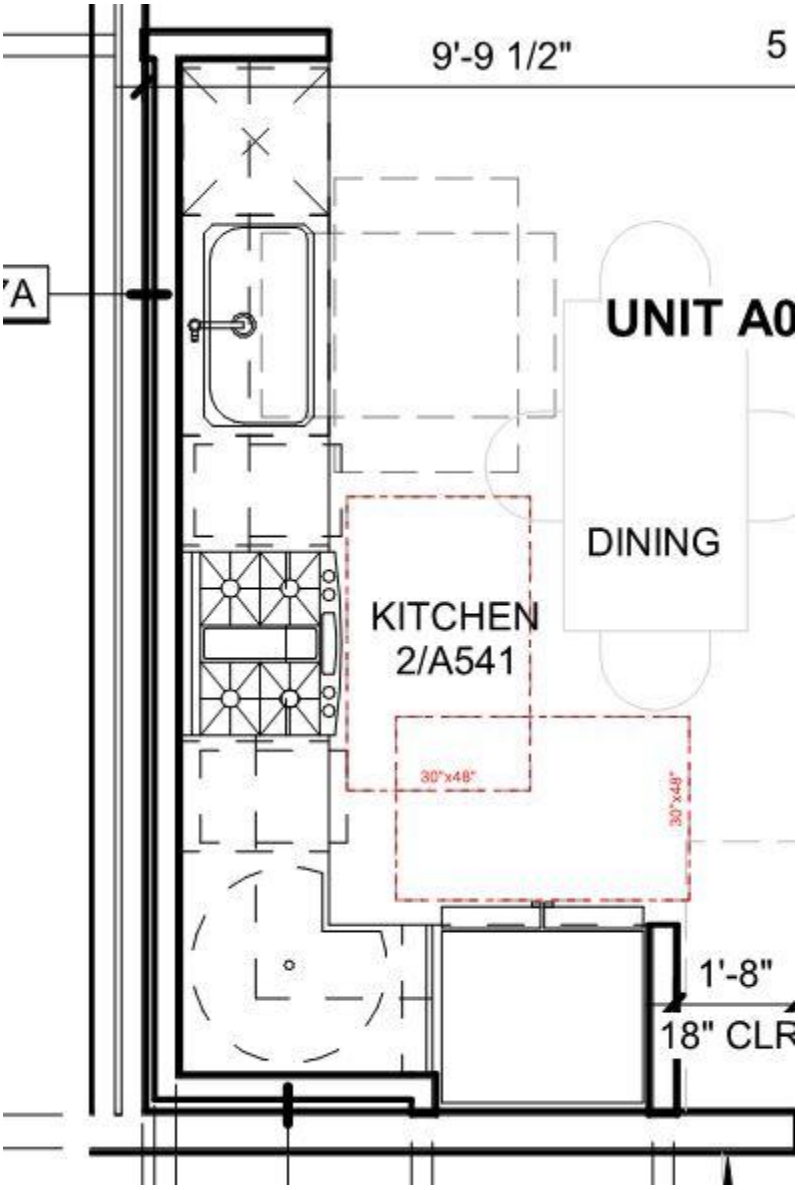
~~8~~9. Reset buttons and shut-offs serving appliances, piping and plumbing fixtures.

~~9~~10. Electrical panelboards shall not be required to comply with Section 309.4.

~~10~~11. Emergency aid devices, such as fire department hose connections, valve controls, gauges, police call boxes and annunciator panels shall not be required to comply with this section provided that they are used only for emergencies by emergency personnel acting in their official capacity.

REASON: The proposed change affects kitchens in Accessible and Type A dwelling units or sleeping units. The standard should clarify whether appliance protrusions, such as range and refrigerator protrusions, can be ignored for purposes of complying with the limitations for side reach over kitchen counters. Standard appliances such as ranges and refrigerators protrude beyond the face of the countertop several inches. In typical kitchen arrangements, there are commonly sections of countertop between these appliances, or between these appliances and other elements, where a parallel clear floor space cannot be positioned directly adjacent to the countertop due to an appliance protrusion. This issue does not only occur at “inside corners,” but also commonly occurs at linear kitchens with less than 48” between appliance protrusions.


W26
2'-3 3/8"
DW
KITCHEN K-1
30"x48"
30"x48"
2'-3"
2'-10"
REF



03-10 – 2021 Replacement 1
309.1

Proponent: Reach work group

Replace and revise as follows:

309.1 General. Operable parts shall comply with Section 309.
Exceptions:
1. Receptacle outlets serving a dedicated use.

~~2. Where two or more receptacle outlets are provided in a kitchen above a length of countertop that is uninterrupted by a sink or appliance, one receptacle outlet shall not be required to comply with this section.~~
~~3. In a kitchen, where a clear floor space for a parallel approach cannot be located at a countertop in a corner between appliances, receptacle outlets over the countertop shall not be required to comply with this section provided that the countertop area does not exceed 9 square feet (0.835 m2) maximum.~~
4. Floor receptacle outlets.
5. HVAC diffusers.
6. Controls mounted on ceiling fans.
7. Where redundant controls other than light switches are provided for a single element, one control in each space shall not be required to comply with this section.
8. Reset buttons and shut-offs serving appliances, piping and plumbing fixtures.
9. Electrical panelboards shall not be required to comply with Section 309.4.
10. Emergency aid devices, such as fire department hose connections, valve controls, gauges, police call boxes and annunciator panels shall not be required to comply with this section provided that they are used only for emergencies by emergency personnel acting in their official capacity.
11. Other than within or serving dwelling or sleeping units, receptacle outlets serving counters in kitchens shall not be required to comply with Section 309 where they comply with Section 804.6.

804.6 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall be located at the work surface. All other receptacle outlets serving the counters shall not be required to comply with Sections 309.2 and 309.3 where complying with at least one of the following:

1. Operable parts of receptacle outlets shall be 44 inches maximum above the floor.
2. Operable parts of receptacle outlets located on the side wall over the counter shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
3. Operable parts of receptacle outlets located at the face of the upper cabinets shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

Reason:
Replace 03-10–2021, 03-11–2021, 03-12–2021, 03-15–2021, 03-16–2021

This proposed change clarifies and streamlines the criteria for locating accessible receptacle outlets in public use and common use kitchens.

To a great extent, this proposal mirrors the Receptacles Task Group replacement proposal for Type A dwelling units, which was approved unanimously by the A117.1 Committee in the March 16, 2023, meeting. A full explanation of the changes can be found there. The additional changes and considerations which differ from that proposal are described here.

Coordination with Kitchens in Accessible Dwelling and Sleeping Units
The Receptacles Task Group differentiated between kitchens inside and outside of dwelling and sleeping units. It may end up being an editorial issue, but it is helpful for the discussion of the different locations of kitchens and will facilitate BALLOT COMMENT. The requirement for public use and common use kitchens was located in new Section 804.6, and new language for kitchens inside dwelling and sleeping units was added in Section 1102.9.

Kitchens and Kitchenettes, Kitchens Outside of Dwelling and Sleeping Units

The new language from this proposal, shown underlined here, is a response to the following points.

> In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309.

- The National Electrical Code does not provide minimum requirements for small appliance or convenience receptacles in kitchens outside of dwelling and sleeping units as it does for those inside dwelling and sleeping units.
- There is no definition for kitchen in A117.1, and the term "kitchenette" was almost completely removed from the standard during the last cycle. The Task Group avoided introducing any new definitions.
- The Task Group continues to operate with the intent that receptacle placement should not dictate kitchen design. Therefore, the Task Group wants to avoid requiring two accessible receptacle outlets where only one receptacle outlet would be required. These areas might include wet bars, coffee preparation areas and other small food and beverage preparation areas.

03-10 – 2021 Replacement 2
309.1

Proponent: Reach work group

Replace and revise as follows:

1102.9 Operable parts. Lighting controls, electrical panelboards, electrical switches and receptacle outlets, environmental controls, appliance controls, plumbing fixture controls and user controls for security or intercom systems shall comply with Section 309.

> **Exception:** Receptacle outlets serving counters in kitchens shall be permitted to comply with Section 1102.9.1.

1102.9.1 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall be located at the work

surface. All other receptacle outlets serving the counters shall comply with at least one of the following:

1. Operable parts of receptacle outlets shall be 44 inches maximum above the floor.
2. Operable parts of receptacle outlets located on the side wall over the counter shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
3. Operable parts of receptacle outlets located at the face of the upper cabinets shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

Reason:
Replace 03-10–2021, 03-11–2021, 03-12–2021, 03-15–2021, 03-16–2021

This proposed change simplifies and streamlines the criteria for locating receptacle outlets in kitchens of Accessible dwelling and sleeping units.

To a great extent, this proposal mirrors the Receptacles Task Group replacement proposal for Type A dwelling units, which was approved unanimously by the A117.1 Committee in the March 16, 2023, meeting. A full explanation of the changes can be found there. The additional changes and considerations which differ from that proposal are described here.

Coordination with Public Use and Common Use Kitchens

The Receptacles Task Group differentiated between kitchens inside and outside of dwelling and sleeping units. It may end up being an editorial issue, but it is helpful for the discussion of the different locations of kitchens and will facilitate BALLOT COMMENT. The requirement for public use and common use kitchens was located in new Section 804.6, and new language for kitchens inside dwelling and sleeping units was added in Section 1102.9.

Kitchens and Kitchenettes, Kitchens Outside of Dwelling and Sleeping Units

The new language from this proposal, shown underlined here, is a response to the following points.

> In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309.

- The National Electrical Code does not provide minimum requirements for small appliance or convenience receptacles in kitchens outside of dwelling and sleeping units as it does for those inside dwelling and sleeping units.
- There is no definition for kitchen in A117.1, and the term “kitchenette” was almost completely removed from the standard during the last cycle. The Task Group avoided introducing any new definitions.
- The Task Group continues to operate with the intent that receptacle placement should not dictate kitchen design. Therefore, the Task Group wants to avoid requiring two accessible receptacle outlets where only one receptacle outlet would be required. These areas might include wet bars, coffee preparation areas and other small food and beverage preparation areas.

Committee Action: Approval as Modified
Replacement 1 29-0-2
Replacement 2 30-0-0

REPORT OF HEARING:

Modification (if any):
Replace and revise as follows:

309.1 General. Operable parts shall comply with Section 309.
Exceptions:

1. Receptacle outlets serving a dedicated use.
2. ~~Where two or more receptacle outlets are provided in a kitchen above a length of countertop that is uninterrupted by a sink or appliance, one receptacle outlet shall not be required to comply with this section.~~
3. ~~In a kitchen, where a clear floor space for a parallel approach cannot be located at a countertop in a corner between appliances, receptacle outlets over the countertop shall not be required to comply with this section provided that the countertop area does not exceed 9 square feet (0.835 m2) maximum.~~
4. Floor receptacle outlets.
5. HVAC diffusers.
6. Controls mounted on ceiling fans.
7. Where redundant controls other than light switches are provided for a single element, one control in each space shall not be required to comply with this section.
8. Reset buttons and shut-offs serving appliances, piping and plumbing fixtures.
9. Electrical panelboards shall not be required to comply with Section 309.4.
10. Emergency aid devices, such as fire department hose connections, valve controls, gauges, police call boxes and annunciator panels shall not be required to comply with this section provided that they are used only for emergencies by emergency personnel acting in their official capacity.
11. Other than within or serving dwelling or sleeping units, receptacle outlets serving counters in kitchens shall not be required to comply with Section 309 where they comply with Section 804.6.

804.6 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall be located at the work surface. All other receptacle outlets serving the counters shall not be required to comply with Sections 309.2 and 309.3 where complying with at least one of the following:

1. Operable parts of receptacle outlets shall be 44 inches maximum above the floor.
2. Operable parts of receptacle outlets located on the side wall over the counter shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.

3. Operable parts of receptacle outlets located at the face of the upper cabinets shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

1102.9 Operable parts. Lighting controls, electrical panelboards, electrical switches and receptacle outlets, environmental controls, appliance controls, plumbing fixture controls and user controls for security or intercom systems shall comply with Section 309.

Exception: Receptacle outlets serving counters in kitchens shall be permitted to comply with Section 1102.9.1.

1102.9.1 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall be located at the work surface. All other receptacle outlets serving the counters shall comply with at least one of the following:

1. Operable parts of receptacle outlets shall be 44 inches maximum above the floor.
2. Operable parts of receptacle outlets located on the side wall over the counter shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
3. Operable parts of receptacle outlets located at the face of the upper cabinets shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

Staff Note: Approval of this proposal will also delete Figure 309.1 OPERABLE PARTS – EXCEPTION 3

Committee Reason: The requirements for shared kitchens and Accessible units are consistent with what the committee approved for Type A and Type B units. This addressed the concerns for access to electrical outlets for persons using the kitchen. There were several proposals that tried to address questions about appliances sticking out past the cabinet depth, countertop drip edge what are appropriate allowances. This will allow good kitchen design for all elements in the space and will provide good accessibility.

309.1-PITTS.doc

03-10 – 2021 Ballot Comments

BALLOT COMMENT 1- FIRST DRAFT: Proponent: Kimberly Paarlberg
Desired Action: Affirmative with comment
Modification: See Ballot Comment 1
BALLOT COMMENT 2- FIRST DRAFT: Proponent: Kimberly Paarlberg
Desired Action: Affirmative with comment
Modification: See Ballot Comment 2

03-10 – 2021 Ballet Comment 1
3039.1, 1102.9, 1102.9.1

Proponent: Kimberly Paarlberg, ICC

Further revise as follows:

309.1 General. Operable parts shall comply with Section 309.
Exceptions:
1. Receptacle outlets serving a dedicated use.
2. Floor receptacle outlets.
3. HVAC diffusers.
4. Controls mounted on ceiling fans.
5. Where redundant controls other than light switches are provided for a single element, one control in each space shall not be required to comply with this section.
6. Reset buttons and shut-offs serving appliances, piping and plumbing fixtures.
7. Electrical panelboards shall not be required to comply with Section 309.4.
8. Emergency aid devices, such as fire department hose connections, valve controls, gauges, police call boxes and annunciator panels shall not be required to comply with this section provided that they are used only for emergencies by emergency personnel acting in their official capacity.
9. ~~Other than within or serving dwelling or sleeping units,~~ receptacle outlets serving counters in kitchens shall not be required to comply with Section 309 where they comply with Section 804.6.

804.6 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall be located at the work surface. All other receptacle outlets serving the counters shall not be required to comply with Sections 309.2 and 309.3 where complying with at least one of the following:
1. Operable parts of receptacle outlets shall be 44 inches maximum above the floor.
2. Operable parts of receptacle outlets located on the side wall over the counter shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
3. Operable parts of receptacle outlets located at the face of the upper cabinets shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

1102.9 Operable parts. Lighting controls, electrical panelboards, electrical switches and receptacle outlets, environmental controls, appliance controls, plumbing fixture controls and user controls for security or intercom systems shall comply with Section 309.

~~**Exception:** Receptacle outlets serving counters in kitchens shall be permitted to comply with Section 1102.9.1.~~

~~**1102.9.1 Receptacle Outlets Serving Counters in Kitchens.** In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall be located at the work surface. All other receptacle outlets serving the counters shall comply with at least one of the following:~~

1. ~~Operable parts of receptacle outlets shall be 44 inches maximum above the floor.~~
2. ~~Operable parts of receptacle outlets located on the side wall over the counter shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.~~
3. ~~Operable parts of receptacle outlets located at the face of the upper cabinets shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.~~

REASON: I strongly support the work done by the Reach Over Counter Task Group. I have a suggestion that I believe is editorial to remove redundant language. Since the committee voted to approve the requirements for 309.1 and 1102.9.1 to be the same, there is no need to repeat the information.

Committee Action for Ballot Comment 1: NA – See combined proposal

REPORT OF HEARING:

Modification (if any):

Committee Reason:

03-10 Paarlberg 1.doc

03-10 – 2021 Ballot Comment 2

309.1, 1102.9

Proponent: Kimberly Paarlberg, ICC

Further revise as follows:

309.1 General. Operable parts shall comply with Section 309.

Exceptions: The operable parts of the following are not required to comply with Section 309:

1. Receptacle outlets serving a dedicated use.
2. Floor receptacle outlets.
3. HVAC diffusers.

4. Controls mounted on ceiling fans.
5. Where redundant controls other than light switches are provided for a single element, one control in each space shall not be required to comply with this section.
6. Reset buttons and shut-offs serving appliances, piping and plumbing fixtures.
7. Electrical panelboards shall not be required to comply with Section 309.4.
8. Emergency aid devices, such as fire department hose connections, valve controls, gauges, police call boxes and annunciator panels shall not be required to comply with this section provided that they are used only for emergencies by emergency personnel acting in their official capacity.
9. Other than within or serving dwelling or sleeping units, receptacle outlets serving counters in kitchens shall not be required to comply with Section 309 where they comply with Section 804.6.

804.6 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall be located at the work surface. All other receptacle outlets serving the counters shall not be required to comply with Sections 309.2 and 309.3 where complying with at least one of the following:

1. Operable parts of receptacle outlets shall be 44 inches maximum above the floor.
2. Operable parts of receptacle outlets located on the side wall over the counter shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
3. Operable parts of receptacle outlets located at the face of the upper cabinets shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

1102.9 Operable parts. Operable part of Lighting controls, electrical panelboards, electrical switches and receptacle outlets, environmental controls, appliance controls, plumbing fixture controls and user controls for security or intercom systems shall comply with Section 309.

Exception: Receptacle outlets serving counters in kitchens shall be permitted to comply with Section 1102.9.1.

1102.9.1 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall be located at the work surface. All other receptacle outlets serving the counters shall comply with at least one of the following:

1. Operable parts of receptacle outlets shall be 44 inches maximum above the floor.
2. Operable parts of receptacle outlets located on the side wall over the counter shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
3. Operable parts of receptacle outlets located at the face of the upper cabinets shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

REASON: 309.1 and 1102.9 – adding 'the operable parts' at the beginning of the exception in the exceptions to 309.1 and the first sentence to Section 1102.9 just makes the requirements more precise and consistent with the reference to Section 309.
This would be consistent with the committee action on 03-16-2021. There will be a similar proposal for 1103.9 (10-03) and 1104.9.

Committee Action Ballot Comment 2: NA – See combined proposal

REPORT OF HEARING:

Modification (if any):

Committee Reason:

03-10 Paarlberg 2.doc

03-10 – 2021 Public Comment 1
804.6

Proponent: Dan Buuck, National Association of Home Builders (NAHB), representing Receptacle Task Group

Further revise as follows:

SECTION 804
KITCHENS

804.6 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall serve ~~be located at~~ the work surface. The operable parts of each additional ~~All other~~ receptacle outlet ~~outlets~~ serving the counters shall not be required to comply with Sections 309.2 and 309.3 where complying with at least one of the following:

1. ~~Operable parts of receptacle outlets~~ They shall be 44 inches maximum above the floor.
2. ~~Operable parts of receptacle outlets~~ Where located on the side wall over the counter, they shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
3. ~~Operable parts of receptacle outlets~~ Where located at the face of the upper cabinets, they shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

REASON: During committee discussion, it was suggested that the sections on receptacles be reorganized to reduce repetition. To do this, the language on "operable parts" was added to the main paragraph and removed from the list of items.

Another suggestion was to align the language by changing the phrase from "located at the work surface" to "serve the work surface" similar to what is used for counters. This term aligns with the National Electrical Code which will lead to more uniform enforcement.

Committee Action for Public Comment 1: NA – See combined proposal

REPORT OF HEARING:

Modification (if any):

Committee Reason:

03-10 Part 1 Buuck.doc

03-10 – 2021 Public Comment 2

1102.9, 1102.9.1

Proponent: Dan Buuck, National Association of Home Builders (NAHB), representing Receptacle Task Group

Further revise as follows:

SECTION 1102
ACCESSIBLE UNITS

1102.9 Operable Parts. Operable parts of lighting ~~Lighting~~ controls, electrical panelboards, electrical switches, and receptacle outlets, environmental controls, appliance controls, plumbing fixture controls, and user controls for security intercom systems shall comply with Section 309.

Exception: Operable parts of receptacle ~~Receptacle~~ outlets serving counters in kitchens shall be permitted to comply with Section 1102.9.1.

1102.9.1 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall serve ~~be located at~~ the work surface. The operable parts of each additional ~~All other~~ receptacle outlet ~~outlets~~ serving the counters shall not be required to comply with Sections 309.2 and 309.3 where complying ~~comply~~ with at least one of the following:

1. ~~Operable parts of receptacle outlets~~ They shall be 44 inches maximum above the floor.

2. ~~Operable parts of receptacle outlets~~ Where located on the side wall over the counter, they shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
3. ~~Operable parts of receptacle outlets~~ Where located at the face of the upper cabinets, they shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

REASON: The Task Group felt it was logical to call out the operable parts of the items listed in 1102.9 and its exception, since it is only the operable parts of those items that need to comply.

During committee discussion, it was suggested that the sections on receptacles be reorganized to reduce repetition. To do this, the language on "operable parts" in Section 1102.9.1 was added to the main paragraph and removed from the list of items.

Another suggestion was to align the language by changing the phrase from "located at the work surface" to "serve the work surface" similar to what is used for counters. This term aligns with the National Electrical Code which will lead to more uniform enforcement.

The language limiting the required compliance to Sections 309.2 and 309.3 was added to correlate with the approved language in Section 804.6. Without this limitation, the operation requirements (one hand, no tight grasping, pinching, twisting of the wrist) would also be exempted.

Committee Action for Public Comment 2: NA – See combined proposal

REPORT OF HEARING:

Modification (if any):

Committee Reason:

03-10 Part 2 Buuck.doc

03-10 – 2021 Public Comment 3

804.6

Proponent: Marsha Mazz, representing the Terminology Task Group

Further revise as follows:

SECTION 804
KITCHENS

804.6 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least one receptacle outlet serving counters shall comply with ~~Section 309~~ operable parts. Where two or more receptacle outlets serving counters are provided, at least two shall comply with ~~Section 309~~ operable parts. Where a work surface is required by Section 804.3, at least one such receptacle

outlet shall be located at the work surface. All other receptacle outlets serving the counters shall not be required to comply with Sections 309.2 and 309.3 where complying with at least one of the following:

1. Operable parts of receptacle outlets shall be 44 inches maximum above the floor.
2. Operable parts of receptacle outlets located on the side wall over the counter shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
3. Operable parts of receptacle outlets located at the face of the upper cabinets shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

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.

Committee Action for Public Comment 3: NA – See combined proposal

REPORT OF HEARING:

Modification (if any):

Committee Reason:

03-10 Terminology.doc

03-10 – 2021 Public Comment Replacement

309.1, 804.6, 1102.9, 1102.9.1, 1103.9, 1103.9.1, 1104.9

Proponent: Marsha Mazz, representing the Terminology Task Group
Further revise as follows:

309.1 General. *Operable parts* shall comply with Section 309.
Exceptions: The *operable parts* of the following items are not required to comply with Section 309:

1.Receptacle outlets serving a dedicated use.
2.Floor receptacle outlets.
3.HVAC diffusers.
4.Controls mounted on ceiling fans.
5.Where redundant controls other than light switches are provided for a single element, one control in each space shall not be required to comply with this section.
6.Reset buttons and shut-offs serving appliances, piping and plumbing fixtures.
7.Electrical panelboards shall not be required to comply with Section 309.4.
8.Emergency aid devices, such as fire department hose connections, valve controls, gauges, police call boxes and annunciator panels shall not be required to comply with this

section provided that they are used only for emergencies by emergency personnel acting in their official capacity.

~~9.Other than within or serving dwelling or sleeping units, receptacle~~ Receptacle outlets serving counters in kitchens shall not be required to comply with Section 309 where they comply with Section 804.6.

804.6 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least one receptacle outlet serving counters shall comply with ~~Section 309~~ *operable parts*. Where two or more receptacle outlets serving counters are provided, at least two shall comply with ~~Section 309~~ *operable parts*. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall serve ~~be located at~~ the work surface. The *operable parts* of each additional ~~All other~~ receptacle outlet ~~outlets~~ serving the counters shall not be required to comply with Sections 309.2 and 309.3 where complying with at least one of the following:

1. ~~Operable parts of receptacle outlets~~ They shall be 44 inches maximum above the floor.
2. ~~Operable parts of receptacle outlets~~ Where located on the side wall over the counter, they shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
3. ~~Operable parts of receptacle outlets~~ Where located at the face of the upper cabinets, they shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

1102.9 Operable parts. *Operable parts* of lighting ~~Lighting~~ controls, electrical panelboards, electrical switches and receptacle outlets, environmental controls, appliance controls, plumbing fixture controls and user controls for security or intercom systems shall comply with Section 309.

~~**Exception:** Receptacle outlets serving counters in kitchens shall be permitted to comply with Section 1102.9.1.~~

~~**1102.9.1 Receptacle Outlets Serving Counters in Kitchens.** In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall be located at the work surface. All other receptacle outlets serving the counters shall comply with at least one of the following:~~

~~1. Operable parts of receptacle outlets shall be 44 inches maximum above the floor.~~
~~2. Operable parts of receptacle outlets located on the side wall over the counter shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.~~
~~3. Operable parts of receptacle outlets located at the face of the upper cabinets shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.~~

SECTION 1103
TYPE A UNITS

1103.9 Operable Parts. *Operable parts* of lighting ~~Lighting~~ controls, electrical panelboards, electrical switches, and receptacle outlets, environmental controls, appliance controls, plumbing fixture controls, and user controls for security intercom systems shall comply with ~~Section 309~~ *operable parts*.

> **Exception:** *Operable parts* of receptacle ~~Receptacle~~ outlets serving counters in kitchens shall be permitted to comply with Section 1103.9.1.

1103.9.1 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least two receptacle outlets serving counters shall comply with ~~Section 309~~ *operable parts*. Where a work surface is required by Section 1103.12.3, at least one such receptacle outlet shall serve ~~be located at~~ the work surface. The *operable parts* of each additional ~~All other~~ receptacle outlet ~~outlets~~ serving the counters shall comply with at least one of the following:

1. ~~Operable parts of receptacle outlets~~ They shall be 44 inches maximum above the floor.
2. ~~Operable parts of receptacle outlets~~ Where located on the side wall over the counter, they shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
3. ~~Operable parts of receptacle outlets~~ Where located at the face of the upper cabinets, they shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

SECTION 1104
TYPE B UNITS

1104.9 Operable Parts. *Operable parts* of lighting ~~Lighting~~ controls, electrical switches and receptacle outlets, environmental controls, electrical panelboards, and user controls for security or intercom systems shall comply with Sections 309.3 and 1104.1.1.

> **Exception ~~Exceptions~~:** The *operable parts* of the following items are not required to comply with Sections 309.3 and 1104.1.1:
>
> 1. Receptacle outlets serving a dedicated use.
> 2. Floor receptacle outlets.
> 3. HVAC diffusers.
> 4. Controls mounted on ceiling fans.
> 5. Controls or switches mounted on appliances.
> 6. Plumbing fixture controls.
> 7. Reset buttons and shut-offs serving appliances, piping and plumbing fixtures.
> 8. One control in each space where ~~Where~~ redundant controls other than light switches are provided for a single element~~, one control in each space shall not be required to comply with Sections 309.3 and 1104.1.1~~.
> 9. ~~Operable parts of lighting~~ Lighting controls, electrical switches, and receptacle outlets serving counters in kitchens and bathrooms complying with either of the following: ~~shall not be required to comply with Sections 309.3 and 1104.1.1 where~~
>
> 9.1. Where located 44 inches maximum above the floor.

~~10. Operable parts of lighting controls, electrical switches, and receptacle outlets serving counters in kitchens and bathrooms shall not be required to comply with Sections 309.3 and 1104.1.1 where~~

9.2. Where located on the side wall over the counter 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.

~~11.~~ 10. ~~Operable parts of receptacle~~ Receptacle outlets serving counters in kitchens and bathrooms ~~shall not be required to comply with Sections 309.3 and 1104.1.1~~ where located at the face of the upper cabinets 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

03-10 – 2021 1st draft Committee Action

Committee Action for First Ballot: Final Action AFM by replacement PC that combined 03-10, 11-07 and 11-21 20-1-4

REPORT OF HEARING:

Modification (if any): See Public Comment replacement

Committee Reason: This is a combination of the ballot and public comment submitted for 03-10, 11-07 and 11-21, all dealing with receptacle outlets in kitchens. The three proponents involved have combined their proposals. These are primarily editorial and coordination revisions. Redundant language is removed.

03-10 – 2021 2nd draft Ballot Comment 1

309.1, 503.1.1

Proponent: Sharon Toji, HLAA
Vote: affirmative with comment, AM

Further revise as follows: (NO SUGGESTION)

309.1 General. *Operable parts* shall comply with Section 309.
Exceptions: The *operable parts* of the following items are not required to comply with Section 309:

1. Receptacle outlets serving a dedicated use.
2. Floor receptacle outlets.
3. HVAC diffusers.
4. Controls mounted on ceiling fans.
5. Where redundant controls other than light switches are provided for a single *element*, one control in each space shall not be required to comply with Section 309.
6. Reset buttons and shut-offs serving appliances, piping or plumbing fixtures.
7. Electrical panelboards shall not be required to comply with Section 309.4.

8. Emergency aid devices, such as fire department hose connections, valve controls, gauges, police call boxes and annunciator panels shall not be required to comply with Section 309 provided that they are used only for emergencies by emergency personnel acting in their official capacity.
9. Receptacle outlets serving counters in kitchens shall not be required to comply with Section 309 where they comply with Section 804.

503.1.1 Operable parts. Controls on the *EV charging station*, including card readers, shall comply with *operable parts*. Where numeric keys or display screens are provided, they shall comply with Section 707.5 through 707.10. Where two-way communication is integrated in the *EV charging station*, they shall comply with Section 708.

REASON: Standards for electric car chargers state that they must comply with operable parts, but they are not mentioned at all in the section on operable parts. The nozzles are often very difficult for people with weak or arthritic hands and fingers to attach to the vehicle and remove from and reattach to the charging station. Therefore, they shout be mentioned in this section.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

03-10 – 2021 2nd 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 *03-10– 2021*		
Committee decision: AM	***Committee Vote at Meeting:*** Replacement 1 29-0-2 Replacement 2 30-0-0	***Committee Vote on Ballot:42-1-2***
REPORT OF HEARING: Modification (if any): **Replace and revise as follows:** **309.1 General.** Operable parts shall comply with Section 309. **Exceptions:** 1. Receptacle outlets serving a dedicated use.		

Report for *03-10– 2021*

~~2. Where two or more receptacle outlets are provided in a kitchen above a length of countertop that is uninterrupted by a sink or appliance, one receptacle outlet shall not be required to comply with this section.~~

~~3. In a kitchen, where a clear floor space for a parallel approach cannot be located at a countertop in a corner between appliances, receptacle outlets over the countertop shall not be required to comply with this section provided that the countertop area does not exceed 9 square feet (0.835 m2) maximum.~~

4. Floor receptacle outlets.
5. HVAC diffusers.
6. Controls mounted on ceiling fans.
7. Where redundant controls other than light switches are provided for a single element, one control in each space shall not be required to comply with this section.
8. Reset buttons and shut-offs serving appliances, piping and plumbing fixtures.
9. Electrical panelboards shall not be required to comply with Section 309.4.
10. Emergency aid devices, such as fire department hose connections, valve controls, gauges, police call boxes and annunciator panels shall not be required to comply with this section provided that they are used only for emergencies by emergency personnel acting in their official capacity.
11. Other than within or serving dwelling or sleeping units, receptacle outlets serving counters in kitchens shall not be required to comply with Section 309 where they comply with Section 804.6.

804.6 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall be located at the work surface. All other receptacle outlets serving the counters shall not be required to comply with Sections 309.2 and 309.3 where complying with at least one of the following:

1. Operable parts of receptacle outlets shall be 44 inches maximum above the floor.
2. Operable parts of receptacle outlets located on the side wall over the counter shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
3. Operable parts of receptacle outlets located at the face of the upper cabinets shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

1102.9 Operable parts. Lighting controls, electrical panelboards, electrical switches and receptacle outlets, environmental controls, appliance controls, plumbing fixture controls and user controls for security or intercom systems shall comply with Section 309.

Exception: Receptacle outlets serving counters in kitchens shall be permitted to comply with Section 1102.9.1.

1102.9.1 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall be located at the work surface. All other receptacle outlets serving the counters shall comply with at least one of the following:

1. Operable parts of receptacle outlets shall be 44 inches maximum above the floor.
2. Operable parts of receptacle outlets located on the side wall over the counter shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
3. Operable parts of receptacle outlets located at the face of the upper cabinets shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

Staff Note: Approval of this proposal will also delete Figure 309.1 OPERABLE PARTS – EXCEPTION 3

Committee Reason: The requirements for shared kitchens and Accessible units are consistent with what the committee approved for Type A and Type B units. This addressed the concerns for access to electrical outlets for persons using the kitchen. There were several proposals that tried to address questions about appliances sticking out past the cabinet depth, countertop drip edge what are appropriate allowances. This will allow good kitchen design for all elements in the space and will provide good accessibility.

Committee decision: AFM by replacement PC	***Committee Vote at Meeting: 20-1-4***	***Committee Vote on Ballot:***

REPORT OF HEARING – FIRST DRAFT

Modification (if any):

Further revise as follows:

309.1 General. *Operable parts* shall comply with Section 309.

Exceptions: The *operable parts* of the following items are not required to comply with Section 309:

1.Receptacle outlets serving a dedicated use.
2.Floor receptacle outlets.
3.HVAC diffusers.
4.Controls mounted on ceiling fans.
5.Where redundant controls other than light switches are provided for a single element, one control in each space shall not be required to comply with this section.
6.Reset buttons and shut-offs serving appliances, piping and plumbing fixtures.
7.Electrical panelboards shall not be required to comply with Section 309.4.
8.Emergency aid devices, such as fire department hose connections, valve controls, gauges, police call boxes and annunciator panels shall not be required to comply with this section provided that they are used only for emergencies by emergency personnel acting in their official capacity.
~~9.Other than within or serving dwelling or sleeping units, receptacle~~ Receptacle outlets serving counters in kitchens shall not be required to comply with Section 309 where they comply with Section 804.6.

Report for *03-10– 2021*

804.6 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least one receptacle outlet serving counters shall comply with ~~Section 309~~ *operable parts*. Where two or more receptacle outlets serving counters are provided, at least two shall comply with ~~Section 309~~ *operable parts*. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall serve ~~be located at~~ the work surface. The *operable parts* of each additional ~~All other~~ receptacle outlet ~~outlets~~ serving the counters shall not be required to comply with Sections 309.2 and 309.3 where complying with at least one of the following:

~~4. Operable parts of receptacle outlets~~ They shall be 44 inches maximum above the floor.

4. ~~Operable parts of receptacle outlets~~ Where located on the side wall over the counter, they shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
5. ~~Operable parts of receptacle outlets~~ Where located at the face of the upper cabinets, they shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

1102.9 Operable parts. *Operable parts* of lighting ~~Lighting~~ controls, electrical panelboards, electrical switches and receptacle outlets, environmental controls, appliance controls, plumbing fixture controls and user controls for security or intercom systems shall comply with Section 309.

~~Exception:~~ ~~Receptacle outlets serving counters in kitchens shall be permitted to comply with Section 1102.9.1.~~

~~1102.9.1 Receptacle Outlets Serving Counters in Kitchens.~~ ~~In kitchens, at least one receptacle outlet serving counters shall comply with Section 309. Where two or more receptacle outlets serving counters are provided, at least two shall comply with Section 309. Where a work surface is required by Section 804.3, at least one such receptacle outlet shall be located at the work surface. All other receptacle outlets serving the counters shall comply with at least one of the following:~~

~~1. Operable parts of receptacle outlets shall be 44 inches maximum above the floor.~~
~~2. Operable parts of receptacle outlets located on the side wall over the counter shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.~~
~~3. Operable parts of receptacle outlets located at the face of the upper cabinets shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.~~

SECTION 1103
TYPE A UNITS

1103.9 Operable Parts. *Operable parts* of lighting ~~Lighting~~ controls, electrical panelboards, electrical switches, and receptacle outlets, environmental controls, appliance controls, plumbing fixture controls, and user controls for security intercom systems shall comply with ~~Section 309~~ *operable parts*.

Exception: *Operable parts* of receptacle ~~Receptacle~~ outlets serving counters in kitchens shall be permitted to comply with Section 1103.9.1.

1103.9.1 Receptacle Outlets Serving Counters in Kitchens. In kitchens, at least two receptacle outlets serving counters shall comply with ~~Section 309~~ *operable parts*. Where a work surface is required by Section 1103.12.3, at least one such receptacle outlet shall serve ~~be located at~~ the work surface. The *operable parts* of each additional ~~All other~~ receptacle outlet ~~outlets~~ serving the counters shall comply with at least one of the following:

1. ~~Operable parts of receptacle outlets~~ They shall be 44 inches maximum above the floor.
2. ~~Operable parts of receptacle outlets~~ Where located on the side wall over the counter, they shall be 48 inches maximum above the floor and 15 inches maximum from front edge of the counter.
3. ~~Operable parts of receptacle outlets~~ Where located at the face of the upper cabinets, they shall be 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.

SECTION 1104
TYPE B UNITS

1104.9 Operable Parts. *Operable parts* of lighting ~~Lighting~~ controls, electrical switches and receptacle outlets, environmental controls, electrical panelboards, and user controls for security or intercom systems shall comply with Sections 309.3 and 1104.1.1.

Exception ~~Exceptions~~: The *operable parts* of the following items are not required to comply with Sections 309.3 and 1104.1.1:

1. Receptacle outlets serving a dedicated use.
2. Floor receptacle outlets.
3. HVAC diffusers.
4. Controls mounted on ceiling fans.

Report for *03-10– 2021*		
5.Controls or switches mounted on appliances. 6.Plumbing fixture controls. 7.Reset buttons and shut-offs serving appliances, piping and plumbing fixtures. 8. One control in each space where ~~Where~~ redundant controls other than light switches are provided for a single element~~, one control in each space shall not be required to comply with Sections 309.3 and 1104.1.1~~. 9. ~~Operable parts of lighting~~ Lighting controls, electrical switches, and receptacle outlets serving counters in kitchens and bathrooms complying with either of the following: ~~shall not be required to comply with Sections 309.3 and 1104.1.1 where~~ 9.1. Where located 44 inches maximum above the floor. ~~Operable parts of lighting controls, electrical switches, and receptacle outlets serving counters in kitchens and bathrooms shall not be required to comply with Sections 309.3 and 1104.1.1 where~~ 9.2. Where located on the side wall over the counter 48 inches maximum above the floor and 15 inches maximum from front edge of the counter. 10. ~~Operable parts of receptacle~~ Receptacle outlets serving counters in kitchens and bathrooms ~~shall not be required to comply with Sections 309.3 and 1104.1.1~~ where located at the face of the upper cabinets 54 inches maximum from the floor and 15 inches maximum from the front edge of the counter and with a forward plug insertion.		
Committee Reason: This is a combination of the ballot and public comment submitted for 03-10, 11-07 and 11-21, all dealing with receptacle outlets in kitchens. The three proponents involved have combined their proposals. These are primarily editorial and coordination revisions. Redundant language is removed.		
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:		

CHAPTER 4
ACCESSIBLE ROUTES

04-19 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
04-19	Paarlberg	404.5.1	D 23-1-0	5-19-2022 11-9-2023	AM by BC1

Comment 1st draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Lescher, NATO	Negative	AM 16-7-4	11-9-2023	

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

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Mazz, USA	AM			
BC2	Schorr, ATBCB	AM			

04-19 – 2021
404.5.1

Proponent: Kimberly Paarlberg, International Code Council

Revise text as follows:

SECTION 405
RAMPS

405.1 General. Ramps along accessible routes shall comply with Section 405.

EXCEPTIONS:

1. In assembly areas, aisle ramps adjacent to seating and not serving elements required to be on an accessible route shall not be required to comply with Section 405.
2. Exterior sidewalks that connect elements on a site and that are a minimum of 48 inches wide and slope with grade are not required to comply with Section 405.

REASON: In hilly sites, sidewalks that move up with the grade may be sloped enough to be considered a ramp. However, to put curb protection and handrails on these sidewalks will block

access to street parking and adjacent building entrances. This exception is consistent with Public Right-of-way where dealing with sloped streets.

Committee Action: Disapproval 23-1-0

REPORT OF HEARING:
Modification (if any):

Committee Reason: This allowance is too broad. While it is permitted in PROWAG, an open site should be able to design for the standard accessible route without this exception for slope of grade.

404.3-PAARLBERG.doc

04-19 – 2021 Ballot Comments

BALLOT COMMENT 1- FIRST DRAFT: *Proponent:* **Matt Lescher representing NATO**
Desired Action: Negative with comment
Modification:
Reason: This code change is needed for large office campuses, college campuses, and residential developments which have streets but are not located in the PROW. The grade should be tied to the grade of the street.

04-19 – 2021 1st draft Committee Action

Committee Action for First Ballot: AM 16-7-4
Modification 16-8-3

REPORT OF HEARING:

Modification (if any):
Further modify as follows:

SECTION 405
RAMPS

405.1 General. Ramps along accessible routes shall comply with Section 405.

EXCEPTIONS:

1. In assembly areas, aisle ramps adjacent to seating and not serving elements required to be on an accessible route shall not be required to comply with Section 405.
2. Exterior sidewalks that connect elements on a site and that are a minimum of 48 inches wide and slope with grade of an existing road or street are not required to comply with Section 405.

Committee Reason: The modification limited the exception to existing facilities – this is reasonable because the slope of the site is existing and regrading could be substantial. This exception is needed for large office campuses, college campuses, and residential developments which have streets.

04-19 – 2021 2nd draft Ballot Comment 1

405.1

Proponent: Marsha Mazz USA
Vote: negative with comment; am

Further revise as follows:

405.1 General. *Ramp*s along *accessible* routes shall comply with Section 405.

Exceptions:

1. In *assembly area*s, aisle *ramp*s adjacent to seating and not serving *element*s required to be on an *accessible* route shall not be required to comply with Section 405.
2. Where exterior ~~sidewalks~~ ramps 48 inches (1220 mm) minimum in width overlap a highway right-of-way ~~that~~ and connect *element*s on a *site*, ~~and that are 48 inches (1220 mm) minimum~~ that portion of the ramp overlapping the highway right-of-way shall be permitted to ~~and~~ slope with the grade of an existing ~~road or street are not required to comply with Section 405~~ highway within the same right-of-way.

REASON: The source for new Exception 2 is the Access Board's Public Rights-of-Way Accessibility Guidelines (PROWAG) – not yet adopted by DOJ and not yet enforceable. The term "sidewalk" is undefined in the A117.1 Standard but has very specific meaning in the PROWAG. Readers not familiar with terminology used in the public right-of-way tend to confuse and walk or walkway that is located within the property lines with a sidewalk which would be located within a public right-of-way.

In PROWAG, the degree of slope permitted on a pedestrian access route depends on whether the pedestrian access route is within or not within a "highway right-of-way". A pedestrian access route must be within a highway right-of-way before it is permitted to mirror the grade established for the adjacent street (see PROWAG excerpt below taken from https://www.access-board.gov/prowag/technical.html#r302-pedestrian-access-routes).

R302.4.1 Within Highway Right-of-Way
Except as provided in R302.4.3, where a *pedestrian access route* is contained within a *highway* right-of-way, the *grade* of the *pedestrian access route* shall not exceed 1:20 (5.0%).
EXCEPTION: Where the *grade* established for the adjacent *street* exceeds 1:20 (5.0%), the *grade* of the *pedestrian access route* shall not exceed the *grade* established for the adjacent *street*.

R302.4.2 Not Within Highway Right-of-Way
Where a *pedestrian access route* is not contained within a *highway* right-of-way, the *grade* of the *pedestrian access route* shall not exceed 1:20 (5.0%).

Both the building code and the 2010 ADA Standards are intended to apply to construction on a site, not in the public right-of-way. However, there are times when a required accessible route may overlap with the public right-of-way. I would not expect this exception to apply under any other condition. Typically, if two standards apply, e.g., PROWAG and ICC A117.1, the more stringent provisions apply. In this case, the proponent is asking for the less stringent standard (PROWAG) to apply. As mentioned during committee debate, this likely will violate the ADA. However, the proposed revision minimizes the instances where the ADA or ABA covered entity is at risk. A better option might be to delete the exception altogether.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

04-19 – 2021 2nd draft Ballot Comment 2

405.1

Proponent: Josh Schorr ATBCB
Vote: affirmative with comment; am

Further revise as follows:

405.1 General. *Ramp*s along *accessible* routes shall comply with Section 405.

Exceptions:

1. In *assembly area*s, aisle *ramp*s adjacent to seating and not serving *element*s required to be on an *accessible* route shall not be required to comply with Section 405.
2. Exterior sidewalks that connect *element*s on a *site* and that are 48 inches (1220 mm) minimum in width and slope with grade of an existing road or street are not required to comply with ~~Section 405~~ Sections 405.2, 405.6, 405.7 and 405.8.

REASON: By not requiring ramps along roadways to comply with any of 405, if the slope is greater than 1:20 then they are no longer required to meet criteria for cross slope, surface, edge protection, wet conditions. Only the relevant subsections that we want the exception for should

be referenced, not the entire section. The intent is to permit a steeper running slope and not require landings or handrails. A sidewalk should not be permitted to be fully inaccessible if the slope is steeper than a walking surface.

Committee Action on 2nd draft Ballot Comment 2: AS/AM/D

REPORT OF HEARING:

Modification (if any):

Committee Reason:

04-19-2021 2nd 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 04-19– 2021		
Committee decision: D	***Committee Vote at Meeting: 23-1-0***	***Committee Vote on Ballot:39-1-1***
REPORT OF HEARING: Modification (if any):		
Committee Reason: This allowance is too broad. While it is permitted in PROWAG, an open site should be able to design for the standard accessible route without this exception for slope of grade.		
Committee decision: AM	***Committee Vote at Meeting: 16-7-4***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any): **405.1 General.** Ramps along accessible routes shall comply with Section 405. **EXCEPTIONS:** 1. In assembly areas, aisle ramps adjacent to seating and not serving elements required to be on an accessible route shall not be required to comply with Section 405. 2. Exterior sidewalks that connect elements on a site and that are a minimum of 48 inches wide and slope with grade of an existing road or street are not required to comply with Section 405.		
Committee Reason: The modification limited the exception to existing facilities – this is reasonable because the slope of the site is existing and regrading could be substantial. This exception is needed for large office campuses, college campuses, and residential developments which have streets.		
Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

04-24 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
04-24	Brinkman	107.5, 407	AS 28-3-4	6-30-2022	Final Action is AS by committee action

Comment 1st draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Pace, HUD	Affirmative	Withdrawn	11-9-2023	
PC1	Terminology	AM	Withdrawn	4-25-2024	Editorial; see E4

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

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Roether	AM			See 04-25 BC1
BC2	Brinkman NEII	AM			
BC3	Toji, HLAA	AM			

04-24 – 2021

107.5, 407.2, 407.2.1, 407.2.1.1, 407.2.1.2, 407.2.1.5, 407.2.1.6, 407.2.1.7, 407.2.3(New) through 407.2.3.10.1(New), 407.2.4.4(New), 407.2.4.4.1(New), 497.2.2.4, 407.2.3.1, 407.2.4, 407.4.7.1.1, 407.4.7.1.2, 407.4.7.1.2.1(New), 407.4.7.2, Figure 407.2.1.7

Proponent: Kevin Brinkman, National Elevator Industry, Inc. (NEII)

Revise as follows:

SECTION 107
DEFINITIONS

107.5 Defined terms.

accessibility function button. A button on an elevator hall call console in a destination-oriented elevator system that, when pressed, will activate a series of visual and verbal prompts and announcements providing instruction regarding hall call console operation and direction to an assigned elevator.

hall call console. An elevator call user interface exclusive to a destination-oriented elevator system that requires the user to select a destination floor prior to entering the elevator car.

SECTION 407

ELEVATORS

407.1 General. Elevators shall comply with Section 407 and ASME A17.1/CSA B44 listed in Section 106.2.8. Elevators shall be passenger elevators as classified by ASME A17.1/ CSA B44. Elevator operation shall be automatic.

407.2 Elevator landing requirements. Elevator call controls, hall signals and hoistway signs ~~landings~~ shall comply with Section 407.2. Where elevator call buttons, keypads, or hall call consoles are provided, they shall also comply with Section 309.4.

407.2.1 Call Controls. ~~Where elevator call buttons or keypads are provided, they shall also comply with Sections 407.2.1 and 309.4.~~ Call buttons, accessibility function button, and additional feature buttons shall be raised or flush. Objects beneath hall call buttons shall protrude 1 inch (25 mm) maximum.

Exceptions:

1. Existing elevators shall be permitted to have recessed call buttons.
2. The restriction on objects beneath call buttons shall not apply to existing call buttons.

407.2.1.1 Height. Call buttons, ~~and~~ keypads, and hall call consoles shall be located within one of the reach ranges specified in Section 308, measured to the centerline of the highest operable part.

Exception: Existing call buttons, ~~and~~ existing keypads and hall call consoles shall be permitted to be located 54 inches (1370 mm) maximum above the floor, measured to the centerline of the highest operable part.

(Note: No change to figure)
FIGURE 407.2.1.1
HEIGHT OF ELEVATOR CALL BUTTONS

407.2.1.2 Size. ~~Call buttons~~ Buttons shall be $3/4$ inch (19 mm) minimum in the smallest dimension.

Exception: Existing elevator call buttons shall not be required to comply with this section.

407.2.1.3 Clear floor space. A clear floor space shall be provided at call controls

407.2.1.4 Location. The call button that designates the up direction shall be located above the call button that designates the down direction.

Exception: Destination-oriented elevators shall not be required to comply with this section.

407.2.1.5 Signals. Call buttons shall have visible signals to indicate when each call is registered and when each call is answered. Call buttons shall provide an audible signal or mechanical motion of the button to indicate when each call is registered.

Exceptions:

1. Destination-oriented elevators shall not be required to comply with Section 407.2.1.5~~, provided a visible signal and audible tones and verbal announcements complying with this section are provided~~.
2. Existing elevators shall not be required to comply with Section 407.2.1.5.

~~407.2.1.6~~ 407.2.2 Keypads. Where keypads are provided, keypads shall be in a standard telephone keypad arrangement complying with Figure 707.5(A) and shall comply with Section 407.4.7.2.

~~407.2.1.7 Destination-oriented elevator signals.~~ ~~Destination-oriented elevators shall be provided with a visible signal and audible tones and verbal announcementsto indicate which car is responding to a call. The audible tone and verbal announcement shall be activated bypressing a function button. The function button shall beidentified by the International Symbol for Accessibilityand a raised indication. The International Symbol for Accessibility, complying with Section 703.6.3.1, shall be 5/8 inch (16 mm) in height and be a visual character complying with Section 703.2. The indication shall be three raised dots, spaced 1/4 inch (6.4 mm) at base diameter, in the form of an equilateral triangle. The functionbutton shall be located immediately below the keypad arrangement or floor buttons.~~

(Delete figure)

~~FIGURE 407.2.1.7~~

~~DESTINATION-ORIENTED ELEVATOR INDICATION~~

407.2.3 Hall Call Consoles. Hall call consoles shall comply with the following requirements:

407.2.3.1 Location. At least one hall call console in the elevator landing area shall be wall mounted. A minimum of one hoistway entrance shall be adjacent to a hall call console. For a multi-car group, the console shall be located between two entrances.

407.2.3.2 Additional hall call consoles. Additional hall call consoles shall be permitted and can be provided outside the elevator landing area and be wall-mounted, pedestal mounted, or mounted on a kiosk or security turnstile.

407.2.3.3 Required features. Hall call consoles shall include a touch screen or keypad complying with 407.2.2 with display screen, an accessibility function button, and audio output loudspeaker. The accessibility function button shall beidentified by the International Symbol for Accessibility and a raised indication. The International Symbol for Accessibility, complying with Section 703.6.3.1, shall be a minimum of 5/8 inch (16 mm) in height and be a visual character complying with Section 703.2. The indication shall be three raised dots, spaced 1/4 inch (6.4 mm) at base diameter, in the form of an equilateral triangle. The accessibility function button shall be located immediately below the keypad arrangement or floor buttons.

407.2.3.4 Touch screen. Touch screen displays shall comply with 407.2.3.5.

407.2.3.5 Display screen. Upon activation, the display screen shall display information such as user input confirmation, elevator assignment designation, direction to the assigned elevator, and when applicable instruction or error messages.

407.2.3.5.1 Contrast. Display screens shall provide contrast with light characters and symbols on a dark background or dark characters and symbols on a light background. The background shall be solid and static.

407.2.3.5.2 Size. Elevator assignment characters shall be 5/8 inch (16 mm) high minimum.

407.2.3.5.3 Duration. Elevator assignment characters shall be displayed for a minimum of 5 seconds upon activation of the accessibility function button.

407.2.3.6 Audio output. Upon activation of the accessibility function button, the audio output shall provide verbal announcements of operating instructions and information such as, user input confirmation, announcement of the elevator assignment designation, direction to the assigned elevator, and, when applicable, error messages. Audio output shall be recorded, digitized human, or synthesized speech and shall be delivered through a loudspeaker. Auditory volume, measured 35 inches (890 mm) in front of the console, shall be maintained at a minimum of 10 dBA above ambient. The volume shall not exceed 80 dBA.

407.2.3.7 Arrangement. Hall call console arrangement of required features shall comply with 407.2.3.7.

407.2.3.7.1 Keypad call console arrangement. Where keypad call consoles are provided, the display screen shall be located directly above the keypad. The accessibility function button shall be located directly below the keypad at a height of not less than 30 inches (760 mm), measured to the centerline of the button, above the finished floor.

407.2.3.7.2 Touch screen call console arrangement. Where touch screen call consoles are provided, the touch screen shall be located directly above the accessibility function button. Any portion of the touch screen requiring user input shall be located at a maximum height of 1220 mm (48 inches), above the finished floor. The accessibility function button shall be located at a height not less than 30 inches (760 mm), measured to the centerline of the button, above the finished floor.

407.2.3.7.3 Proximity of required elements. Required features shall be provided on a hall call console assembly or as individual elements grouped in close proximity.

407.2.3.7.4 Position. For hall call consoles required by Section 407.2.3.1, the face of individual elements or group of individual elements that are operated by user input shall be permitted to slope away from the user, at an angle of no more than 25

degrees from the vertical plane. The face of hall call console shall be permitted to be sloped away from the user, at an angle of no more than 25 degrees from the vertical plane. Additional hall call consoles are permitted to have an angle greater than 25 degrees.

407.2.3.8 Additional features. Hall call console additional features, if provided, shall comply with the following requirements:

407.2.3.8.1 Hall call console additional buttons. Hall call console buttons provided in addition to the accessibility function button shall be permitted.

407.2.3.8.1.1 Arrangement. Buttons shall be arranged and located adjacent to the keypad with a minimum spacing from the keypad to the additional buttons of 1.5 times the spacing used for the standard telephone keypad complying with 407.2.2.

407.2.3.8.1.2 Identification. Buttons shall be identified by raised characters and braille complying with Sections 703.3.1 through 703.3.9 and 703.4.1 through 703.4.4. Identification shall be placed immediately to the left of the control button to which the designation applies.

407.2.3.9 Security or access controls. Security or access control system card readers associated with elevator operation shall be in close proximity to each hall call console in a consistent manner throughout the facility.

407.2.3.10 Elevator car assignment. When the accessibility function button is pressed, the audio output shall provide verbal instruction for the user to enter a destination floor. The selected destination floor shall be confirmed by verbal announcement and on the display screen. Verbal and visible indication of an invalid input shall be provided. The display screen shall indicate the elevator assignment designation and a verbal announcement shall be made of the assigned elevator responding to the call. Visual and verbal direction to the assigned elevator shall be provided.

407.2.3.10.1 Adjacency assignment. When the accessibility function button is pressed, the system shall assign an elevator adjacent to the hall call console unless the adjacent elevator is out of service.

~~**407.2.2**~~**407.2.4 Hall signals.** Hall signals, including in-car signals, shall comply with Section ~~407.2.2~~ 407.2.4.

~~**407.2.2.1**~~ **407.2.4.1 Visible and audible signals.** A visible and audible signal shall be provided at each hoistway entrance to indicate which car is answering a call and the car's direction of travel. Where in-car signals are provided they shall be visible from the floor area adjacent to the hall call buttons.

Exceptions:

1. Destination-oriented elevators shall not berequired to comply with this section, provided a visible signal and audible tones and verbal announcements complying with Section ~~407.2.1.7~~ 402.2.4.4 are provided.
2. In existing elevators, a signal indicating the direction of car travel shall not be required.

~~407.2.2.2~~ 407.2.4.2 Visible signals. Visible signal fixtures shall be centered at 72 inches (1830 mm) minimum above the floor. The visible signal elements shall be $2^1/_2$ inches (64 mm) minimum between the uppermost and lowest edges of the illuminated shape measured vertically. Signals shall be visible from the floor area adjacent to the hall call button.

Exceptions:

1. Destination-oriented elevators shall be permitted to have signals visible from the floor area adjacent to the hoistway entrance.
2. Existing elevators shall not be required to comply with this section.

(No change to figure)

FIGURE ~~407.2.2.2~~ 407.2.4.2 (A) ELEVATOR VISIBLE SIGNALS HEIGHT OF SIGNALS

(No change to figure)

FIGURE ~~407.2.2.2~~ 407.2.4.2 (B) ELEVATOR VISIBLE SIGNALS SIZE OF SIGNALS

~~407.2.2.3~~ 407.2.4.3 Audible signals. Audible signals shall sound once for the up direction and twice for the down direction, or shall have verbal annunciators that indicate the direction of elevator car travel. Audible signals shall have a frequency of 1500 Hz maximum. Verbal annunciators shall have a frequency of 300 Hz minimum and 3,000 Hz maximum. The audible signal or verbal annunciator shall be 10 dBA minimum above ambient, but shall not exceed 80 dBA, measured at the hall call button.

Exceptions:

1. Destination-oriented elevators shall not be required to comply with this section, provided the audible tone and verbal announcement is the same as those given at the call button or call button keypad.
2. The requirement for the frequency and range of audible signals shall not apply in existing elevators.

407.2.4.4 Destination-oriented elevator signals. Destination-oriented elevators shall be provided with hall call consoles complying with Section 407.2.3 and with a visible signal and audible tones and verbal announcements to indicate which car is responding to a call. The audible tone and verbal announcement shall be activated by pressing an

accessibility function button.

407.2.4.4.1 Verbal Announcement. When the accessibility function button is pressed, verbal announcement such as the car designation shall be provided at the elevator car entrance upon arrival. Audio output shall be recorded digitized human or synthesized speech and shall be delivered through a loudspeaker. The verbal annunciator shall have a frequency of 300 Hz minimum and 3000 Hz maximum. Auditory volume, measured 35 inches (890 mm) in front of the elevator entrance and at 48 inches (1220 mm) above the floor, shall be maintained at a minimum of 10 dBA. The volume shall not exceed 80 dBA.

407.2.4.5 ~~407.2.2.4~~ Differentiation. Each destination-oriented elevator in a ~~bank~~ group of elevators shall have audible and visible means for differentiation.

~~407.2.3~~ 407.2.5 Hoistway signs. Signs at elevator hoistways shall comply with Section ~~407.2.3~~ 407.2.5.

~~407.2.3.1~~ 407.2.5.1 Floor designation. Floor designations shall be provided in raised characters and braille complying with Sections 703.3 and 703.4. Raised characters shall be 2 inches (51 mm) minimum in height. Floor designations shall be located on both jambs of elevator hoist-way entrances. A raised star shall be provided on both jambs at the main entry level.

(No change to figure)
FIGURE ~~407.2.3.1~~ 407.2.5.1
FLOOR DESIGNATION

~~407.2.3.2~~ 407.2.5.2 Car identification. Destination-oriented elevators cars shall be designated with a single alphabetic character or an alphanumeric designations such as "A1". ~~shall provide~~ ~~car~~ Car identification shall be provided in raised characters and braille complying with Sections ~~703.3~~ 703.3.1 through 703.3.9 and ~~703.4~~ 703.4.1 through 703.4.4. Raised characters shall be 2 inches (51 mm) minimum in height. Car identifications shall be located on both jambs of the hoistway immediately below the floor designation.

(No change to figure)
FIGURE ~~407.2.3.2~~ 407.2.5.2
DESTINATION-ORIENTED ELEVATOR CAR IDENTIFICATION

~~407.2.4~~ 407.2.6 Destination signs. Where signs indicate that elevators do not serve all landings, signs in raised characters and braille complying with Sections ~~703.3~~ 703.3.1 through 703.3.9 and ~~703.4~~ 703.4.1 through 703.4.4 shall be provided above the hall call button or keypad.

Exception: Destination oriented elevator systems shall not be required to comply with this section.

Note: No change to Sections 407.3 through 407.4.6.

407.4.7 Designations and indicators of car controls. Designations and indicators of car controls shall comply with Section 407.4.7.

Exceptions:

1. In existing elevators, where a new car operating panel complying with Section 407.4.7 is provided, existing car operating panels shall not be required to comply with Section 407.4.7.
2. Where existing building floor designations differ from the arrangement required by Section 407.4.6.2.2, or are alphanumeric, a new operating panel shall be permitted to use such existing building floor designations.

407.4.7.1 Buttons. Car control buttons shall comply with Section 407.4.7.1.

407.4.7.1.1 Type. Control buttons shall be identified by raised characters and braille complying with Sections ~~703.3~~ 703.3.1 through 703.3.9 and ~~703.4~~ 703.4.1 through 703.4.4.

407.4.7.1.2 Designation. Floors shall be designated . . . -4, -3, -2, -1, 0, 1, 2, 3, 4, etcetera, with floors below the main entry floor designated with minus numbers. Numbers shall be permitted to be omitted, provided the remaining numbers are in sequence. Where a ~~telephone~~ keypad arrangement is used complying with Figure 707.5(A), the number key ("#") shall be utilized to enter the minus symbol ("-"). A minus sign (-) on the lower right button is permitted instead of the number (#) sign. Ancillary letters shall be permitted to be used in conjunction with the numbers, provided the letters are located to the right of the numbers and not more than two letters are used for each floor designation. For access to special floors, such as floors with rear entrances, instructions shall be provided at the keypad or console.

407.4.7.1.2.1 In existing facilities where new elevators are installed or existing elevators are altered into a destination-oriented elevator system, floor designations shall conform to the following:

1. Levels within stories, such as mezzanines located above or below the main entry level shall be permitted to be designated with an alphanumeric character such as "M2", indicating "mezzanine" and the "story number", respectively, in which it is located, provided there is no duplication with alphanumeric designations of elevator cars in the facility. The entire word shall be used, when announced, for the floor description, e.g., "mezzanine" not "M".
2. Non-successive floor numbering shall be permitted.

407.4.7.1.3 Location. Raised character and braille designations shall be placed immediately to the left of the control button to which the designations apply. Where a negative number is used to indicate a negative floor, the braille designation shall be a cell with the dots 3 and 6 followed by the ordinal number.

Exception: Where space on an existing car operating panel precludes raised characters and brailleto the left of the control button, markings shall beplaced as near to the control button as possible.

407.4.7.1.4 Symbols. The control button for the emergency stop, alarm, door open, door close, main entry floor, and phone, shall be identified with raised symbols and braille as shown in Table 407.4.7.1.4.

TABLE 407.4.7.1.4 -CONTROL BUTTON IDENTIFICATION

(No change to table)

407.4.7.1.5 Visible indicators. Buttons with floor designations shall be provided with visible indicators to show that a call has been registered. The visible indication shall extinguish when the car arrives at the designated floor.

407.4.7.2 Keypads. Keypad keys shall be identified byvisual characters complying with Section 703.2 centered on the corresponding keypad button. The numberfive key shall have a single raised dot. The dot shall have a base diameter of 0.118 inch (3 mm) minimum and 0.120 inch (3.05 mm) maximum, and a height of 0.025 inch (0.6 mm) minimum and 0.037 inch (0.9 mm) maximum. <u>The dot shall be centrally located.</u>

Note: No changes to remaining sections – 407.4.8 through 407.4.10.3.

REASON: Note: It is not the intent of NEII that any of the changes proposed here override other change proposals from NEII for Section 407. If this change and other changes are approved, the changes will need to be merged/coordinated for the final document.

General Rationale: The purpose of this proposal is to update ICC A117.1 to include additional requirements for destination-oriented elevator systems, including the use of "Touch Screens" and related features such as consoles and function buttons, along with verbal announcements. The following proposals are to harmonize with changes being finalized in ASME A17.1/CSA B44, Appendix E. The proposals were developed to ensure that systems currently designed for compliance with the destination-oriented elevator accessibility requirements in the California Building Code (CBC), would also comply with this code. Also included some editorial clean up to make format consistent with other sections of the standard.

Section 107 Rationale: Proposed revision to add definitions for the accessibility function button and hall call console used by destination-oriented elevator systems.

Section 407.2, 407.2.1, and 407.2.2 Rationale: The proposal restructures this section for inclusion of additional requirements for destination-oriented elevators. The proposal includes language to requires that the accessibility function button and hall consoles be mounted within a specific reach range for easy access. Requirement 407.2.1.7 was relocated to 407.2.4.4 to group with other signals. Added a reference in 407.2.2 to the Figure showing the "standard telephone keypad arrangement." Clarify that 407.2.1.2 applies to all buttons in the hall (call buttons, keypads, and hall call consoles). Current A117.1 requires all buttons including keypad buttons,

accessibility button and any optional additional button(s) to be ¾ inch minimum smallest dimension.

Section 407.2.3 Rationale: The proposed revision adds requirements for hall consoles, touch screens, and display screens to harmonize with A17.1/B44 Appendix E. The proposed changes include a requirement that verbal announcements be provided when the accessibility function button is activated. The proposed changes also specify the arrangement for hall call consoles including keypad and touch screen arrangements and their locations, as well as the arrangement and identification of additional buttons and features of the hall call console. The hall call consoles must be able to interface with security systems. A provision is also provided to assign an adjacent car when the accessibility function button is used to select a floor.

Section 407.2.4 Rationale: The proposed revisions groups the hall signal requirements. It requires verbal announcements in the car when the car stops to answer the call and at the car entrance when the car arrives to answer the call. The requirements for volume characteristics are consistent with other announcements. Requirement 407.2.4.4 was relocated from 407.2.1.7 to group with other signals. The word "Accessibility" was added to clarify the purpose of the function button and "minimum" was added to clarify that the size for the symbol is a minimum. The language was revised to use the term "group" instead of "bank" to be consistent with common industry terminology.

Section 407.2.5 and 407.2.6 Rationale: The requirements are being renumbered as part of the overall reformatting. 407.2.5.2 was revised to provide identification of cars with an alphabetic identification, or alpha-numeric identification, if necessary.

Section 407.2.7.1 Rationale: The references are being revised to ensure that they align with the exceptions in 703.3 and 703.4 since elevators are exempted from 703.3.10 and 703.4.5 already and 703.3.11 does not apply to elevators (only door signs). Currently, A117.1 requires the use of the number (#) button to indicate minus (-). The California Building Code requires the use of the minus (-) symbol. This proposal is to permit either symbol to be used. Also added a requirement for instructions be provided to access special floors. In existing buildings, the convention for numbering of floors may already be established and should not need to be revised. Where special names such as "mezzanine" are used, the entire word should be announced, not just the first letter. Also provided an exception for buildings where a certain floor number is not to be used.

Section 407.2.7.2 Rationale: The proposed revision clarifies the position for the dot on the "5" key to align with changes to Appendix E. That change was made based on input from a committee member with limited vision who indicated that if the dot is not centered, it impairs quick location of the "5" key.

Committee Action: 28-3-4 As Submitted
REPORT OF HEARING:
Modification (if any):

Committee Reason: The new requirements for destination oriented elevators will clarify requirements and improve accessibility. This is also coordinated with ASME A17.1.

407.6.4 et al-BRINKMAN.doc

04-24 – 2021 Ballot Comments

BALLOT COMMENT 1- FIRST DRAFT: *Proponent:* **Rex Pace representing HUD**
Desired Action: Affirmative with Comment
Modification:
Reason: Deferred to the view of those with expertise on this subject

04-24 – 2021 Public Comment 1

407.2.3.7.2

Proponent: Marsha Mazz, representing the Terminology Work Group

Further revise as follows:

SECTION 407
ELEVATORS

407.2.3 Hall Call Consoles. Hall call consoles shall comply with the following requirements:

407.2.3.7 Arrangement. Hall call console arrangement of required features shall comply with Section 407.2.3.7.

407.2.3.7.2 Touch screen call console arrangement. Where touch screen call consoles are provided, the touch screen shall be located directly above the accessibility function button. Any portion of the touch screen requiring user input shall be located within the applicable reach range ~~at a maximum height of 48 inches (1220 mm), above the finished floor~~. The accessibility function button shall be located within the applicable reach range and at a height not less than 30 inches (760 mm), ~~measured to the centerline of the button,~~ above the finished floor.

REASON: This is part of the generic terminology proposal from the Terminology Work Group for building blocks. This public comment is submitted here because this is a new requirement related to reach ranges. Please see the full proposal for complete information.

The current references sometimes references Section 308 and sometimes not. The adjective varies from ‘at least one of’ or ‘specified’. The work group is suggesting ‘applicable’.

Committee Action for Public Comment 1: Withdrawn. See E4.

REPORT OF HEARING:

Modification (if any):

Committee Reason:

04-24 – 2021 1st draft Committee Action

Committee Action for First Ballot: As submitted

REPORT OF HEARING:

Modification (if any):

Committee Reason: Addressed in E4-2023.

04-24 – 2021 2nd draft Ballot Comment 1

407.2.1.1

Proponent: Ed Roether
Vote: affirmative with comment; AM

Further revise as follows:
407.2.1.1 Height. Call buttons, keypads, and *hall call console*s shall be located 30 inches (760 mm) minimum and 48 inches (1 220 mm) maximum above the floor, measured to the centerline of the *operable parts*.

Exceptions:

1. Existing call buttons, existing keypads, and *hall call console*s shall be permitted to be located 54 inches (1370 mm) maximum above the floor, measured to the centerline of the highest *operable part*.
2. Where provided, foot controls or other alternate means in addition to the required landing controls shall be permitted to be located ~~mounted~~ outside the specified range.

Staff note: See 04-25 BC1

REASON: In Section 407.2.1.1 Height, Exception 2 is confusing as written, either 'located' or 'mounted' should be deleted for clarity.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

04-24 – 2021 2nd draft Ballot Comment 2

407.2.4.4.1

Proponent: Kevin Brinkman NEII
Vote: affirmative with comment; AM

Further revise as follows:
407.2.4.4.1 Verbal Announcement. When the *accessibility function button* is pressed, verbal announcement such as the car designation, shall be provided at the elevator car entrance upon arrival. Audio output shall be recorded digitized human or synthesized speech and shall be delivered through a loudspeaker. The verbal annunciator shall have a frequency of 300 Hz minimum and 3000 Hz maximum. Auditory volume, measured 35 inches (890 mm) in front of the elevator entrance and at 48 inches (1220 mm) above the floor, shall be maintained at a minimum of 10 dBA above ambient. The volume shall not exceed 80 dBA.

REASON: In 407.2.4.4.1, the minimum auditory volume should be 10 dBA above ambient. It is shown correctly in clean draft, but not legislative draft.

Committee Action on 2nd draft Ballot Comment 2: AS/AM/D

REPORT OF HEARING:

Modification (if any):

Committee Reason:

04-24 – 2021 2nd draft Ballot Comment 3

407.2.5.1

Proponent: Sharon Toji, HLAA
Vote: negative with comment, AM

Further revise as follows:
407.2.5 Hoistway signs. Signs at elevator hoistways shallcomply with Section 407.2.5.

407.2.5.1 Floor designation. Floor designations shall be provided in raised *characters* and braille complying with Sections 703.4.1.3, 703.3 and 703.4, except that raised *characters* shall be 1-7/8 inches to 2 inches (48 to 51 mm) ~~minimum~~ in height. Floor designations shall

be located on both jambs of the elevator hoistway entrances. A completely raised five-pointed star ~~polygon that is equilateral and equiangular~~, complying with Table 407.4.7.1.4, shall be provided on both jambs at the main entry level and located to the left of the floor designation. The ~~height~~ outside diameter of the star shall equal the height of the floor designation.

Exception: Where the width of the jamb of the elevator hoistway entrance does not have sufficient space for a 2 inch (51 mm) star placed to the left of the floor designation, the star shall be permitted to be located above the floor designation.

REASON: This item prompted an intense discussion about clarity and simplicity versus more technical terms. The initial problem was that tactile characters are 2 inched high maximum, so there are no clear way to provide even a small leeway for the height of the character, even though a small difference would not reduce the ability of a person with low vision to read the sign, and a smaller figure would be easier to read by touch. Requiring the character to be 1-7/8 to 2 inches in height would solve that problem. The description of the star is overly technical, and simple language calling for a 5 pointed star, 2 inches in diameter, with points of equal length would be more clear. Also, the requirement needs to be added that the star should be completely filled in.

Committee Action on 2nd draft Ballot Comment 3: AS/AM/D

REPORT OF HEARING:

Modification (if any):

Committee Reason:

04-24 – 2021 2nd 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 0*4-24– 2021*		
Committee decision: AS	***Committee Vote at Meeting: 28-3-4***	***Committee Vote on Ballot:39-1-1***
REPORT OF HEARING: Modification (if any):		
Committee Reason: The new requirements for destination oriented elevators will clarify requirements and improve accessibility. This is also coordinated with ASME A17.1.		
Committee decision: *NA*	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any):		

Report for 0*4-24– 2021*		
Committee Reason: Addressed in E4-2023.		
Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

04-25 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
04-25	Brinkman	407.2.1.1	Part 1 AM 28-1-2 Part 2 D 29-3-5	6-30-2022 11-9-2023	Final Action is AFM BC2

Comment 1st draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Pace, HUD	Affirmative	NA	11-9-2023	
BC2	Brinkman, NEII	Negative	AS 22-0-3	11-9-2023	
PC1	Terminology	AM	Withdrawn	4-25-2024	Editorial, See E4
PC2	Dittman	AM	D 23-0-2	11-9-2023	

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

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Brinkman, NEII	AM			See 04-24 BC1

04-25 – 2021
407.2.1.1

Proponent: Kevin Brinkman representing National Elevator Industry, Inc. (NEII)

Revise as follows:

SECTION 407
ELEVATORS

407.2.1.1 Height. Call buttons and keypads shall be located ~~within one of the reach ranges specified in Section 308, measured to the centerline of the highest operable part~~ vertically between 30 inches (760 mm) and 48 inches (1 220 mm) above the floor, measured to the centerline of the respective button.

~~Exception~~ Exceptions:

1. Existing call buttons and existing keypads shall be permitted to be located 54 inches (1370 mm) maximum above the floor, measured to the centerline of the highest operable part.
2. Where additional call buttons, keypads or other means are provided, they shall be permitted to be located outside the specified reach range.

REASON: The proposed change would specify an upper and lower range rather than the more general reference to reach ranges and clarify that the all the buttons need to be within the range. This is similar the requirements in ASME A17.1/CSA B44, Appendix E. The additional exception allows alternate technologies, such as foot controls, in addition to the required controls. Figure 407.2.1.1 should either be deleted or be updated to accurately reflect the prescriptive requirement. *The minimum height was chosen to align with a more appropriate value for lower reach for a standing person and is still well above the lower reach for a person in a wheelchair (15 inches).*

REPORT OF HEARING:

Modification (if any): Question was split into 2 parts

Main paragraph Committee Action:	28-1-2	As Modified
Exception 2 Committee Action:	29-3-5	Disapproved

Further modify as follows:

407.2.1.1 Height. Call buttons and keypads shall be located vertically ~~between~~ 30 inches (760 mm) minimum and 48 inches (1 220 mm) maximum above the floor, measured to the centerline of the ~~respective button~~ operable parts.

> **Exception:** Existing call buttons and existing keypads shall be permitted to be located 54 inches (1370 mm) maximum above the floor, measured to the centerline of the highest operable part.

Committee Reason: The modifications to the first sentence for the dimensions was to allow for a range that included end points. The modification to change 'respective button' to 'operable parts' was to address keypads. The committee approved the changes to the main paragraph as providing a better range and information on call buttons. The committee voted to disapprove the new Exception 2 because they felt it was too broad and could be interpreted incorrectly for situations where there were multiple call buttons in the same elevator lobby.

407.2.1.1-BRINKMAN.doc

04-25 – 2021 Ballot Comments

BALLOT COMMENT 1- FIRST DRAFT: *Proponent:* **Rex Pace representing HUD**
Desired Action: Affirmative with comment- (1st & 2nd split)
Modification:
Reason: Deferred to the view of those with expertise on this subject. (1st & 2nd split)
BALLOT COMMENT 2- FIRST DRAFT: *Proponent:* **Kevin Brinkman representing NEII**
Desired Action: Negative with comment-2nd split
Modification: See Ballot comment 2

04-25 – 2021 Ballot Comment 2
407.2.1.1

Proponent: Kevin Brinkman, NEII

Further revise as follows:

SECTION 407
ELEVATORS

407.2.1.1 Height. Call buttons and keypads shall be located vertically between 30 inches (760 mm) and 48 inches (1 220 mm) above the floor, measured to the centerline of the respective button.

Exceptions:

1. Existing call buttons and existing keypads shall be permitted to be located 54 inches (1370 mm) maximum above the floor, measured to the centerline of the highest operable part.
2. ~~Where additional call buttons, keypads or other means are provided, they shall be permitted to be located outside the specified reach range.~~ Where foot controls or other alternate means are provided in addition to the required landing controls, the foot controls or other alternate means shall be permitted to be mounted outside the specified range.

REASON: The exception is an important part of the overall change because the new lower limit would preclude the use of foot controls which have become more popular due to COVID. A concern was raised that the exception as written might mean that one set of controls could be in the range and duplicate controls on the opposite wall or between other hoistway doors could be outside the range.

Committee Action for Ballot Comment 2: AS 22-0-3

REPORT OF HEARING:

Modification (if any):

Committee Reason: The exception allows foot controls and alternate means without applying to duplicative primary controls.

04-25 Brinkman.doc

04-25 – 2021 Public Comment 1
407.2.1.1

Proponent: Marsha Mazz, representing the Terminology Work Group

Further revise as follows:

SECTION 407
ELEVATORS

407.2.1 Call Controls…….

407.2.1.1 Height. Call buttons and keypads shall be located within the applicable reach range, and not less than ~~vertically~~ 30 inches (760 mm) minimum ~~and 48 inches (1 220 mm) maximum~~ above the floor~~, measured to the centerline of the operable parts~~.

Exceptions:

3. Existing call buttons and existing keypads shall be permitted to be located 54 inches (1370 mm) maximum above the floor, measured to the centerline of the highest operable part.
4. Where additional call buttons, keypads or other means are provided, they shall be permitted to be located outside the ~~specified~~ applicable reach range.

Figure 407.2.1.1
HEIGHT OF ELEVATOR CALL BUTTONS

REASON: This is part of the generic terminology proposal from the Terminology Work Group for building blocks. This public comment is submitted here because this is a new requirement related to reach ranges. Please see the full proposal for complete information.

The current references sometimes references Section 308 and sometimes not. The adjective varies from ‘at least one of’ or ‘specified’. The work group is suggesting ‘applicable’.

Committee Action for Public Comment 1: Withdrawn

REPORT OF HEARING:

Modification (if any):

Committee Reason: Addressed in E4-2023

04-25 Terminology.doc

04-25 – 2021 Public Comment 2

407.2.1.1

Proponent: Tim Ditman

Further revise as follows:

SECTION 407
ELEVATORS

407.2.1.1 Height. Call buttons and keypads shall be located within one of the reach ranges specified in Section 308, measured to the centerline of the highest operable parts ~~vertically 30 inches (760 mm) minimum and 48 inches (1 220 mm) maximum above the floor, measured to the centerline of the operable parts~~.

Exceptions:

1. Existing call buttons and existing keypads shall be permitted to be located 54 inches (1370 mm) maximum above the floor, measured to the centerline of the highest operable part.
2. Where additional call buttons, keypads or other means are provided, they shall be permitted to be located outside the specified reach range.

REASON: The reason provided for changing the minimum height to the 30 inches was "to align with a more appropriate value for lower reach for a standing person". Regarding A117.1's purpose, Section 102.1 of A117.1 – 2017 states, "this standard makes sites, facilities, buildings and elements accessible to and usable by people with such physical disabilities as the inability walk, difficulty walking, reliance on walking aids, blindness and visual impairment, deafness and hearing impairment, incoordination, reaching and manipulation disabilities, lack of stamina, difficulty interpreting and reacting to sensory information, and extremes of physical size" however, a 'standing person' is notably absent from the stated purpose of A117.1. It treats disabled persons less favorably when the A117.1 is modified to place elevator operable parts in convenient locations for non-disabled persons, while the standard for operable parts in Section 308 reflects data that was deemed inappropriate for safety reasons.

The ICC needs to update the unobstructed low reach to "24 inches (610 mm) minimum above the floor" in ICC A117.1 Sections 308.2.1 and 308.3.1, along with any other low reach limit requirements. Section 308 of the 2024 A117.1 update should reflect current research from 2010 rather than continue to use standards derived from antiquated research conducted almost fifty years ago. The ICC established an Electrical Receptacles Task Group for A117.1 2024 and was, among other things, assigned to "7. Review available data on the reach ranges of individuals using wheeled mobility devices." (https://www.iccsafe.org/wp-content/uploads/asc_a117_1/Residential-Receptacles-Task-Group-Scope-and-Objectives-2022-03-09-FIN.pdf) Despite being providing with the following information in March of 2023, which clearly highlights the importance of raising the lower reach range to a height that is safe for individuals using wheeled mobility devices, the only change that came from this task group was clarification for where to measure for operable parts, which does nothing to improve the safety of electrical receptacles.

"The technical requirements of the ICC/ANSI A117.1 (1998) Accessible and Usable Buildings and Facilities (ICC/ANSI) were generated from research completed from 1974 -1978 using a research sample that included about 60 individuals who used wheelchairs (see Steinfeld et al., 1979)." *See* The 2010 Anthropometry of Wheeled Mobility Project final report, December 31, 2010, PDF page 5 of 173, *available at* http://idea.ap.buffalo.edu/wp-content/uploads/sites/110/2020/01/AnthropometryofWheeledMobilityProject_FinalReport.pdf. The 2010 research study had a sample of 495 wheeled mobility devices ("WhMD") users, and documented that **none** of the WhMD users could safely achieve the unobstructed low reach of 15

inches. (*See* PDF page 71 of 173, Figure 3-15 and PDF page 73 of 173, Figure 3-16) Below are two key observations with respect to minimum low reach.

1. PDF page 9 of 173, "12. Reach limits: A majority of WhMD users cannot complete a forward reach to the minimum forward reach height in U.S. standards on a vertical plane in front of their anterior most point (toes or device). The current high side reach limit accommodates WhMD users. The low reach limit, as defined, is currently **inappropriate for safety reasons**." (emphasis added)

2. PDF page 70 of 173, "The lower limit of the U.S. standard would need to be raised from 380 mm (15 in.) to at least 600 mm (23.6 in.) in order to accommodate over 70%, 50% and 38% of our study's manual wheelchair users, powered chair users and scooter users, respectively."

Electrical outlets are just one example of operable parts that WhMD users encounter. In the December 2017 issue of Consumer Reports' magazine, the article entitled, "Make Your Home Elder-Friendly" (*available at* https://www.consumerreports.org/home-improvement-remodeling/elder-friendly-home/) addresses affordable upgrades using universal design when renovating a home. The article noted that design and construction upgrades could benefit persons with mobility disabilities by stating, "These [universal] design elements can also make a big difference if you lose mobility—after all, more than 35 percent of people age 65 and older in the U.S. are disabled, according to a 2016 report from the University of New Hampshire's Institute on Disability." Consumer Reports addressed minimum height of electrical receptacles and recommended, "setting new electrical outlets 24 inches off the floor instead of the usual 12 to 18" which would, "eliminate the stooping usually required to plug in a vacuum". Consumer Reports added that there is, "no cost for resetting outlets" at this accessible location.

Additionally, there should not be any child safety concerns about raising the receptacles to an accessible height for mobility-impaired individuals because Tamper Resistant (TR) receptacles have been mandated in dwelling units since 2008 to address this potential issue (*See* National Electrical Code (NEC) 2008 Section 406.12, Tamper-Resistant Receptacles in Dwelling Units).

When amending the Fair Housing Act in 1988, Congress clearly intended to cover 'persons with mobility impairments' by stating that 'switches and other controls must be in convenient locations', Congress also did not want mobility-impaired persons going through the financial burden and inconvenience of resetting outlet heights when they could have been set at an actual accessible and safe height at the time of construction for **zero** cost.

> "Because persons with mobility impairments need to be able to get into and around a dwelling unit (or else they are in effect excluded because of their handicap), the bill requires that in the future covered multifamily dwellings be accessible and adaptable. This means that the doors and hallways must be wide enough to accommodate wheelchairs, switches and other controls must be in **convenient** locations, most rooms and spaces must be on an accessible route, and disabled persons should be able to easily make additional accommodations if needed, such as installing grab bars in the bathroom, without major renovation or structural change." (emphasis added)

Fair Housing Amendments Act of 1988 House Report (Judiciary Committee) No. 100-711, at 18 (June 17, 1988), *reprinted in* 1988 U.S.C.C.A.N. 2173, 2179.

Committee Action for Public Comment 2: Disapproval of PC 23-0-2

REPORT OF HEARING:

Modification (if any):

Committee Reason: The current requirements for elevator call buttons are more restrictive than the proposed.

04-25 Ditman.doc

04-25 – 2021 1st draft Committee Action

Committee Action for First Ballot: AFM BC2 22-0-3

REPORT OF HEARING:

Modification (if any):

Committee Reason: The exception in BC2 allows foot controls and alternate means without applying to duplicative primary controls.

04-25 – 2021 2nd draft Ballot Comment 1

407.2.1.1

Proponent: Kevin Brinkman NEII
Vote: affirmative with comment; AM

Further revise as follows:
407.2.1.1 Height. Call buttons, keypads, and *hall call console*s shall be located 30 inches (760 mm) minimum and 48 inches (1 220 mm) maximum above the floor, measured to the centerline of the *operable parts*.

Exceptions:

1. Existing call buttons, existing keypads, and existing *hall call console*s shall be permitted to be located 54 inches (1370 mm) maximum above the floor, measured to the centerline of the highest *operable part*.
2. Where provided, foot controls or other alternate means in addition to the required landing controls shall be permitted to be located ~~mounted~~ outside the specified range.

Staff note: See 04-24 BC1

REASON: In exception 1, the first two items have “existing” in front of them, but the added item does not. In exception 2, the “located mounted” is redundant.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

04-25 – 2021 2nd 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 *04-25– 2021*		
Committee decision: AM/D	***Committee Vote at Meeting: 28-1-2/29-3-5***	***Committee Vote on Ballot:38-2-1***
REPORT OF HEARING: Modification (if any): **Further modify as follows:** **407.2.1.1 Height**. Call buttons and keypads shall be located vertically ~~between~~ 30 inches (760 mm) minimum and 48 inches (1 220 mm) maximum above the floor, measured to the centerline of the ~~respective button~~ operable parts. **Exception:** Existing call buttons and existing keypads shall be permitted to be located 54 inches (1370 mm) maximum above the floor, measured to the centerline of the highest operable part.		
Committee Reason: The modifications to the first sentence for the dimensions was to allow for a range that included end points. The modification to change ‘respective button’ to ‘operable parts’ was to address keypads. The committee approved the changes to the main paragraph as providing a better range and information on call buttons. The committee voted to disapprove the new Exception 2 because they felt it was too broad and could be interpreted incorrectly for situations where there were multiple call buttons in the same elevator lobby.		
Committee decision: AFM BC2	***Committee Vote at Meeting: 22-0-3***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any):		
Committee Reason: The exception in BC2 allows foot controls and alternate means without applying to duplicative primary controls.		
Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

04-33 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
04-33	Brinkman	407.4.10	AM 22-0-3	7-14-2022 12-7-2023	Final Action AFM BC2

Comment 1st draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Pace, HUD	Affirmative	Withdrawn	12-7-2023	
BC2	Paarlberg, ICC	Negative	AM 24-0-4	12-7-2023	
BC3	Schoonover	Affirmative	NA	12-7-2023	
PC1	Terminology	AM	Withdrawn	4-25-2024	Editorial, See E4

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

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

04-33 – 2021

407.4.10.1, 407.4.10.3, 407.4.10.4(New), 407.4.10.4.1(New), 407.4.10.4.2(New)

Proponent: Kevin Brinkman, National Elevator Industry, Inc. (NEII)

Revise as follows:

SECTION 407
ELEVATORS

407.4.10 Emergency communications. Emergency ~~two-way~~ communication systems between an elevator car and a point outside the hoistway shall comply with Section 407.4.10 and ASME A17.1/CSA B44 listed in Section 106.2.8.

407.4.10.1 Height. ~~The highest operable part of a two-way communication system shall comply with Section 308.~~ Operable parts of the communication system shall be located between 30 inches (760 mm) and 48 inches (1 220 mm) above the floor.

407.4.10.2 Identification. Raised characters and braille complying with Sections 703.3 and 703.4 and raised symbols complying with Section 407.4.7.1.4 shall be provided adjacent to the device.

407.4.10.3 Instructions. Where instructions for use are provided, essential ~~information~~ instructions shall be presented in visual form, raised characters and braille complying with Sections 703.2, 703.3 and 703.4.

407.4.10.4 Message Display Screen.

407.4.10.4.1 Visibility. The display screen shall be visible from a point located 40 inches (1015 mm) above the center of the clear floor space, 24 inches (610 mm) immediately in front of the car operating panel.

407.4.10.4.2 Characters. Characters displayed on the screen shall be in a conventional form. Characters shall not be italic, oblique, script, highly decorative or other unusual forms. The uppercase letter "I" shall be used to determine the allowable height of all characters of the font. The uppercase letter "I" of the font shall be 3/16 inch (4.8 mm) minimum in height. Characters shall contrast with their background with either light characters on a dark background, or dark characters on a light background.

REASON: The reference to Section 308 would require the operable parts to be located 48 inches maximum and 15 inches minimum above the floor. The lower limit of 15 inches was necessary for older elevators that used a traditional phone handset with a cord because a phone box needed to be located below the car operating panel. Modern phone systems use a single push button which can be easily located in or near the car operating panel. The 30-inch dimension was chosen to allow the phone button to be located directly below the car operating panel.

ASME A17.1-2019/CSA B44:19 requires an in-car message display to be used by an elevator occupant who may not be able to communicate audibly to emergency personnel. The visibility of the display is to accommodate a wheelchair user through a standing adult, modeled after 707.7.1 for automatic teller machines and fare machines. The font style is the style required for general visual characters in section 703.2.3 and the font size is the size required for the displays used on automatic teller machines and fare machines in section 707.7.2.

The term “two-way” is removed from the requirement because it is included in the referenced requirements in ASME A17.1/CSA B44 and some communication components may not provide effective two-way communications between every passenger and every responder. Some passengers may only communicate verbally while others may only communicate visually therefore it is the collection of all communication components, audible and visual that provides the total communication functionality.

The word ‘information” was changed to “instructions” to align with the title and contents of the requirement.

04-33 – 2021 Modification

407.4.10.1, 407.4.10.3, 407.4.10.4(New), 407.4.10.4.1(New), 407.4.10.4.2(New)

Proponent: Kevin Brinkman, National Elevator Industry, Inc. (NEII)

Further modify as follows:

> **407.4.10.1 Height.** Operable parts of the communication system shall be located ~~between~~ 30 inches (760 mm) minimum and 48 inches (1 220 mm) maximum above the floor.

Reason: Editorial. To clarify that 30 and 48 inches are part of the range.

Staff Note: Question Divided.

Committee Action: Part 1 - Section 407.4.10 – remove "two-way" AS 4-18-3; D 21-3-1
Part 2 - Remainder of proposal – AS 22-0-3 with editorial modification

REPORT OF HEARING:
Modification (if any):

Further modify as follows:

407.4.10 Emergency communications. Emergency two-way communication systems between an elevator car and a point outside the hoistway shall comply with Section 407.4.10 and ASME A17.1/CSA B44 listed in Section 106.2.8.

> **407.4.10.1 Height.** Operable parts of the communication system shall be located ~~between~~ 30 inches (760 mm) minimum and 48 inches (1 220 mm) maximum above the floor.

Committee Reason: The term "two-way" was reinserted in Section 407.4.10 because the committee felt that since this is included in ASME A17.1 it would not be a conflict and would make the overall intent of the section clearer. The modification to Section 407.4.10.1 is editorial.

The change to Section 407.4.10.1 improved the reach for the operable parts. The additional requirement for the display screen provided appropriate requirements for placement and the information on the screen.

407.4.10-BRINKMAN.doc

04-33 – 2021 Ballot Comments

BALLOT COMMENT 1- FIRST DRAFT: *Proponent:* **Rex Pace representing HUD**
Desired Action: Affirmative with comment
Modification:
Reason: Deferred to the view of those with expertise on this subject.

BALLOT COMMENT 2- FIRST DRAFT: *Proponent:* **Kim Paarlberg representing ICC**
Desired Action: Negative with comment
Modification: See Ballot Comment 2
BALLOT COMMENT 3- FIRST DRAFT: Proponent: *Ken Schoonover, Individual member*
Desired Action: Affirmative with comment
Modification: See Ballot Comment 3

04-33 – 2021 Ballot Comment 2

407.4.10.4.1, 407.4.20.4.2

Proponent: Kimberly Paarlberg, ICC

Further modify the proposal as follows:

407.4.10.4 Message Display Screen.

407.4.10.4.1 Visibility. The display screen shall be visible from a point located ~~40~~ 43 inches (~~1015~~ 1092 mm) minimum and 54 inches (1372 mm) maximum ~~above the center of the clear floor space~~, 15 inches (381 mm) minimum and 24 inches (610 mm) maximum ~~immediately~~ in front of the car operating panel.

407.4.10.4.2 Characters. Characters displayed on the screen shall comply with Section 703.2 for visual characters except that the minimum character height is 3/16 inches (4.8 mm) minimum. ~~be in a conventional form. Characters shall not be italic, oblique, script, highly decorative or other unusual forms. The uppercase letter "I" shall be used to determine the allowable height of all characters of the font. The uppercase letter "I" of the font shall be 3/16 inch (4.8 mm) minimum in height. Characters shall contrast with their background with either light characters on a dark background, or dark characters on a light background.~~

REASON: I support the concept of the change; however, the proposed text is matching the display screen on an automatic teller machine, which is set up for a person seated in a wheelchair. Since this screen is intended for persons with hearing impairments, this should be set up for a standing person as well – 40" seems too low. The clear floor space may be perpendicular to parallel, so 24" is not always the right distance away and is father than someone would stand. The character information is addressed in visual requirements and does not need to be repeated. This will also address items not covered, such a s stroke width, character and line spacing and character width.

Committee Action for Ballot Comment 2: AM 24-0-4

REPORT OF HEARING:

Modification (if any):

407.4.10.4.1 Visibility. The display screen shall be visible from a point located 40 inches (1015 mm) above the center of the clear floor space, 24 inches (610 mm) immediately in front of the car operating panel.

407.4.10.4.2 Characters. Characters displayed on the screen shall comply with Section 703.2 for visual characters except that the minimum character height is 3/16 inches (4.8 mm) minimum. ~~be in a conventional form. Characters shall not be italic, oblique, script, highly decorative or other unusual forms. The uppercase letter "I" shall be used to determine the allowable height of all characters of the font. The uppercase letter "I" of the font shall be 3/16 inch (4.8 mm) minimum in height. Characters shall contrast with their background with either light characters on a dark background, or dark characters on a light background.~~

Committee Reason: First paragraph should be consistent with ATM. Leave as is. Change to 407.4.10.2 will eliminate duplication in 703.2.

04-33 – 2021 Ballot Comment 3

407.4.10.4.1

Proponent: Ken Schoonover

Revise as follows:

407.4.10.4.2 Characters. ~~Characters displayed on the screen shall be in a conventional form.~~ Characters shall not be italic, oblique, script, highly decorative or other unusual forms. The uppercase letter "I" shall be used to determine the allowable height of all characters of the font. The uppercase letter "I" of the font shall be 3/16 inch (4.8 mm) minimum in height. Characters shall contrast with their background with either light characters on a dark background, or dark characters on a light background.

REASON: The provision is vague, subjective and unenforceable. If there are specific features that intended to be required or prohibited, they must be clearly identified and described

---

Committee Action for Ballot Comment 3: NA

REPORT OF HEARING:

Modification (if any):

Committee Reason: Adress in BC2

04-33 Schoonover.doc

04-33 – 2021 Public Comment 1
407.4.10.1

Proponent: Marsha Mazz, representing the Terminology Work Group

Further revise as follows:

SECTION 407
ELEVATORS

407.4 Elevator car requirements. Elevator cars shall comply with Section 407.4.

407.4.10 Emergency communications….

407.4.10.1 Height. Operable parts of the communication system shall be located within the applicable reach range and 30 inches (760 mm) minimum ~~and 48 inches (1 220 mm) maximum~~ above the floor.

REASON: This is part of the generic terminology proposal from the Terminology Work Group for building blocks. This public comment is submitted here because this is a new requirement related to reach ranges. Please see the full proposal for complete information.

The current references sometimes references Section 308 and sometimes not. The adjective varies from ‘at least one of’ or ‘specified’. The work group is suggesting ‘applicable’.

Committee Action for Public Comment 1: Withdrawn

REPORT OF HEARING:

Modification (if any):

Committee Reason: Addressed in E4-2023

04-33 Terminology.doc

04-33– 2021 1st draft Committee Action

Committee Action for First Ballot: Final action is AFM BC2

REPORT OF HEARING:

Modification (if any):

Committee Reason: First paragraph should be consistent with ATM. Leave as is. Change to 407.4.10.2 will eliminate duplication in 703.2.

04-33 – 2021 2nd draft Ballot Comment 1

407.4.10.4.2

Proponent: Josh Schorr ATBCB
Vote: negative with comment; AM

Further revise as follows:
407.4.10.4.2 Characters. *Characters* displayed on the screen comply with Section 703.2 for visual *characters* except that the minimum character height is 3/16 inches (4.8 mm) minimum where the height to the baseline of the character above the floor is 70 inches (1780 mm) maximum.

Staff note: Section 407.4.10 is for the emergency communications systems within an elevator car. Section 407.4.10.4 is the message display screen. Section 407.4.10.4.1 addresses the height of the display screen.

REASON: 703.2.4 determines character height based on Table 703.2.4. By just changing the minimum character height to 3/16 inches, then there's nothing from preventing characters only 3/16 inches tall even if above 70 inches. It's fine if we want to define a different minimum character height above 70 inches if a 2 inch minimum height is too large, but a 3/16 inch text at 6.5 feet aff is going to be very difficult to read for a person in a wheelchair.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

04-33 – 2021 2nd 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 0*4-33– 2021*		
Committee decision: AM	***Committee Vote at Meeting: 22-0-3***	***Committee Vote on Ballot:37-3-1***
REPORT OF HEARING: Modification (if any): **Further modify as follows:** **407.4.10 Emergency communications.** Emergency two-way communication systems between an elevator car and a point outside the hoistway shall comply with Section 407.4.10 and ASME A17.1/CSA B44 listed in Section 106.2.8. **407.4.10.1 Height.** Operable parts of the communication system shall be located ~~between~~ 30 inches (760 mm) minimum and 48 inches (1 220 mm) maximum above the floor.		
Committee Reason: The term "two-way" was reinserted in Section 407.4.10 because the committee felt that since this is included in ASME A17.1 it would not be a conflict and would make the overall intent of the section clearer. The modification to Section 407.4.10.1 is editorial. The change to Section 407.4.10.1 improved the reach for the operable parts. The additional requirement for the display screen provided appropriate requirements for placement and the information on the screen.		
Committee decision: AFM BC2	***Committee Vote at Meeting: 24-0-4***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any): **407.4.10.4.2 Characters**. Characters displayed on the screen shall comply with Section 703.2 for visual characters except that the minimum character height is 3/16 inches (4.8 mm) minimum. ~~be in a conventional form. Characters shall not be italic, oblique, script, highly decorative or other unusual forms. The uppercase letter "I" shall be used to determine the allowable height of all characters of the font. The uppercase letter "I" of the font shall be 3/16 inch (4.8 mm) minimum in height. Characters shall contrast with their background with either light characters on a dark background, or dark characters on a light background.~~		
Committee Reason: First paragraph should be consistent with ATM. Leave as is. Change to 407.4.10.2 will eliminate duplication in 703.2.		
Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

CHAPTER 5
GENERAL SITE AND BUILDING ELEMENTS

05-08 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
05-08	Paarlberg	502.1, 502.11, 502.11.1, 502.11.2, 503(New), 503.1.4 (New)	AS – 16-6-8	6-16-2022 12-7-2024	AM PC1 with modifications

Comment 1st draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
PC1	Paarlberg, Windley	AM	AM 19-0-2	12-7-2024	
PC2	Mazz	AM	Withdrawn	12-7-2024	

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

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Mazz, USA	AM			
BC2	Schorr, ATBCB	AM			
BC3	Toji, HLAA	AM			

05-08 – 2021
502.1, 502.11, 502.11.1, 502.11.2, 503(New), 503.1.4 (New)

Proponent: Kimberly Paarlberg, International Code Council

Add text as follows:

SECTION 502
PARKING SPACES

502.1 General. Car and van parking spaces in parking lots shall comply with Sections 502.2 through 502.8. Car and van parking spaces provided as part of on-street parking shall comply with

Sections 502.9 and 502.10. ~~Where an electrical vehicle charging station is provided at a parking space, it shall comply with Section 502.11.~~

SECTION 503
ELECTRICAL VEHICL CHARGING STATIONS

503.1 ~~**502.11**~~ **Electrical vehicle charging stations.** Where an ~~An~~ electrical vehicle charging station serving ~~a parking space~~ an accessible vehicle space, that electrical vehicle charging station shall comply with ~~Section~~ ~~502.11~~ Sections 503.1.1 through 503.1.3. The accessible vehicle space shall comply with Section 503.1.4.

503.1.1 ~~**502.11.1**~~ **Operable parts.** Operable parts on the charging station intended for operation by the user, including card readers, shall comply with Section 309.

503.1.2 ~~**502.11.2**~~ **Accessible route.** An accessible route shall be provided from the access aisle adjacent to the parking space to the clear floor space complying with Section 502.11.1 adjacent to the vehicle charging station. When the vehicle is being charged, the accessible route shall not be obstructed by the cable between the car and charging station.

503.1.3 ~~**502.11.3**~~ **Obstructions.** Protection bollards, curbs or wheel stops shall be located so that they do not obstruct the clear floor space required by Section 502.11.1 or the accessible route required by Section 502.11.2.

503.1.4 Vehicle space size. Accessible vehicle spaces at electrical vehicle charging stations shall comply with the van space requirements in Sections 502.2 through 502.6.

REASON: The 2021 IBC includes provisions for electrical vehicle charging stations, however, they are not indicated as a parking spaces, but as a service. Therefore, this proposal moves the provisions in ICC A117.1 for electrical vehicle charging stations into it's own section and out from within parking spaces consistency.

The IBC proposal, G121-18 was submitted by Dawn Anderson, Dan Buuck, David Collins, Marsha Mazz, and Dominic Marinelli. It is my understanding that this is based on the requirements currently being used in California. The 2021 IBC text follows this reason. While IBC Section 1107.2.2 does say the space should be sized as an van space, it does not provide the level of detail for marking, length, floor surface and vertical clearance that is found in the ICC A117.1. Since this is technical criteria, I am proposing to include this in the ICC A117.1 as a new Section 503.1.4 with the added criteria.

The current requirement in IBC do not require a sign making these electrical vehicle charging stations to be reserved, so I am not including Section 502.7.

SECTION 1107
MOTOR VEHICLE RELATED FACILITIES

1107.1 General. *Electrical vehicle charging stations* shall comply with Section 1107.2. Fuel-dispensing systems shall comply with Section 1107.3.

1107.2 Electrical vehicle charging stations. *Electrical vehicle charging stations* shall comply with Sections 1107.2.1 and 1107.2.2.
Exception: *Electrical vehicle charging stations* provided to serve Groups R-2, R-3 and R-4 occupancies are not required to comply with this section.

1107.2.1 Number of accessible vehicle spaces. Not less than 5% of vehicle spaces on the site served by electrical vehicle charging systems but, not fewer than one for each type of electric vehicle charging system shall be accessible.

1107.2.2 Vehicle space size. Accessible vehicle spaces shall comply with the requirements for a van accessible parking space that is 132 inches (3350 mm) minimum in width with an adjoining access aisle that is 60 inches (1525 mm) minimum in width.

1107.3 Fuel-dispensing systems. Fuel-dispensing systems shall be *accessible*.

Committee Action: 16-6-8 Approved as submitted.
REPORT OF HEARING:

Errata:

SECTION 503
ELECTRICAL VEHICLE CHARGING STATIONS

503.1 Electrical vehicle charging stations. Where an electrical vehicle charging station serves ~~serving~~ an accessible vehicle space, that electrical vehicle charging station shall comply with Sections 503.1.1 through 503.1.3. The accessible vehicle space shall comply with Section 503.1.4.

Modification (if any):None

Committee Reason: IBC scopes EV charging stations as a service. This would coordinate with A117.1 with the scoping terminology.

There was a suggestion to clarify which sizes for van spaces and the access aisle should be used since there are two choices in the A117.1 and the IBC requires the 132”/60” option.

504.6-PAARLBERG.doc

05-08 – 2021 Public Comment 1
107.5, 503

Proponent: Kimberly Paarlberg, International Code Council and Scott Windley, US Access Board

Further revise as follows:

Definitions 107.5
Charging Station: One or more electrical vehicle (EV) chargers at a common location.

Vehicle Charging Space: A space to park a vehicle for charging.

SECTION 503
ELECTRICAL VEHICLE CHARGING STATIONS

503.1 Electrical vehicle charging stations. Where an electrical vehicle charging station serves an accessible vehicle charging space, that electrical vehicle charging station shall comply with Sections 503.1.1 through 503.1.3. The accessible vehicle charging space shall comply with Section 503.1.4.

503.1.1 Operable parts. Operable parts on the charging station intended for operation by the user, including card readers, shall comply with Section 309. Where numeric keys or display screens are provided, they shall comply with Section 707.5 through 707.10. If two-way communication is integrated in the charging station, they shall comply with Section 708.

503.1.2 Accessible route. An accessible route shall be provided from the access aisle adjacent to the ~~parking~~ vehicle charging space to the clear floor space ~~required by Section 503.1.1~~ adjacent to the ~~vehicle~~ charging station. An accessible route shall be provided from the vehicle charging space to an accessible entrance for the associated building on the same site. When the vehicle is being charged, the accessible route shall not be obstructed by the cable between the car and charging station.

503.1.3 Obstructions. Protection bollards, curbs or wheel stops shall be located so that they do not obstruct the clear floor space ~~required by Section 503.1.1~~ or the accessible route ~~required by Section 503.1.2~~.

503.1.4 Vehicle charging space ~~size~~. ~~Accessible vehicle spaces at electrical vehicle charging stations shall comply with the van space requirements in Sections 502.2 through 502.6.~~ The vehicle charging spaces shall comply with Section 503.1.4.

503.1.4.1 Vehicle charging space size. The vehicle charging spaces shall be 132 inches (3353 mm) minimum in width and 240 inches (6096 mm) minimum in length.

Figure 503.1.4.1
VEHICLE PARKING SPACE SIZE

503.1.4.2 Vehicle charging space marking. The vehicle charging spaces shall be marked to define the width and length. Where vehicle charging spaces are marked with lines, the width measurements of vehicle charging spaces and adjacent access aisles shall be made from the centerline of the markings.

Exceptions:

1. Where parking spaces or access aisles are not adjacent to another vehicle charging space or access aisle, measurements shall be permitted to include the full width of the line defining the vehicle charging space or access aisle.
2. Vehicle charging space in pull-through EV charging stations are not required to comply with this section.

503.1.4.3 Access aisle. The vehicle charging spaces shall have an adjacent access aisle complying with Section 503.1.4.3.

Exception: Where charging stations are provided for street parking, the access aisle for the vehicle charging space shall be permitted to comply with Section 502.9.

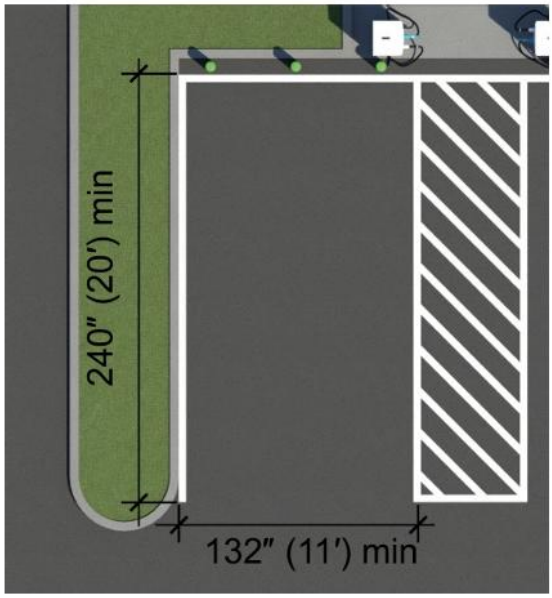


Figure 503.1.4.3
VEHICLE CHARGING SPACE ACCESS AISLE

503.1.4.3.1 Location. Access aisles shall adjoin an accessible route. Two vehicle charging spaces shall be permitted to share a common access aisle. Access aisles shall not overlap with the vehicular way. The vehicle charging spaces shall be permitted to have access aisles placed on either side of the vehicle charging space.

503.1.4.3.2 Width. Access aisles serving the vehicle charging spaces shall be 60 inches (1525 mm) minimum in width.

503.1.4.3.3 Length. Access aisles shall extend the full length of the vehicle charging spaces they serve.

503.1.4.3.4 Marking. Access aisles shall be marked so as to discourage parking in them. Where access aisles are marked with lines, the width measurements of access aisles and adjacent vehicle charging spaces shall be made from the centerline of the markings.

Exception:

1. Where access aisles or vehicle charging spaces are not adjacent to another access aisle or vehicle charging space, measurements shall be permitted to include the full width of the line defining the access aisle or vehicle charging space.
2. Vehicle charging space in pull-through EV charging stations are not required to comply with this section.

503.1.4.4 Vertical clearance. A vertical clearance of 98 inches (2490 mm) minimum shall be provided at the following locations:

1. Vehicle charging spaces.
2. The access aisles serving the vehicle charging space.
3. The vehicular routes serving the On-street vehicle charging space.

503.1.4.5 Floor surfaces. Vehicle charging spaces and access aisles shall comply with Section 302 and have surface slopes not steeper than 1:48. Access aisles shall be at the same level as the vehicle charging spaces they serve.

503.1.5 Identification. Where vehicle charging spaces are identified by signs, the signs shall include "Accessible EV Charing - Use Last". Signs shall be 60 inches (1525 mm) minimum above the floor of the vehicle charging space, measured to the bottom of the sign.

REASON: The Access Board has put out new guidelines for the size of the EV station. This proposal's reference for size was based on information before this. This public comment is to coordinate the size in the recommendations.

There are a couple of important updates. The recommended size is wider however two spaces can share an access aisle. There is a length requirement. There are additional clarification for the access aisle on street parking and no marking at pull-thru stations. EV spaces have the same height requirement as van spaces.
There was a clarification that an accessible route is required to the charger and the building entrance. There are recommendations for signage.

Committee Action for Public Comment 1: AM PC1 – with 2 modifications 19-0-2
Mod 1 15-5-4
Mod 2 21-0-1

REPORT OF HEARING:

Modification (if any):
Further revise as follows:

503.1.2 Accessible route. An accessible route shall be provided from the access aisle adjacent to the vehicle charging space to the clear floor space adjacent to the charging station. ~~An accessible route shall be provided from the vehicle charging space to an accessible entrance for the associated building on the same site.~~ When the vehicle is being charged, the accessible route shall not be obstructed by the cable between the car and charging station.

503.1.4.3 Access aisle. The vehicle charging spaces shall have an adjacent access aisle complying with Section 503.1.4.3.

Exception: Where charging stations are provided at ~~for street~~ parallel ~~-~~parking in the public right-of-way, the access aisle for the vehicle charging space shall be permitted to comply with Section 502.9.

Committee Reason: The modification to Section 503.1.2 is already addressed in the general scoping and is not required. This could be interpreted as not having to connect to other elements. The modification to Section 503.1.4.3 is more specific and coordinates with the committee action on 05-06 PC1. The modification as a whole will coordinate with the Access Board guidance for EV charging stations.

05-08 Paarlberg.doc

05-08 – 2021 Public Comment 2
503.1.4

Proponent: Marsha Mazz, United Spinal Association

Further revise as follows:

SECTION 502
PARKING SPACES

503.1.4 Vehicle space size. Accessible vehicle spaces at electrical vehicle charging stations shall com-ply with the van space requirements in Sections ~~502.2~~ 502.3 through 502.6 and be 132 inches (3350 mm) minimum in width with an adjoining access aisle that is 60 inches (1525 mm) minimum in width.

REASON: The added qualification is taken directly from the original proposal to the IBC 2021. As one of the proponents, we wanted to be clear regarding the configuration of the van space, not permitting the option in the Standard to provide an 8-foot-wide parking space with an 8-foot-wide access aisle. The 132-inch-wide space allows wheelchair users more room around the vehicle within the space so that they can access the charging port regardless of its location. By not including the technical criteria in the Standard, the space could be configured in violation of the IBC. A proposal to remove the technical criteria from future editions of the IBC and to leave only the scoping, now that the requirements are in the Standard would make sense.

Committee Action for Public Comment 2: Withdrawn

REPORT OF HEARING:

Modification (if any):

Committee Reason:

05-08 Mazz.doc

05-08 – 2021 1st draft Committee Action

Committee Action for First Ballot: Final action AM PC1

REPORT OF HEARING:

Modification (if any): See PC1

Committee Reason: The modification to Section 503.1.2 is already addressed in the general scoping and is not required. This could be interpreted as not having to connect to other elements. The modification to Section 503.1.4.3 is more specific and coordinates with the committee action on 05-06 PC1. The modification as a whole will coordinate with the Access Board guidance for EV charging stations.

05-08 – 2021 2nd draft Ballot Comment 1

503.1.4.1, 503.1.4.4, 504.5

Proponent: Marsha Mazz USA
Vote: negative with comment; AM

Further revise as follows:

503.1.4.1 EV charging space size. The EV charging spaces shall be 132 inches (3353 mm) minimum in width and ~~240~~ 192 inches (~~6096~~ 4877 mm) minimum in length.

503.1.4.4 Vertical clearance. A vertical clearance of 98 inches (2490 mm) minimum shall be provided at the following locations:

1. EV charging spaces.
2. The access aisles serving the EV charging space.
3. The vehicular routes serving the ~~On-street~~ EV charging space.

504.5 Vertical clearance. A vertical clearance of 114 inches (2895 mm) minimum shall be provided at the following locations:

1. Vehicle pull-up spaces;
2. The access aisles serving vehicle pull-up spaces;
3. A vehicular route from an entrance to the passenger loading zone, and;
4. A vehicular route from the passenger loading zone to a vehicular exit serving vehicle pull-up spaces.

Staff note: No change suggested for Section 504.5.

REASON: Section 503.1.4.1. The 20-foot length requirement for EV vehicle spaces is a significant departure from typical construction, particularly in parking structures. If retained, this will have a significant cost impact. The 20 foot dimension comes from the Access Board's proposed rulemaking on EV charging. The Board received negative comments on this proposed from numerous commenters - https://www.regulations.gov/document/ATBCB-2024-0001-0001/comment. Until the Board publishes a final rule retaining and justifying this requirement, I believe we should not increase costs unnecessarily. We find that 18 feet is the typical depth for most parking spaces. If we elect to not establish a minimum depth, we should at least require the accessible space to be the same depth as other spaces providing the same service.

Section 503.1.4.1. It makes no sense at all to specify a vertical clearance ONLY for on-street vehicle spaces. This provision derives from the requirements for van parking spaces in garages. Where does the vehicular route for an on-street parking space in Philadelphia begin – Pittsburgh?

Editorial Note: There is a similar problem with Items 3 & 4 in Section 504.5 where the requirement specifies a vehicular route height from an "entrance" and to a vehicular "exit" without first specifying that the passenger loading zone is in a structure of some sort.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

05-08 – 2021 2nd draft Ballot Comment 2

503.1.4.5

Proponent: Josh Schorr ATBCB
Vote: negative with comment; AM

Further revise as follows:

503.1.4.5 Floor surfaces. *EV charging space*s and access aisles shall comply with *floor surfaces* and shall not have surface slopes ~~not~~ steeper than one unit vertical in 48 inches horizontal (2 percent slope) measured along their length and width. Access aisles shall be at the same level as the *EV charging space*s they serve.

REASON: Match the language that's been changed throughout the document for determining slope. Measured along length and width instead of 360 degrees.

Committee Action on 2nd draft Ballot Comment 2: AS/AM/D

REPORT OF HEARING:

Modification (if any):

Committee Reason:

05-08 – 2021 2nd draft Ballot Comment 3

503.1.1, 503.1.5, 503.1.5.1 (New)

Proponent: Sharon Toji, HLAA
Vote: affirmative with comment, AM

Further revise as follows:

503.1.1 Operable parts. Controls on the *EV charging station*, including card readers, shall comply with *operable parts*. Where numeric keys or display screens are provided, they shall comply with Section 707.5 ~~through 707.10~~. Where two-way communication is integrated in the *EV charging station*, they shall comply with Section 708.

503.1.5 Identification. Where *EV charging space*s are identified by signs, the signs shall include "Accessible EV Charing - Use Last". Signs shall be 60 inches (1525 mm) minimum above the floor of the *EV charging space*, measured to the bottom of the sign. Characters shall be 1 inch (25 mm) minimum in height and complying with the visual character requirements in Section 703.2.

An International Symbol of Accessibility, complying with Section 703.6.2.1, shall be 2 inches (51 mm) square, shall be placed to the left of the required text.

503.1.5.1 Illumination. Each individual charging stations shall also be identified with high contrast horizontal LED light strips places at the top edged on the front and back of each station.

REASON: I am an elderly person with a disability and I drive an electric car distances far enough from my home and business that I often use unfamiliar charging stations. Two major problems also discussed with other drivers are how heavy the cables are, and how difficult they are for people with weak hands and fingers, often due to arthritis, to disengage and carry from the charging station. It is often covered with a scratched or cloudy plastic screen. Phone numbers for assistance are often tiny and difficult to read. A second major problem is that at night and sometimes during the day in large parking lots, the charging station can be very difficult to find. Those with bright LED lighting at the top edges of the charging stations are much easier to spot from a distance.

Solutions: 503.1 Operable parts.
Each segment of the process, from the insertion of identification and payment cards, to the disengaging of the hose and insertion into the vehicle, and then disengagement when the charge is completed, needs to be studied in terms of ease of use both be disabled and elderly drivers, so updated standards can be written and adopted.

There is not reason to complicate design and fabrication by requiring raised characters and braille. Revise the operable parts section as shown.

I believe there needs to be a thorough study about the ease of finding and using charging stations, including any disabled and elderly people. Updated standards should be written as soon as possible after this work is done, without waiting years for the standards process to roll around.

503.1.2 Accessible route: I am concerned about the requirements stating that the accessible route shall not be obstructed by the cable between the car and the EV charging station. Charging ports can be on either side of the vehicle, sometimes in front of the front wheels, and sometimes behind the rear wheels. There are often two vehicle charging at the same time, so the may be no way to keep cords out of the path of travel at all times.

Committee Action on 2nd draft Ballot Comment 3: AS/AM/D

REPORT OF HEARING:

Modification (if any):

Committee Reason:

05-08 – 2021 2nd 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 0*5-08– 2021*		
Committee decision: AS	***Committee Vote at Meeting: 16-6-8***	***Committee Vote on Ballot: 40-0-1***
REPORT OF HEARING: Modification (if any):		
Committee Reason: IBC scopes EV charging stations as a service. This would coordinate with A117.1 with the scoping terminology. There was a suggestion to clarify which sizes for van spaces and the access aisle should be used since there are two choices in the A117.1 and the IBC requires the 132"/60" option.		
BALLOT COMMENT- FIRST DRAFT: Proponent:		
Desired Action:		
Modification:		
Reason:		
Committee decision: AM PC1 with 2 modifications	***Committee Vote at Meeting: 19-0-2***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any): See PC1 and modifications		
Committee Reason: The modification to Section 503.1.2 is already addressed in the general scoping and is not required. This could be interpreted as not having to connect to other elements. The modification to Section 503.1.4.3 is more specific and coordinates with the committee action on 05-06 PC1. The modification as a whole will coordinate with the Access Board guidance for EV charging stations.		
Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

05-10 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
05-10	Paarlberg	106.2.5 (New), 504 (All)	AM 15-14-4	7-28-2022 12-21-2023	Final Action AFM PC1, PC2 and PC3

Comment 1st draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Buuck, NAHB	Affirmative	NA	12-21-2023	
BC2	Paarlberg, ICC	Affirmative	NA	12-21-2023	
PC1	Mazz	AM	AM 27-4-5	12-21-2023	
PC2	Cooper	AM	AM 25-5-4	12-21-2023	Modification proposed
PC3	Cooper	AM	AM 15-14-2	12-21-2023	

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

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Buuck, NAHB	AM			See 05-13 BC1

05-10 – 2021
106.2.3(New), 504 (All)

Proponent: Kimberly Paarlberg, International Code Council

Revise text as follows:

SECTION 504
STAIRWAYS

504.1 General. Accessible stairs shall comply with Section 504.

504.2 Stairway width. The minimum stairway width shall comply with Section 1011.2 of the International Building Code listed in Section 106.2.3.

504.3 Stairway landings. Stairway landings shall comply with Section 1011.6 of the International Building Code listed in Section 106.2.3.

504.4 Headroom. The headroom clearance along the stairway shall be in accordance with Section 1011.3 of the International Building Code listed in Section 106.2.3.

504.5 ~~504.2~~ Treads and risers. All steps on a flight of stairs shall have uniform riser height and uniform tread depth. Risers shall be 4 inches (100 mm) minimum and 7 inches (180 mm) maximum in height. Treads shall be 11 inches (280 mm) minimum in depth.

504.6 ~~504.3~~ Open risers. Open risers shall not be permitted.

504.7 ~~504.4~~ Tread surface. Stair treads shall comply with Section 302 and shall have a slope not steeper than 1:48.

504.7 Dimensional uniformity. The stair tread and risers shall be of uniform size and shape. The tolerances between largest and smallest shall be in accordance with Section 1011.5.4 and 1011.5.4.1 of the International Building Code listed in Section 106.2.3.

504.8 ~~504.5~~ Nosings. Nosings shall comply with the following:

1. Nosings within a stairway shall be uniform.
2. If rounded, the radius of curvature at the leading edge of the tread shall be $^1/_2$ inch (13 mm) maximum.
3. If beveled, the bevel at the leading edge shall slope at 45 degrees to the plane of the top surface of the tread and landing and extend for a horizontal distance of $^1/_2$ inch (13 mm) maximum.
4. Nosings that project beyond risers shall have the underside of the leading edge curved or beveled.
5. Risers shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical.
6. The permitted projection of the nosing shall be $1^1/_2$ inches (38 mm) maximum over the tread or floor below.

504.9 ~~504.6~~ Visual contrast. Visual contrast shall comply with either 1 or 2:

1. The leading 1 to 2 inches (25 to 51 mm) of every tread and landing, measured horizontally from the leading edge of the nosing, shall consist of a solid color having visual contrast of dark-on-light or light-on-dark from the remainder of the tread. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread.
2. Durable distinctive warning markings required by the adopted building code or ANSI safety standard.

504.10 ~~504.7~~ Handrails. Stairs shall have handrails complying with Section 505.

504.11 504.8 Wet conditions. Stair treads and landings subject to wet conditions shall be designed to prevent the accumulation of water.

504.12 Curved stairways. Curved stairways shall comply with Section 1011.9 of the International Building Code listed in Section 106.2.3.

504.13 Spiral stairways. Spiral stairways shall comply with Section 1011.9 of the International Building Code listed in Section 106.2.3.

504.14 ~~504.9~~ Lighting. Lighting for interior stairways shall comply with Section 504.9.

504.14.1 ~~504.9.1~~ Illumination level. Lighting facilities shall be capable of providing illuminance of stairs measured at the center of tread surfaces and on landing surfaces within 24 inches (610 mm) of step nosings as follows:

1. A 1-foot-candle (10.8 lux) minimum illumination at times other than conditions of stair use
2. A 10-foot-candle (108 lux) minimum illumination during conditions of stair use
3. The transition from 1 foot candle (10.8 lux) to 10 foot candle (108 lux) under conditions of stair use shall be permitted to be achieved by automatic, motion sensor-type lighting switches provided the switch controllers comply with all of the following:

3.1 The switch controllers are equipped for fail-safe operation and evaluated for this purpose

3.2 The motion sensor is activated by occupant movement on the stair or stair landings

3.3 The illumination timers are set for a minimum 15-minute duration.

504.14.2 ~~504.9.2~~ Lighting controls. If provided, occupancy-sensing automatic controls shall activate the stairway lighting so the illuminance level required by Section 504.9.1 is provided on the entrance landing, each stair flight adjacent to the entrance landing, and on the landings above and below the entrance landing prior to any step being used.

504.15 ~~504.10~~ Tactile signage within the stairway enclosure. Stair level identification signs in raised characters and braille complying with Sections 703.3 and 703.4 shall be located at each floor level landing in all enclosed stairways connecting more than three stories. Such sign shall be located adjacent to the door leading from the stairwell into the corridor to identify the floor level. The exit door discharging to the outside or to the level of exit discharge shall have a sign with raised characters and braille stating "EXIT."

504.11 Tactile signage at exits. A sign stating EXIT in raised characters and Braille and complying with Sections 703.3 and 703.4 shall be provided adjacent to each door to an area of refuge providing direct access to a stairway, an exterior area for assisted rescue, an exit stairway, an exit ramp, an exit passageway and the exit discharge.

SECTION 106
REFERENCED DOCUMENTS

106.2.3 International Building Code. International Code Council (ICC) International Building Code-2024.

REASON: The IBC contains provisions for stairways that deal with the use of stairways by person with mobility and vision impairments that are not currently in the ICC A117.1. While

the IBC does not scope the ICC A117.1 for stairways the A117.1 committee has stated that they would like this standard to be adoptable by any code. I am not proposing adding the text to the ICC A117.1 because I do not want conflicts over time.

Proposed Section 504.2 and 504.3 provide criteria for minimum widths to allow for save evacuation, but also address the width needed for the use of evacuation chairs and fire department carries during emergencies. Proposed 504.4 has minimum headroom, which is consistent with protruding object criteria. Proposed 504.7 for dimensional uniformity is an important factor for reducing falls since a stairway studies have shown your gait is established in just two steps – this is especially important for persons with stability or balance issues. Proposed Section 504.12 and 504.13 address two types of stairways, curved and spiral, that are extremely common in buildings. The IBC includes important tread and riser information that is not in the ICC A117.1.

The change to proposed 504.15 is addressing a current conflict with the IBC. Stairway information signage is only required where the interior exit stairway connect more than three stories.

Staff note: The *2021 International Building Code* can be viewed on the ICC website at https://codes.iccsafe.org/content/IBC2021P2.

05-10 – 2021 Modification

106.2.5(New), 504 (All)

Proponent: Sharon Toji, representing Communications Task Group

Further revise text as follows:

504.15 Tactile signage within the stairway enclosure. Stair level identification signs in raised characters and braille complying with Sections 703.3 and 703.4 shall be located at each floor level landing in all enclosed stairways ~~connecting more than three stories~~. Such sign shall be located adjacent to the door leading from the stairwell into the corridor to identify the floor level. The exit door discharging to the outside or to the level of exit discharge shall have a sign with raised characters and braille stating "EXIT."

Reason: The original proposal would eliminate the requirement for signs on stairs to be accessible if the stair connects 3 stories or less. The proponent's reason statement justifies this action on the basis that floor level identification 05-10-2021 signs are not required by the IBC on such stairways. While it is true that IBC Section 1023.9 does not require signs on these shorter stairways, it also does not prohibit them. If a designer elects to provide such signs, another Section, IBC 1023.11, would require them to be accessible because this provision applies where such signs are "provided", not where they are "required". Consequently, there is no conflict. Additionally, if this modification fails, this proposal will conflict with the DOJ ADA Standards Section 216.2 and 216.4.1.

Committee Action: 14-14-4 Chair votes to approve As Modified

REPORT OF HEARING:
Modification (if any): 23-2-6 Mod approved

Further revise text as follows:

504.15 Tactile signage within the stairway enclosure. Stair level identification signs in raised characters and braille complying with Sections 703.3 and 703.4 shall be located at each floor level landing in all enclosed stairways ~~connecting more than three stories~~. Such sign shall be located adjacent to the door leading from the stairwell into the corridor to identify the floor level. The exit door discharging to the outside or to the level of exit discharge shall have a sign with raised characters and braille stating "EXIT."

Committee Reason: The purpose of the modification was so that stair level identification signage would be provided in any height building.
The provisions will provide a complete package of stairway requirements for persons with mobility and vision disabilities. Some of the important safety issues associated with stairways are not currently included in the ICC A117.1.

504.6-PAARLBERG.doc

05-10 – 2021 Ballot Comments

BALLOT COMMENT 1- FIRST DRAFT: *Proponent:* **Dan Buuck representing NAHB**
Desired Action: Affirmative with comment
Modification:
Reason: Referencing specific sections in the IBC, especially subsections, can be risky, since those references can easily be broken when the section numbers change. This is especially true for A117.1 which is not in a parallel development cycle with the other I-Codes. Is there another way to reference the provisions in the IBC?

BALLOT COMMENT 2- FIRST DRAFT: *Proponent:* **Kim Paarlberg representing ICC**
Desired Action: Affirmative with comment
Modification:
Reason: If the standard wants to include stairways, it needs to address the allowances for all types of stairways. These elements are necessary for persons with mobility and visual impairments.

05-10 – 2021 Public Comment 1

505.4

Proponent: Marsha Mazz, United Spinal Association

Further revise as follows:

SECTION 504
STAIRWAYS

505.4 Headroom. The ~~headroom clearance~~ circulation path along the stairway shall ~~be in accordance with Section 1011.3 of the International Building Code listed in Section 106.2.5~~ comply with Section 307.

REASON: ICC A117.1 prohibits "protruding objects" on all circulation paths, including stairs and landings. The Standard ensures that headroom is adequate and prohibits objects from protruding into the width of circulation paths. The current requirements of the Standard better protect persons with vision impairments because they are not limited to headroom and they address the entire circulation path. The referenced section of the IBC seems to only govern "headroom" and not to extend coverage to the entire circulation path. We see so many protruding objects in stairways that we believe either the text of the IBC is inadequate or it is consistently misinterpreted.

Committee Action Public Comment 1: Modification 21-7-2; AFM 27-4-5

REPORT OF HEARING:

Modification (if any):
Replace PC1 with the following

505.4 Headroom. The headroom clearance along the stairway shall be in accordance with Section 1011.3 of the International Building Code listed in Section 106.2.5. The circulation path along the stairway shall comply with Section 307.

Committee Reason: It is important to remind users the stairway is also part of a circulation path that has to deal with protruding objects. The editorial committee should look at revising the title.

05-10 Mazz.doc

05-10 – 2021 Public Comment 2
107.5

Proponent: David Cooper, Stair Design and Manufacturing Consultants

Further revise as follows:

SECTION 107

DEFINITIONS

107.5 Defined terms.

landing: A horizontal walking surface providing the minimum area to access or depart from, an adjacent stair, flight of stairs, ramp run, or elevator.

REASON: This definition for landing is not in the IBC and has been submitted in a separate public comment by the proponent for that reason. This definition or its modification as approved by the A117.1 committee will be submitted by the SMA for inclusion in the 2027 IBC to provide correlation.

This term is used throughout the standard as it relates to the required sizes of walking surfaces where stairs, flights of stairs, ramp runs, and elevators connect at each adjoining floor level or intermediate level between floors of each story . This definition provides a clear understanding of the requirements of this standard. It is the intent of the Terminology task group to review this proposal prior to the committee review.

Modification to PC2 –
Proponent: Terminology/Editorial Work Group

Further revise as follows:

landing: That portion of a ~~A horizontal~~ walking surface ~~providing the minimum area to~~ required for direct access ~~or depart~~ to or from~~,~~ an adjacent stair, flight of stairs, ramp run, or elevator.

Committee Action for Public Comment 2: 25-5-4

REPORT OF HEARING:

Modification (if any): landing: That portion of a ~~A horizontal~~ walking surface ~~providing the minimum area to~~ required for direct access ~~or depart~~ to or from~~,~~ an adjacent stair, flight of stairs, ramp run, or elevator.

Committee Reason: The definition for landing is important for complete understanding of the stairway provisions. This definition does include the intermediate landings.

05-10 Cooper Part 1.doc

05-10 – 2021 Public Comment 3

107.5

Proponent: David Cooper, Stair Design and Manufacturing Consultants

Further revise as follows:

SECTION 107
DEFINITIONS

107.5 Defined terms.

flight: A continuous run of rectangular treads, winders, or combination thereof from one landing to another.

handrail: A horizontal or sloping rail intended for grasping by the hand for guidance or support.

nosing: The leading edge of treads of stairs and of landings at the top of stairway flights.

stair: A change in elevation, consisting of one or more risers.

stairway: One or more flights of stairs, either exterior or interior, with the necessary landings and platforms connecting them, to form a continuous and uninterrupted passage from one level to another.

spiral stairway: A stairway having a closed circular form in its plan view with uniform section-shaped treads attached to and radiating from a minimum-diameter supporting column.

winder: A tread with nonparallel edges.

REASON: The terms stair, stairway, and flight are understood to have similar context but clearly are intended to have different meanings. These terms and others related to stairs are defined in the building codes.

This modification provides the definitions of terms relevant to this proposal as they are defined in the IBC. They are essential to a clear understanding of the requirements of this standard.

Please note that IBC definition of "Ramp" is already a defined term in the A117.1 standard. The use of terms as defined in the IBC is rudimentary to correlation of the standard with the building codes.

It is the intent of the Terminology task group to review these terms prior to the committee review.

We request approval as further modified by this public comment.

Committee Action for Public Comment 3: AFM 15-14-2
modification to remove winder – 27-3-2
modification to change 'flight' – 26-5-1

REPORT OF HEARING:

Modification (if any):
flight: A continuous run of ~~rectangular~~ treads~~, winders, or combination thereof~~ from one landing to another.

handrail: A horizontal or sloping rail intended for grasping by the hand for guidance or support.

nosing: The leading edge of treads of stairs and of landings at the top of stairway flights.

stair: A change in elevation, consisting of one or more risers.

stairway: One or more flights of stairs, either exterior or interior, with the necessary landings and platforms connecting them, to form a continuous and uninterrupted passage from one level to another.

spiral stairway: A stairway having a closed circular form in its plan view with uniform section-shaped treads attached to and radiating from a minimum-diameter supporting column.

~~**winder:** A tread with nonparallel edges.~~

Committee Reason: Winder not used in standard text. The change to flight allows for all shaped treads. The defined terms are essential to a clear understanding of the requirements of this standard. This is consistent with IBC defined terms.

05-10 Cooper Part 2.doc

05-10 – 2021 1st draft Committee Action

Committee Action for First Ballot: AFM by PC1, PC2, PC3

REPORT OF HEARING:

Modification (if any):

Committee Reason: The pointer to protruding objects and the addition of definitions for stairways will clarify stairway requirements.

05-10 – 2021 2nd draft Ballot Comment 1

505.10

Proponent: Dan Buuck NAHB
Vote: affirmative with comment

Further revise as follows:
505.10 Visual contrast marking. Visual contrast markings shall comply with either 1 or 2:

1. The leading 1 to 2 inches (25 to 51 mm) of every tread and *landing*, measured horizontally from the leading edge of the *nosing*, shall consist of a solid color contrasting marking complying with Section ~~504.6.1~~ 505.10.1. The visual contrast marking shall be uniform at each tread and *landing*, and consistent throughout the *stairway*. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread.
2. Distinctive warning markings including, but not limited to, photoluminescent markings as approved by the *administrative authority*.

Staff note: See 05-13 BC1, Section reference should be errata to draft.

REASON: I believe the correct section referenced in Item 1 under 505.10 is 505.10.1.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

05-10 – 2021 2nd 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 *05-10– 2021*		
Committee decision: AM	***Committee Vote at Meeting: 15-14-4***	***Committee Vote on Ballot: 38-2-1***
REPORT OF HEARING: Modification (if any): **Further revise text as follows:** **504.15 Tactile signage within the stairway enclosure.** Stair level identification signs in raised characters and braille complying with Sections 703.3 and 703.4 shall be located at each floor level landing in all enclosed stairways ~~connecting more than three stories~~. Such sign shall be located adjacent to the door leading from the stairwell into the corridor to identify the floor level. The exit door discharging to the outside or to the level of exit discharge shall have a sign with raised characters and braille stating "EXIT."		
Committee Reason: The purpose of the modification was so that stair level identification signage would be provided in any height building. The provisions will provide a complete package of stairway requirements for persons with mobility and vision disabilities. Some of the important safety issues associated with stairways are not currently included in the ICC A117.1.		
Committee decision: AFM PC1, PC2, PC3	***Committee Vote at Meeting: 27-4-5; 25-5-4; 15-14-2***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any):		
Committee Reason: The pointer to protruding objects and the addition of definitions for stairways will clarify stairway requirements.		

Report for *05-10– 2021*		
Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

05-13 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
05-13	Toji	504.6.1(New)	D 25-0-1	2-2-2023 5-9-2024	Communications - 01-05, 05-13, 07-08 and 07-19

Comment 1st draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Toji, HLAA	Negative	NA	5-9-2024	
BC2	Paarlberg, ICC	Affirmative	NA	5-9-2024	
PC1	Sims/Sheehan	AM	Withdrawn	5-9-2024	
PC2	Communications	AM	AM 22-1-2	5-9-2024	Added 5-7-2024
PC3	Noell-Wagner	AM	AS 6-22-1 failed	5-9-2024	Added 5-7-2024
PC4	Mazz	AM	AM 18-8-3	5-9-2024	Added 5-7-2024
PC5	Mazz	AM	AM 24-1-3	5-9-2024	Added 5-7-2024
PC6	Peskin, Cooper	AM	AM 23-2-2	5-9-2024	Added 5-7-2024
PC7	Paarlberg	AM	AM 25-0-2	5-9-2024	Added 5-7-2024

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

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Buuck, NAHB	AM			See 05-10 BC1 for Section 505.10.
BC2	Toji. HLAA	AM			

05-13 – 2021
504.6.1(New)

Proponent: Sharon Toji, Access Communication

Revise text as follows:

SECTION 504
STAIRWAYS

504.6 Visual contrast. Visual contrast shall comply with either 1, or 2:

1. The leading 1 to 2 inches (25 to 51 mm) of every tread and landing, measured horizontally from the leading edge of the nosing, shall consist of a solid color having visual contrast of

dark-on-light or light-on-dark from the remainder of the tread. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread.

2. Durable distinctive warning markings required by the adopted building code or ANSI safety standard.

504.6.1 Contrast. The light reflectance value (LVR) of the light or dark marking stripe and its background shall differ by a minimum of 50 points of LRV.

REASON: The contrast of the striping on stairs, either indoor or outdoor, is absolutely vital not only to those with vision impairments throughout their lives, but to older people. Stairway accidents are the cause of many serious injuries, and not being able to see where the edge of tread is, is a major cause of those accidents. Too many times, we see stair striping that is just grooved lines — even though those are not allowed. We need as specific a standard as possible for stair striping, so that inspectors have some criteria for refusing to grant occupancy when the stairs are dangerous.

It is possible to measure the light reflectance value of carpeting, and even of carpeting that is not completely solid in color. Manufacturers who sell carpeting, paint, or colored cement should also be able to provide accurate LRV numbers for their products.

I have been trying for some time to move to the simplicity of most of the European countries, and specifically Great Britain, by merely requiring a specific spread between the low LRV and high LRV numbers for the two adjacent colors that would also make sense if you used the Weber 70 percent formula. In my opinion, the British requirement of 70 points for signs is too high, and would be immediately rejected by even those designers who want to provide high contrast.

The extensive exploratory work done by a special committee at NIBS, the National Institute of Building Standards, on architectural standards to aid people with vision impairments who are not functionally blind includes a close look at standards throughout much of the world as well as research by several well known figures in the field. I was shown an early copy of the report, and made extensive comments to the committee. Many of my comments appear to be reflected in the final publication. Two members of our ANSI A117.1 Committee, Marsha Mazz and Eunice Noell-Waggoner, were members of the NIBS committee as well. I believe their recommendations are well supported by their research.

Their recommendation on contrast, which they do explain is still a work in progress as much more needs to be done to understand how people with such a huge variety and mixture of vision impairments can best access the built environment, is that all signs as well as stair striping use adjacent colors that have LRV differences of at least 50 points. In several instances, they also note the Weber 70 percent formula. I assume this may mean that as I formerly suggested, we start with an LRV for the light color, find the second color, and then apply the formula to determine if the contrast meets a minimum of 70 percent.

In this case, I started with a very dark swatch, with an LRV of 5, compared it with a swatch of 55 to get the 50 points difference, and then also applied the formula. At that end of the scale the percentage is about 90 percent. I moved upward 5 points at a time. Each move produced a lower percentage when the formula was applied. When I reached a lighter color with an LRV of 70, and compared it with a dark color with an LRV of 20, the contrast percentage was 71 percent. Although my conclusion is that it would be preferable at this point to apply the formula, they do not make that definite recommendation, and although I think it would be well founded, I have not done so either. Moving further up the scale into the lighter colors, and requiring a minimum 50 points of difference will not be ideal, but as a minimum, it is still preferable to many of the fashionable tone on tone signs I have seen lately, such as white letters on an ivory or pale beige background.

In further support, I think it is time for us to join the rest of the world. Virtually every country that has an extensive set of requirements for disabled access takes contrast seriously, and uses light reflectance values, or LRV, to measure adjoining colored surfaces for contrast. Some use the Weber formula, but more use a formula referred to as the Michelson formula. All of them have struggled, I believe, with the same concerns we have, that it is almost impossible to carry out a large scale study because the range of vision and vision impairments is so complex. However, it is certainly true that many forms of vision impairment, from common forms of red/green color blindness or Deuteranopia which affects as many as 8 percent of males in our population to more complex conditions like glaucoma or macular degeneration include some degree of inability to distinguish colors. Therefore, the differences in light reflectance are crucial if signs are to be visually accessible. We have listened to experts in contrast, vision and color and heard a report and recommendation from a subcommittee on contrast that worked together for a year and also included several experts. We came close to passing a measurable standard three times. Once it failed by one vote when the Chair broke a tie. None of these efforts at creating a measurable standard was perfect, but neither are most of our other standards. Who is to say, for instance, that our standard for ramps is exactly what is needed for access by the majority of wheelchair users? Almost every successful standard is some sort of compromise that serves many people quite well, some people fairly well, and some people not at all.

Let us finally move forward to the next step, and add contrast to the many issues where we have a measurable standard, though those standards are not always perfect. That is why we return every several years for revisions. We will not ever be able to move forward on this issue unless we start somewhere. Once we have a standard, we may be able to get grant money and do some meaningful research on how adequate that standard is in providing access to persons with partial vision and a variety of vision impairments.

Here are documents and articles that document the use of LRV to measure contrast in support of disabled access from around the world. The NIBS report is included, which refers to much of that material. There is an extensive article that mentions some of our efforts here, but documents that we do not have a measurable standard. There are two articles in German, which I did read in the original. The Google translation will be accurate if you do not read German, but you will need to break up the articles into several parts. One of those articles is especially interested in contrast for stair striping due to the high percentage of accidents on stairs.

https://www.nibs.org/files/pdfs/NIBS_LVDP_Guidelines_2015.pdf

https://www.anec.eu/images/Publications/technical-studies/ANEC-final-report-1503-1700-Lenoir-et-al.pdf

https://nullbarriere.de/din32975.htm

https://www.pro-retina.de/system/files/artikel/broschure_barrierefrei_2019ua_1_0.pdf

---

Committee Action: Disapproval 25-0-1

REPORT OF HEARING:

Modification (if any):

Committee Reason: The Communications task group needs additional time for development of LRV requirements.

504.6-TOJI.doc

05-13 – 2021 Ballot Comments

BALLOT COMMENT 1- FIRST DRAFT: Proponent: Sharon Toji, Hearing Loss Association of America
Desired Action: Negative with comment
Modification:
Reason: Proposed modification due to the work of the Stair Contrast Sub Group of the Communication Task Group.
BALLOT COMMENT 2- FIRST DRAFT: Proponent: Kimberly Paarlberg, ICC
Desired Action: Affirmative with comment
Modification:
Reason: It is my understanding that the studies being reviewed by the Communications work group has not considered stairway geometry or lighting as part of the reduction on falls on stairways. I believe that there should be no additional criteria for stripes on stairways past what is currently required until such time as we have complete information.

05-13 – 2021 Public Comment 1

504.6

Proponent: Koni Sims, Pat Sheehan, representing American Council of the Blind (ACB)

Replace with the following:

504.6 Visual contrast. Visual contrast shall comply with either 1, or 2:

1. The leading 1 to 2 inches (25 to 51 mm) of every tread and landing, measured horizontally from the leading edge of the nosing~~,~~. The solid color shall provide a high contrast minimum of 70% ~~shall consist of a solid color having visual contrast~~ of dark-on-light or light-on-dark from the remainder of the tread or landing. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread.
2. Durable distinctive warning markings required by the adopted building code or ANSI safety standard.

REASON: The key to this modification to the proposal is improved safety for people with low vision as they approach and use stairs. Over the past thirty years, the blindness community has demanded contrasting stripes at or near nosings on stair treads and landings. Individuals with low vision, particularly those unfamiliar with the stair location and its geometry, must negotiate what is, for them, a hazardous walking surface (stairs). A 70% or greater contrast equates to the light reflective value (LRV) difference of 65 points on a 100-point scale. Applying a uniform standard for stair striping promotes safety and accessibility for seniors and low vision individuals who rely low vision for mobility.

Committee Action for Public Comment 1: Withdrawn

REPORT OF HEARING:

Modification (if any):

Committee Reason:

05-13 Sheehan.doc

05-13 – 2021 Public Comment 2

504.6, 504.6.1(New)

Proponent: Communications task group

Replace with the following:

504.6 Visual contrast. Visual contrast shall comply with either 1, or 2:

1. The leading 1 to 2 inches (25 to 51 mm) of every tread and landing, measured horizontally from the leading edge of the nosing, shall consist of a solid color contrasting marking complying with Section 504.6.1 ~~having visual contrast of dark-on-light or light-on-dark from the remainder of the tread~~. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread.

2. Durable distinctive warning markings required by the adopted building code or ANSI safety standard.

504.6.1 Contrast. Ther percentage of contrast between the marking and its background shall be 65% minimum. Calculations shall be in accordance with the Weber formula below:

Contrast = [(B1 - B2)/B1] x 100
where B1 = light reflectance value (LRV) of the lighter surface; and
B2 = light reflectance value (LRV) of the darker surface.

Exceptions:

1. Exterior stairs shall be permitted to have markings that have a contrast of dark-on-light or light-on-dark from the remainder of the tread and landing.

2. Stairs where the LRV of a background material cannot be accurately measured, such as a natural material, the contrast markings shall be permitted to have a contrast of dark-on-light or light-on-dark from the remainder of the tread and landing.

REASON: The Weber formula is well established and used internationally. It is an improvement over current requirements. The exterior stairways should be exempted because of weather changes. Natural materials is typically multi-colored and cannot be changed.

Committee Action for Public Comment 2: AM by PC2 and PC4 through PC7 22-1-2

REPORT OF HEARING:

Modification (if any):

Committee Reason: Provides a measurable method for determining contrast on stairways. This is consistent with what was done for signage in 07-08. (see PC3 through PC7)

05-13 – 2021 Public Comment 3

504.6, 504.6.1(New)

Proponent: Eunice Noell-Waggoner, Beezy Benzon, Gina Hilberry, Sharon Toji, Sarah Prestley, Ramesh Gulantee

Further modify PC2 with the following:

504.6 Visual contrast. Visual contrast shall comply with either 1, or 2:

1. The leading 1 to 2 inches (25 to 51 mm) of every tread and landing, measured horizontally from the leading edge of the nosing, shall consist of a solid color contrasting marking complying with Section 504.6.1. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread.
2. Durable distinctive warning markings required by the adopted building code or ANSI safety standard.

504.6.1 Contrast. Ther percentage of contrast between the marking and its background shall be 65% minimum. Calculations shall be in accordance with the Weber formula below:

Contrast = [(B1 - B2)/B1] x 100
where B1 = light reflectance value (LRV) of the lighter surface; and
B2 = light reflectance value (LRV) of the darker surface.

The lighter surface shall be 50 LRV minimum.

Exceptions:

1. Exterior stairs shall be permitted to have markings that have a contrast of dark-on-light or light-on-dark from the remainder of the tread and landing.
2. Stairs where the LRV of a background material cannot be accurately measured, such as a natural material, the contrast markings shall be permitted to have a contrast of dark-on-light or light-on-dark from the remainder of the tread and landing.

REASON: It is recommended by the Internation Communication on Illumination to add this to the Weber formula. This would prohibit options with two larger colors.

Committee Action for Public Comment 3: AS 6-22-1 (fail)

REPORT OF HEARING:

Modification (if any):

Committee Reason: This is too restrictive. There are many safety colors that are so close to 50 (safety yellow) that you could not use that color and meet this 50 LRV minimum limit consistently. This would be consistent with the committee action on 07-08.

05-13 – 2021 Public Comment 4
504.6, 504.6.1(New)

Proponent: Marsha Mazz, Ramesh Gulatee, Pat Sheehan, Koni Sims, Beezy Bentzen

Further modify PC2 with the following:

504.6 Visual contrast. Visual contrast shall comply with either 1, or 2:

1. The leading 1 to 2 inches (25 to 51 mm) of every tread and landing, measured horizontally from the leading edge of the nosing, shall consist of a solid color contrasting marking complying with Section 504.6.1. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread.
2. Durable distinctive warning markings required by the adopted building code or ANSI safety standard.

504.6.1 Contrast. Ther percentage of contrast between the marking and its background shall be 65% minimum. Calculations shall be in accordance with the Weber formula below:

Contrast = [(B1 - B2)/B1] x 100
where B1 = light reflectance value (LRV) of the lighter surface; and
B2 = light reflectance value (LRV) of the darker surface.

Exceptions:

1. Exterior stairs shall be permitted to have markings that have a contrast of dark-on-light or light-on-dark from the remainder of the tread and landing.
2. Stairs where the LRV of a background material cannot be accurately measured, such as a ~~natural~~ naturally variegated material, the contrast markings shall be permitted to have a contrast of dark-on-light or light-on-dark from the remainder of the tread and landing.

REASON: This is the intent of the committee. These materials are typically multi-colored.

Committee Action for Public Comment 4: AM 18-8-3

REPORT OF HEARING:

Modification (if any):
Further modify as follows:

504.6.1 Contrast. Ther percentage of contrast between the marking and its background shall be 65% minimum. Calculations shall be in accordance with the Weber formula below:

Contrast = [(B1 - B2)/B1] x 100
where B1 = light reflectance value (LRV) of the lighter surface; and
B2 = light reflectance value (LRV) of the darker surface.

Exceptions:

3. Exterior stairs shall be permitted to have markings that have a contrast of dark-on-light or light-on-dark from the remainder of the tread and landing.
4. Stairs where the LRV of a background material cannot be accurately measured, ~~such as a~~ including, but not limited to a naturally variegated material, the contrast markings shall be permitted to have a contrast of dark-on-light or light-on-dark from the remainder of the tread and landing.

Committee Reason: The modification allows for options other than just naturally variegated materials. The proposal allow for a variety of materials that cannot be accurately measured for LRV due to multiple coloring in the surface**.**

05-13 – 2021 Public Comment 5

504.6, 504.6.1(New), 504.6.1.1(New)

Proponent: Marsha Mazz, Ramesh Gulatee, Pat Sheehan, Koni Sims

Further modify PC2 with the following:

504.6 Visual contrast. Visual contrast shall comply with either 1, or 2:

1. The leading 1 to 2 inches (25 to 51 mm) of every tread and landing, measured horizontally from the leading edge of the nosing, shall consist of a solid color contrasting marking complying with Section 504.6.1. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread.
2. Durable distinctive warning markings required by the adopted building code or ANSI safety standard.

504.6.1 Contrast. Ther percentage of contrast between the marking and its background shall be 65% minimum. Calculations shall be in accordance with the Weber formula below:

Contrast = [(B1 - B2)/B1] x 100
where B1 = light reflectance value (LRV) of the lighter surface; and

B2 = light reflectance value (LRV) of the darker surface.

Exceptions:

1. Exterior stairs shall be permitted to have markings that have a contrast of dark-on-light or light-on-dark from the remainder of the tread and landing.
2. Stairs where the LRV of a background material cannot be accurately measured, such as a natural material, the contrast markings shall be permitted to have a contrast of dark-on-light or light-on-dark from the remainder of the tread and landing.

504.6.1.1 Compliance. Compliance with the Section 504.6.1 shall be determined by at least one of the following:

1. Documentation provided by the stair manufacturer or builder based on information from the supplier of the material.
2. Documentation of compliance by a testing agency.
3. Field measurement.

REASON: This gives the stairway manufacturers or builder the same options to prove compliance as the signage requirements.

Committee Action for Public Comment 5: AM 24-1-3
Modification to PC5 – 26-0-2

REPORT OF HEARING:

Modification (if any):

504.6.1.1 Compliance. Compliance with the Section 504.6.1 shall be determined by at least one of the following:

1. Documentation provided by the stair manufacturer or builder ~~based on information from the supplier of the material.~~
2. Documentation of compliance by a testing agency.
3. Field measurement.

Committee Reason: The modification is to delete "based on information from the supplier of the material" because it could be read to limit this to only be information from the supplier and would not allow for combined materials. This should also be deleted in 07-08.
This compliance section is the same as permitted for signage to allow for compliance options.

05-13 – 2021 Public Comment 6
504.6

Proponent: Kenny Peskin, David Cooper

Further modify PC2 with the following:

504.6 Visual contrast. Visual contrast shall comply with either 1, or 2:

1. The leading 1 to 2 inches (25 to 51 mm) of every tread and landing, measured horizontally from the leading edge of the nosing, shall consist of a solid color contrasting marking complying with Section 504.6.1. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread.
2. ~~Durable distinctive~~ Distinctive warning markings and photoluminescent markings as approved ~~required~~ by the ~~adopted building code or ANSI safety standard~~ authority having jurisdiction.

504.6.1 Contrast. Ther percentage of contrast between the marking and its background shall be 65% minimum. Calculations shall be in accordance with the Weber formula below:

Contrast = [(B1 - B2)/B1] x 100
where B1 = light reflectance value (LRV) of the lighter surface; and
B2 = light reflectance value (LRV) of the darker surface.

Exceptions:

1. Exterior stairs shall be permitted to have markings that have a contrast of dark-on-light or light-on-dark from the remainder of the tread and landing.
2. Stairs where the LRV of a background material cannot be accurately measured, such as a natural material, the contrast markings shall be permitted to have a contrast of dark-on-light or light-on-dark from the remainder of the tread and landing.

REASON: This modification originally was proposed as part of 05-11-2021 Public Comment 1. The chair ruled this part of that public comment as out of order, because the scope of the original 05-11 proposal only addressed the width of the contrasting stair stripe, not other characteristics of that contrast marking. In 05-13, both the original proposal and Public Comment 1 attempt to develop a new standard of acceptable color contrast. This modification should be within the scope of subjects already addressed by 05-13-2021 Public Comment 1.

This modification does not affect the language that would be modified under Public Comment 1 (as submitted).

The term “durable” has been deleted as subjective and not enforceable.

Photoluminescent markings may not be interpreted as “distinctive warning markings” and have been added to prevent potential conflict with contrast markings. Because photoluminescent markings function in a very different environment of low-light conditions, it is appropriate that photoluminescent markings be considered separate from other stair markings that function under different lighting conditions.

Finally, the substitution of “as approved by the authority having jurisdiction” is consistent with similar changes throughout the standard is likely editorial.

Committee Action for Public Comment 6: AM 23-2-2
Delete ‘durable’ – 9-19-2 – fail
Add “included, but not limited to” – 23-2-2
Add “photoluminescent” – 23-2-2

REPORT OF HEARING:

Modification (if any):
Further modify -

504.6 Visual contrast. Visual contrast shall comply with either 1, or 2:

1. The leading 1 to 2 inches (25 to 51 mm) of every tread and landing, measured horizontally from the leading edge of the nosing, shall consist of a solid color contrasting marking complying with Section 504.6.1. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread.
2. Durable distinctive warning markings ~~and~~ including, but not limited to, photoluminescent markings as approved by the ~~authority having jurisdiction~~ administrative authority.

Committee Reason: “Durable” is maintained since the stripes need to remain in place over time. There was a discussion if photoluminescent was a distinctive stripe or not, so this is now listed as a type of distinctive marking. Administrative authority is the defined term in the ICC A117.1. The change to Item 2 clarification of stripes not required to comply with the new calculations. This would allow for photoluminescent, hazard warning or tripping hazard provisions currently in the code and the other authority.

05-13 – 2021 Public Comment 7
504.6, 504.6.1(New)

Proponent: Kimberly Paarlberg

Further modify PC2 with the following:

504.6 Visual contrast. Visual contrast shall comply with either 1, or 2:

1. The leading 1 to 2 inches (25 to 51 mm) of every tread and landing, measured horizontally from the leading edge of the nosing, shall consist of a solid color contrasting marking complying with Section 504.6.1. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread.
2. Durable distinctive warning markings required by the adopted building code or ANSI safety standard.

504.6.1 Contrast. Ther percentage of visual contrast between the marking and its background shall be 65% minimum~~. Calculations shall be in accordance with the Weber formula below:~~ as determined by the following equation:

Contrast = [(B1 - B2)/B1] x 100
where B1 = light reflectance value (LRV) of the lighter surface; and
B2 = light reflectance value (LRV) of the darker surface.

Exception: The following shall be permitted to have markings that have a contrast of dark-on-light or light-on-dark from ~~the remainder of the tread and landing~~ its background:

1. Exterior stairways ~~shall be permitted to have markings that have a contrast of dark-on-light or light-on-dark from the remainder of the tread and landing~~.
2. Stairways where the LRV of a background material cannot be accurately measured, such as a natural material~~, the contrast markings shall be permitted to have a contrast of dark-on-light or light-on-dark from the remainder of the tread and landing~~.

REASON: The changes to Section 504.6.1 is for consistency with the language the committee approved for signage in 07-08.

Committee Action for Public Comment 7: AM 25-0-2

REPORT OF HEARING:

Modification (if any):

504.6.1 Contrast. Ther percentage of visual contrast between the marking and its background shall be 65% minimum as determined by the following equation:

Contrast = [(B1 - B2)/B1] x 100
where B1 = light reflectance value (LRV) of the lighter surface; and
B2 = light reflectance value (LRV) of the darker surface.

Exception: The following shall be permitted to have markings that have a contrast of dark-on-light or light-on-dark from ~~the remainder of the tread and landing~~ its background:

1. Exterior stairways.

2. Stairways where the LRV of a background material cannot be accurately measured, such as a natural material.

Committee Reason: Change 'stairs' to 'stairways' for consistency with defined terms. Change 'the remainder of the landing" to "its background for consistency between 504.6.1 and exceptions. The change is approved for consistency with the changes in 07-08 for signage.

05-13 – 2021 1st draft Committee Action

Committee Action for First Ballot: AM by PC2, PC3, PC4, PC5, PC6, PC7

REPORT OF HEARING:

Modification (if any):
The final version of the modification is as follows:

504.6 Visual contrast. Visual contrast shall comply with either 1, or 2:

1. The leading 1 to 2 inches (25 to 51 mm) of every tread and landing, measured horizontally from the leading edge of the nosing, shall consist of a solid color contrasting marking complying with Section 504.6.1 ~~having visual contrast of dark-on-light or light-on-dark from the remainder of the tread~~. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread.
2. Durable distinctive warning markings including, but not limited to, photoluminescent markings as approved ~~required~~ by the ~~adopted building code or ANSI safety standard~~ administrative authority.

504.6.1 Contrast. Ther percentage of visual contrast between the marking and its background shall be 65% minimum as determined by the following equation:

Contrast = [(B1 - B2)/B1] x 100
where B1 = light reflectance value (LRV) of the lighter surface; and
B2 = light reflectance value (LRV) of the darker surface.

Exceptions: The following shall be permitted to have markings that have a contrast of dark-on-light or light-on-dark from its background:

1.Exterior stairways.

2.Stairways where the LRV of a background material cannot be accurately measured, including, but not limited to a naturally variegated material.

504.6.1.1 Compliance. Compliance with the Section 504.6.1 shall be determined by at least one of the following:

1.Documentation provided by the stair manufacturer or builder.
2.Documentation of compliance by a testing agency.
3.Field measurement.

Committee Reason:
PC2 - Provides a measurable method for determining contrast on stairways. This is consistent with what was done for signage in 07-08.
PC4 - The modification allows for options other than just naturally variegated materials. The proposal allow for a variety of materials that cannot be accurately measured for LRV due to multiple coloring in the surface**.**
PC5 - The modification is to delete "based on information from the supplier of the material" because it could be read to limit this to only be information from the supplier and would not allow for combined materials. This should also be deleted in 07-08.
This compliance section is the same as permitted for signage to allow for compliance options.
PC6 - "Durable" is maintained since the stripes need to remain in place over time. There was a discussion if photoluminescent was a distinctive stripe or not, so this is now listed as a type of distinctive marking. Administrative authority is the defined term in the ICC A117.1. The change to Item 2 clarification of stripes not required to comply with the new calculations. This would allow for photoluminescent, hazard warning or tripping hazard provisions currently in the code and the other authority.
PC7 - Change 'stairs' to 'stairways' for consistency with defined terms. Change 'the remainder of the landing" to "its background for consistency between 504.6.1 and exceptions. The change is approved for consistency with the changes in 07-08 for signage.

05-13 – 2021 2nd draft Ballot Comment 1

505.10, 505.10.1

Proponent: Dan Buuck NAHB
Vote: negative with comment; AM

Further revise as follows:
505.10 Visual contrast marking. Visual contrast markings shall comply with either 1 or 2:

1. The leading 1 to 2 inches (25 to 51 mm) of every tread and *landing*, measured horizontally from the leading edge of the *nosing*, shall consist of a solid color contrasting marking complying with Section ~~504.6.1~~505.10.1. The visual contrast marking shall be uniform at each tread and *landing*, and consistent throughout the *stairway*. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread.
2. Distinctive warning markings including, but not limited to, photoluminescent markings as approved by the *administrative authority*.

505.10.1 Contrast. ~~The percentage of visual contrast between the marking and its background shall be 65% minimum as determined by the following equation:~~ The markings shall contrast visually with the remainder of the tread surface. Visual contrast shall be either light-on-dark or dark-on-light.

~~Contrast = [(B1 - B2)/B1] x 100~~
~~where B1 = *light reflectance value* (*LRV*) of the *light* surface; and~~
~~B2 = *light reflectance value* (*LRV*) of the *dark* surface.~~

~~**Exceptions:** The following shall be permitted to have markings that have a contrast of dark-on-light or light-on-dark from its background:~~
~~1. Exterior *stairways*.~~
~~2. *Stairways* where the *LRV* of a background material cannot be accurately measured, including, but not limited to a naturally variegated material.~~

~~**505.10.1.1 Compliance.** Compliance with the Section 505.10.1 shall be determined by at least one of the following:~~
~~1. Documentation provided by the stair manufacturer or builder.~~
~~2. Documentation of compliance by a testing agency.~~
~~3. Field measurement.~~

REASON: This comment aligns stairway contrast markings with the recent actions of the means of egress committee on item E73 at the hearings in Long Beach. In E73 the committee selected language requiring every tread nosing to have a marking stripe of a solid color that is lighter or darker than the remainder of the tread of interior and exterior exit stairways. The language between the building code and the standard should be closely aligned since stairways may be required to comply with both sets of requirements.
The referenced section in 505.10 was corrected.

Staff note: See 05-10 BC1 for Section 505.10.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

05-13 – 2021 2nd draft Ballot Comment 2

505.10.1

Proponent: Sharon Toji, HLAA
Vote: affirmative with comment, AM

Further revise as follows:

505.10.1 Contrast. Ther percentage of visual contrast between the marking and its background shall be 65% minimum as determined by the following equation:

Contrast = [(B1 - B2)/B1] x 100
where B1 = *light reflectance value* (*LRV*) of the *light* surface; and
B2 = *light reflectance value* (*LRV*) of the *dark* surface.

The light surface (B1) shall have a light reflectance value (LVR) of no less than 70.

Exceptions: The following shall be permitted to have markings that have a contrast of dark-on-light or light-on-dark from its background:

1. Exterior *stairway*s.
2. *Stairway*s where the *LRV* of a background material cannot be accurately measured, including, but not limited to a naturally variegated material.

REASON: It is well known by persons studying contrast and its effect on the ability of persons, especially elderly people and those with visions loss, the unless you take care to choose colors from two sections of the color or hue range that are far apart, so that you are actually comparing a color that would be called “light’ to contrast with one you would call “dark”, you cannot use the Weber Formula, to determine the contrast ration. If two dark colors, with high number LRCs are used in the equation, you will get a ‘false positive”, or misleadingly high percentage.

For that reason, the British Standards Association dictates that sings use materials that measure 70 LRV points apart on the scale, and the ISO or International Standards Organization has recently revised its standards to require that the lowest an LRC of 70 be used for the lighter of two colors.

Solution: We therefore propose that we comply with the ISO standard, and require that the lighter color for the stair markings be required to have an LRV of 70 or more.

Our proposal is supported by Eugene Lozano. Eugene Lozano has represented the California Council of the Blind in various roles for many years, and has worked continuously on environmental issues dealing with the requirements for blind individuals to access the surrounding environments. Currently, in addition to other roles, he is the Chair of the Sacramento County Disability Advisory Commission. He has informed me that he supports the inclusion of the ANSI Standards of a limit on the lighter color of 70 LRC or more, when the issues is contrast for signage and stair striping.

It is extremely simple to "fool" a simple requirement for two colors to contrast by a specific amount, using the Weber Formula, when you used two colors or hues from the darker end of the spectrum. This is what the International Signage Association teaches its members to do, by showing them that a single color from the darker end of the spectrum, Herbal Green, can masquerade as either a light color when used with black for a very dark gray, or dark when used with white. One color cannot be both light and dark, and in fact, Herbal Green is what we would call a dark color, right on the edge of 'medium". Yes, there probably are more colors that fall firmly into either the dark or light category, but certainly there are many colors or shades of colors that fall into this medium (new I'm dark, presto – now I'm light) category. And when you use one of these medium colors, with and LRC that falls significantly below the halfway mark, with a dark color, the inspector will be forced, if the proposed standard is followed to pass this set of colors that have a very pool contrast. The low vision and elderly user of the building is the loser.

Although an easier way to solve the problem is to merely require a specific number of points between the two LRVs, as the British do, we can also just set the lowest possible number of the lighter of the two colors, and accomplish the same thing, albeit with more mathematics involved. Therefore, we support eh requirements of a boundary LRV for the lighter color of 70 LRV.

Committee Action on 2nd draft Ballot Comment 2: AS/AM/D

REPORT OF HEARING:

Modification (if any):

Committee Reason:

05-13 – 2021 2nd 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 0*5-13– 2021*		
Committee decision: D	***Committee Vote at Meeting: 25-0-1***	***Committee Vote on Ballot: 41-2-2***
REPORT OF HEARING: Modification (if any):		
Committee Reason: The Communications task group needs additional time for development of LRV requirements.		
Committee decision: AM PC2, PC4, PC5, PC6, PC7	***Committee Vote at Meeting: 22-1-2***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any):		

Report for 05-13– 2021

The final version of the modification is as follows:

504.6 Visual contrast. Visual contrast shall comply with either 1, or 2:

1. The leading 1 to 2 inches (25 to 51 mm) of every tread and landing, measured horizontally from the leading edge of the nosing, shall consist of a solid color contrasting marking complying with Section 504.6.1 ~~having visual contrast of dark-on-light or light-on-dark from the remainder of the tread~~. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread.
2. Durable distinctive warning markings including, but not limited to, photoluminescent markings as approved ~~required~~ by the ~~adopted building code or ANSI safety standard~~ authority having jurisdiction.

504.6.1 Contrast. Ther percentage of visual contrast between the marking and its background shall be 65% minimum as determined by the following equation:

Contrast = [(B1 - B2)/B1] x 100
where B1 = light reflectance value (LRV) of the lighter surface; and
B2 = light reflectance value (LRV) of the darker surface.

Exceptions: The following shall be permitted to have markings that have a contrast of dark-on-light or light-on-dark from its background:

1.Exterior stairways.

2.Stairways where the LRV of a background material cannot be accurately measured, including, but not limited to a naturally variegated material.

504.6.1.1 Compliance. Compliance with the Section 504.6.1 shall be determined by at least one of the following:

1.Documentation provided by the stair manufacturer or builder.
2.Documentation of compliance by a testing agency.
3.Field measurement.

Committee Reason:
PC2 **-** Provides a measurable method for determining contrast on stairways. This is consistent with what was done for signage in 07-08.
PC4 - The modification allows for options other than just naturally variegated materials. The proposal allow for a variety of materials that cannot be accurately measured for LRV due to multiple coloring in the surface**.**
PC5 **-** The modification is to delete "based on information from the supplier of the material" because it could be read to limit this to only be information from the supplier and would not allow for combined materials. This should also be deleted in 07-08.
This compliance section is the same as permitted for signage to allow for compliance options.
PC6 - "Durable" is maintained since the stripes need to remain in place over time. There was a discussion if photoluminescent was a distinctive stripe or not, so this is now listed as a type of distinctive marking. Administrative authority is the defined term in the ICC A117.1. The change to Item 2 clarification of stripes not required to comply with the new calculations. This would allow for photoluminescent, hazard warning or tripping hazard provisions currently in the code and the other authority.
PC7 - Change 'stairs' to 'stairways' for consistency with defined terms. Change 'the remainder of the landing" to "its background for consistency between 504.6.1 and exceptions. The change is approved for consistency with the changes in 07-08 for signage.

Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

05-18 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
05-18	Boecker	505.5	AS 19-6-5	6-16-2022 1-4-2024	Final Action is D

Comment 1st draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Paarlberg, ICC	Negative	D 18-8-2	1-4-2024	
BC2	Buuck, NAHB	Affirmative	NA	1-4-2024	
BC3	Cooper, SMA	Negative	NA	1-4-2024	
PC1	Boecker	AM	Part 1 13-14-3 - fail Part 2 24-10-1 Part 3 NA	1-4-2024	**See BC1**

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

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Ross NMGCD	AM			

05-18 – 2021
505.5

Proponent: Gene Boecker, Code Consultants, Inc.

Revise as follows:

SECTION 505
HANDRAILS

505.5 Clearance. Clearance between handrail gripping surface and adjacent surfaces shall be 1 1/2 inches (38 mm) minimum. The space between the handrail and projecting objects above the handrail shall be 18 inches (455 mm) minimum. A projecting object shall not project further than the inside face of the handrail.

REASON: Although this was deleted from the provisions, it needs to be brought back. We have recently seen a handrail located in a recess that had only 3 inches clear above the top gripping surface. This makes the condition potentially unsafe since the top of the hand can contact the underside of the projecting wall above.

In researching this issue, it was found that other elements could become problematic as well. Wall sconces and artwork mounted to the wall can become elements that may adversely affect the ability to grasp the handrail in an emergency condition.

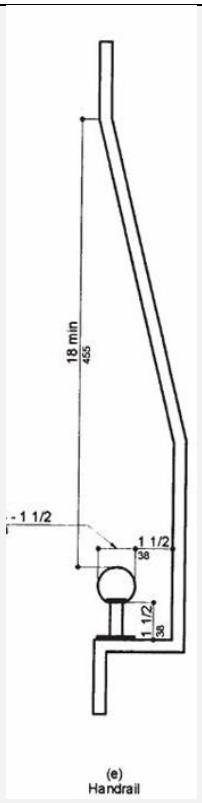
Committee Action: 19-6-5 Approved as submitted
REPORT OF HEARING:
Modification (if any):

Committee Reason: The committee agreed that there should be clearances above the handrails but did not agree on what that dimension should be. There was also concern that the first and 2nd added sentences do not work together and might conflict with the protruding object criteria in Section 307.

505.5-BOECKER.doc

05-18 – 2021 Ballot Comments

BALLOT COMMENT 1- FIRST DRAFT: Proponent: Kimberly Paarlberg, ICC
Desired Action: Negative with comment
Modification:
Reason: This proposal needs to be disapproved. There is a conflict between the two sentences. The first says you cannot have anything over the handrail for 18". At the top or bottom of a stairways, this could be a room designation sign or a light switch. The 2nd sentence then goes on to say that projections you just told me I could not have can go out as far as the handrails – or is this a projection at any height over the handrail – such as well sconces? I found this picture in a 2007 Florida building code. If this is what Gene is trying to do the text does not do this. This has been deleted from the Florida code, so I cannot access the text. I remember this is BOCA over 20 years ago, but I don't think it has ever been in IBC.



I have found out that this is 1990 ADA and was removed. Text was – "Handrails may be located in a recess if the recess is a maximum of 3 inches (76 mm) deep and extend at least 18 inches above the top of the rail." I am not proposing this, because I don't think the text matches the figure.

BALLOT COMMENT 2- FIRST DRAFT:
Proponent: Dan Buuck, NAHB

Desired Action: Affirmative with comment

Modification:

Reason:
It is unclear in which direction the user is to measure the 18 inches. It could be interpreted as not allowing anything above the plane of the handrail to be within 18 inches horizontally from the handrail. The intent of the second sentence is also unclear. At the very least, a diagram would be helpful for clarification.

BALLOT COMMENT 3- FIRST DRAFT:
Proponent: David Cooper, SMA

Desired Action: Negative with comment

Modification:
505.5 Clearance. Clearance between handrail gripping surface and adjacent surfaces shall be 1 1/2 inches (38 mm) minimum. The space between the handrail and projecting objects above

the handrail shall be 18 inches (455 mm) minimum. ~~A projecting object shall not project further than the inside face of the handrail.~~
Reason: The last sentence should be deleted because it will cause confusion with the requirements for protruding objects covered elsewhere in the standard.

05-18 – 2021 Ballot Comment 3

505.5

Proponent: David Cooper, SMA

Further revise as follows:

SECTION 505
HANDRAILS

505.5 Clearance. Clearance between handrail gripping surface and adjacent surfaces shall be 1 1/2 inches (38 mm) minimum. The space between the handrail and projecting objects above the handrail shall be 18 inches (455 mm) minimum. ~~A projecting object shall not project further than the inside face of the handrail.~~

REASON: The last sentence should be deleted because it will cause confusion with the requirements for protruding objects covered elsewhere in the standard.

Committee Action for Ballot Comment 3: NA

REPORT OF HEARING:

Modification (if any):

Committee Reason:

05-18 Cooper.doc

05-18 – 2021 Public Comment 1

505.5

Proponent: Gene Boecker, CCI

Further revise as follows:

SECTION 505
HANDRAILS

505.5 Clearance. Clearance between handrail gripping surface and adjacent surfaces shall be 1 1/2 inches (38 mm) minimum. The space between the handrail and projecting objects above the handrail shall be ~~18~~ 24 inches (~~455~~ 610 mm) minimum. ~~A projecting object shall not project further than the inside face of the handrail.~~

REASON: The committee liked the concept but felt the wording in the last sentence was difficult. So, it's proposed to no longer be a part of the proposal. The height was felt to be not what's best and might need to be higher. I agree and did some research.

The average shoulder height of an adult male is 57 inches above the floor. Handrail height must be 34-38 inches above the floor/nosing of the ramp/stair. Assuming the handrail is at it's lowest, shoulder height will be 23 inches above the handrail (57" – 34" = 23"). I then suggest to round up an inch – both for safety and to make an easier measurement to remember.

As the original proposal was intended, this will eliminate handrails being placed in slots in the wall, with no effective way to use them.

Committee Action for Public Comment 1: AM (see final action)
Part 1 change from 18" to 24" – AS 13-14-3 failed
Part 2 – deletion of last sentence – AS 24-10-1

REPORT OF HEARING:

Modification (if any):

Committee Reason: There is no justification for the increase to 24 inches. Reaching for a handrail is not related to shoulder height. This 2nd sentence adds confusion. The first sentence already limits the protrusions to 4-1/2" minus the handrail dimensions.

05-18 Boecker.doc

05-18 – 2021 1st draft Committee Action

Committee Action for First Ballot: D 18-8-2 (see BC1)

REPORT OF HEARING:

Modification (if any):

Committee Reason: While this is not an issue for a handrail on a wall, this is too restrictive for a recessed handrail.

05-18 – 2021 2nd draft Ballot Comment 1
505.5

Proponent: Stan Ross NMGCD
Vote: negative with comment; AM

Replace with the following:

SECTION 505
HANDRAILS

505.5 Clearance. Clearance between handrail gripping surface and adjacent surfaces shall be 1-1/2 inches (38 mm) minimum. The space between the handrail and projecting objects above the handrail shall be 18 inches (455 mm) minimum.

Exception. Objects projecting from the wall up to 1/2 inch (25 mm) maximum shall be permitted to be located 1-1/2 inch (38 mm) minimum to 18 inches maximum (455mm) above the handrail.

Staff note: The text does not match the graphic indicated in the reason.

REASON:
People with limited strength and balance lean against the wall above the handrail to balance their step down. See photo below. This person places their forearm against the wall and needs 18" clearance above the handrail. In addition, the clearance above the handrail provides unobstructed reach during a slip or fall.

Handrails need clearance above the gripping surface similar to the requirement for Garb Bars in 609.3. The clearance required above the Grab Bar in 609.3 is 12" high to accommodate a seated person, then there is an exception for projections. See 609.3 from CLEAN DRAFT copied further below.

Pic 1

The upper level guardrail post encroaches into area required for arm support. This person must release their grip to move down past the obstruction.

Pic 2

Rocker Light Switch projects less than ½” from wall. This ½” allows signs

and light switches to be located

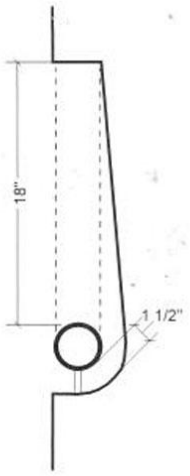


Fig. 505.5

above the handrail.

Pic 3

Bring back Figure for Handrail Spacing.

For comparison information only, see 609.3 Exception 4:

609 GRAB BARS

609.3 Spacing. The space between the wall and the grab bar shall be $1^1/_2$ inches (38 mm). The space between the grab bar and projecting objects below and at the ends of the grab bar shall be $1^1/_2$ inches (38 mm) minimum. The space between the grab bar and projecting objects above the grab bar shall be 12 inches (305 mm) minimum.

Exceptions:

1. The space between the grab bars and *operable parts* for the on/off water flow, temperature and diverter controls, shower or bathtub fittings, including the vertical bar for the adjustable mount for the hand shower, and other grab bars above the grab bar 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.

3. Automatic and push button flushing device cover plates and controls projecting from the wall up to
4. 1 inch (25 mm) maximum shall be permitted to be 4 inch (100 mm) minimum above the grab bar. Automatic flushing device cover plates and maintenance controls projecting from the wall up to 1/4 inch (6.4 mm) maximum shall be permitted within the 12-inch (305 mm) space above and the 1-1/2-inch (38 mm) spaces below the grab bar.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

05-18 – 2021 2nd 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 0*5-18– 2021*		
Committee decision: AS	***Committee Vote at Meeting: 19-6-5***	***Committee Vote on Ballot:37-3-1***
REPORT OF HEARING: Modification (if any):		
Committee Reason: The committee agreed that there should be clearances above the handrails but did not agree on what that dimension should be. There was also concern that the first and 2nd added sentences do not work together and might conflict with the protruding object criteria in Section 307.		
Committee decision: BC1 D	***Committee Vote at Meeting: 18-8-2***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any):		
Committee Reason: While this is not an issue for a handrail on a wall, this is too restrictive for a recessed handrail.		
Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

05-21 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
05-21	Cooper	505.10.1, 505.10.2, 505.10.3, Figures 505.10.3	D 32-0-2	6-30-2022 1-18-2024	AM by PC1

Comment 1st draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Cooper, SMA	Negative	NA	1-18-2024	
PC1	Cooper, SMA	AM	AM 16-8-5, 13-12-3	1-18-2024	
PC2	Zuzick	AM	NA	1-18-2024	

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

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Paarlberg, ICC	D			

05-21 – 2021

505.10.1, 505.10.2, 505.10.3, Figures 505.10.3

Proponent: David Cooper, Stair Design and Manufacturing Consultants, representing Stairbuilders and Manufacturers Association

Revise as follows:

SECTION 505
HANDRAILS

505.10.1 Top and bottom extension at ramps. Ramp handrails shall extend horizontally above the landing 12 inches (305 mm) minimum beyond the top and bottom of ramp runs. Extensions shall return to a wall, guard, or floor, or shall be continuous to the handrail of an adjacent ramp run or adjacent flight of stairs.

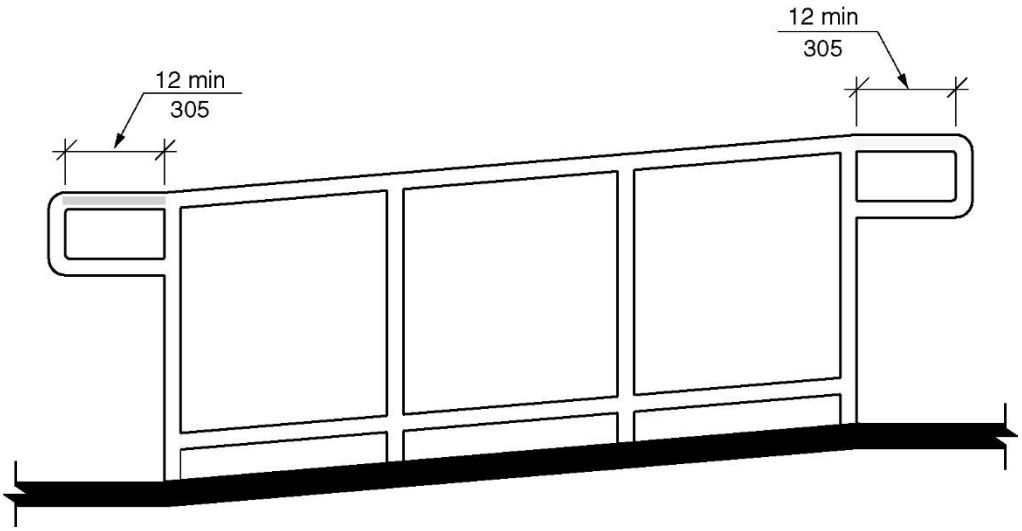


FIGURE 505.10.1
TOP AND BOTTOM HANDRAIL EXTENSION AT RAMPS

505.10.2 Top extension at stairs. At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beginning directly above the landing nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight or adjacent ramp run.

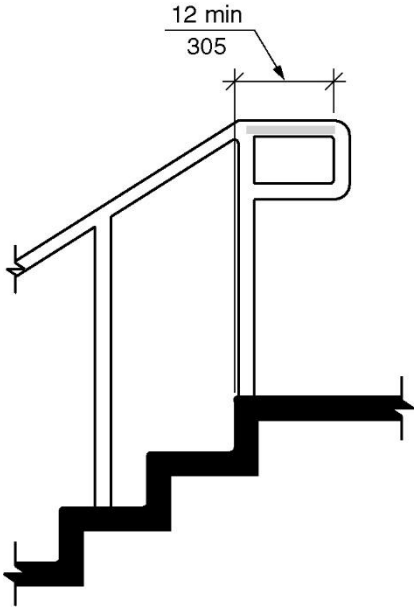


FIGURE 505.10.2
TOP AND BOTTOM HANDRAIL EXTENSION AT RAMPS

505.10.3 Bottom extension at stairs. At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance equal to one tread depth beyond the bottom tread

nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight or adjacent ramp run.

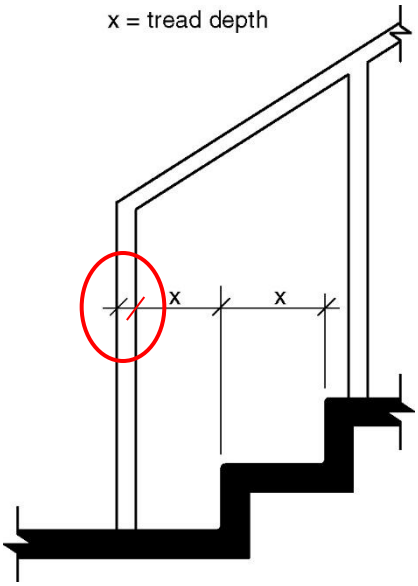


FIGURE 505.10.3
BOTTOM HANDRAIL EXTENSION AT STAIRS

REASON: It is very common for stairs and ramps in juxtaposition to leave no room for typical handrail extensions but it is often feasible to make the handrail continuous at the intersection of the ramp and stair just as it is to provide continuity at adjoining ramp runs and adjoining flights of stairs.

Committee Action: 32-0-2 Disapproved
REPORT OF HEARING:
Modification (if any):

Committee Reason: The language is confusing. The reason is not specific on why this change in needed. No supporting data was submitted. There is concern that 'continuous' handrails should be along the same path and direction of travel, not a ramp and stairway that come up to the same landing.

505.10.1-COOPER.doc

05-21 – 2021 Ballot Comments

BALLOT COMMENT 1- FIRST DRAFT: *Proponent:* **David Cooper representing SMA**
Desired Action: Negative with comment
Modification:

Reason: The discussion related to disapproval relayed serious concerns that I will try to address with a BALLOT COMMENT that will include drawings to clearly illustrate. The standard currently allows reasonable economy of space and no handrail extensions where the rail is continuous between ramp runs or continuous between flights of stairs. Stairs and ramps are commonly adjacent in the built environment. Providing guidance for handrail continuity between stairs and ramps will aid in understanding, compliance, and improved accessibility.

05-21 – 2021 Public Comment 1

505.10.1, 505.10.2, 505.10.3

Proponent: David Coopers, SMA

Replace with the following:

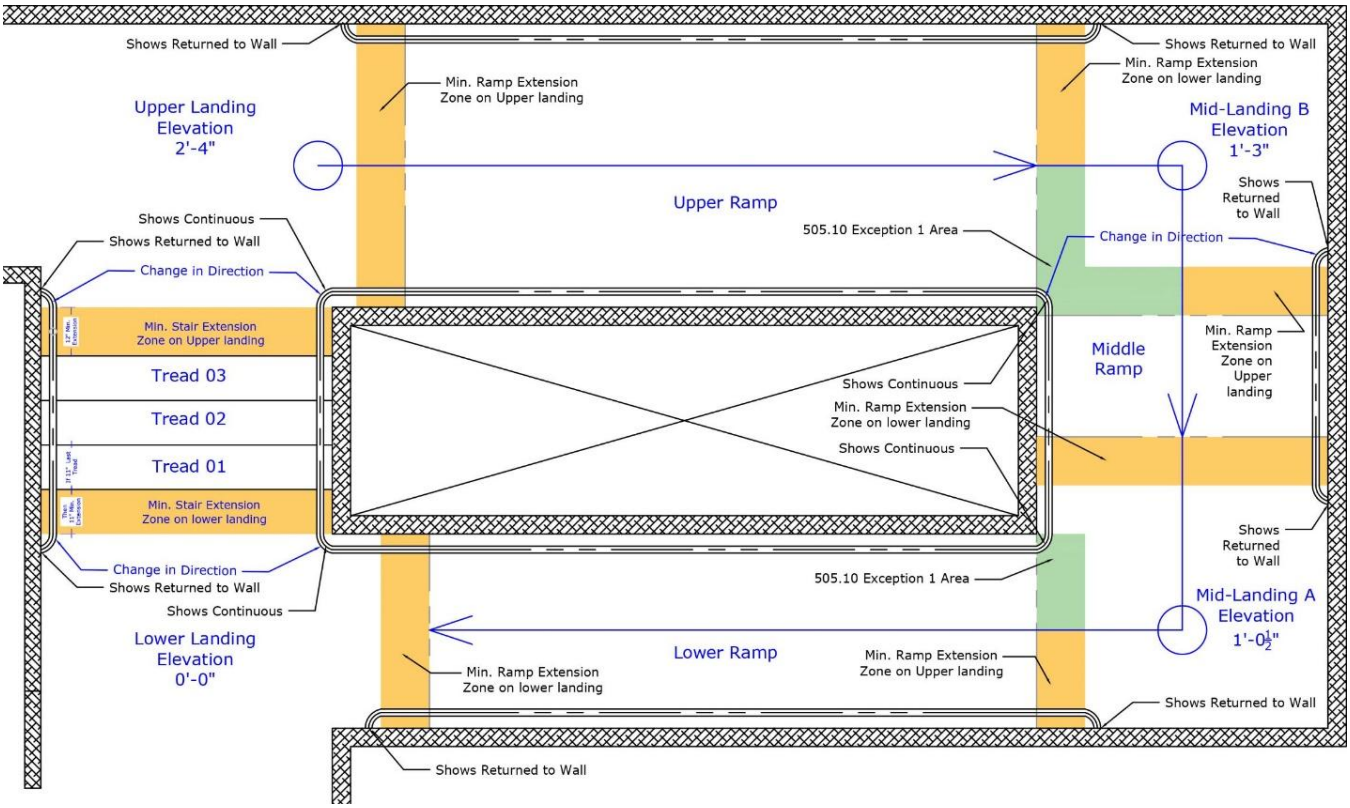
SECTION 505
HANDRAILS

505.10.1 Top and bottom extension at ramps. Ramp handrails shall extend horizontally above the landing 12 inches (305 mm) minimum beyond the top and bottom of ramp runs. Extensions shall return to a wall, guard, or floor, or shall be continuous to the handrail of an adjacent ramp run or continuous to the handrail extension of an adjacent flight of stairs.

505.10.2 Top extension at stairs. At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beginning directly above the landing nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight or continuous to the handrail extension of an adjacent ramp run.

505.10.3 Bottom extension at stairs. At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance equal to one tread depth beyond the bottom tread nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight or continuous to the handrail extension of an adjacent ramp run.

REASON: The drawing below is included to clearly illustrate the modification's intent to provide handrail continuity by allowing the connection of *handrail extensions* at adjacent ramps and stairs. Currently the standard does not allow the handrails of ramps and stairs to be connected regardless of the distance between them but requires the termination of extensions by returning them to a wall, guard, or floor. This modification provides for continuity and potential economy of space when compared to the requirement to return the handrail extensions.



Committee Action for Public Comment 1:
Part 1 Mod added 505.10 from PC2 – 16-8-5
Part 2 Change to 505.10.1, 505.10.2, 505.10.3 – 13-12-3

REPORT OF HEARING:

Modification (if any):

Replace with the following:

SECTION 505
HANDRAILS

505.10 Handrail extensions. Handrails shall extend beyond and in the same direction of stair flights and ramp runs in accordance with Section 505.10.

Exceptions:

1. Continuous handrails at the inside turn of stairs to another stair and ramps to another ramp.
2. Handrail extensions shall not be required in aisles serving seating where the handrails are discontinuous to provide access to seating and to permit crossovers within the aisle.
3. In alterations, full extensions of handrails shall not be required where such extensions would be hazardous due to plan configuration.

505.10.1 Top and bottom extension at ramps. Ramp handrails shall extend horizontally above the landing 12 inches (305 mm) minimum beyond the top and bottom of ramp runs. Extensions shall return to a wall, guard, or floor, or shall be continuous to the handrail of an adjacent ramp run or continuous to the handrail extension of an adjacent flight of stairs.

505.10.2 Top extension at stairs. At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beginning directly above the landing nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight or continuous to the handrail extension of an adjacent ramp run.

505.10.3 Bottom extension at stairs. At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance equal to one tread depth beyond the bottom tread nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight or continuous to the handrail extension of an adjacent ramp run.

Committee Reason: This would clarify that where a stairway and a ramp come together at the same landing full extensions are required. Where a stairway and ramp join at a corner, they should both have full extensions since different people are using each – this is not continuous like a stair to stair. This will clarify that the larger landing is needed to accommodate the extensions. The changes to 505.10.1, 505.10.2, and 505.10.3 are consistent with that decision.

05-21 Cooper.doc

05-21 – 2021 Public Comment 2

505.10, 505.10.1, 505.10.2, 505.10.3

Proponent: Thomas Zuzik, representing NOMMA

Replace with the following:

SECTION 505
HANDRAILS

505.10 Handrail extensions. Handrails shall extend beyond and in the same direction of stair flights and ramp runs in accordance with Section 505.10.

Exceptions:

1. Continuous handrails at the inside turn of stairs to another stair and ramps to another ramp.
2. Handrail extensions shall not be required in aisles serving seating where the handrails are discontinuous to provide access to seating and to permit crossovers within the aisle.
3. In alterations, full extensions of handrails shall not be required where such extensions would be hazardous due to plan configuration.

505.10.1 Top and bottom extension at ramps. Ramp handrails shall extend horizontally above the landing 12 inches (305 mm) minimum beyond the top and bottom of ramp runs ~~and shall extend the required minimum length before any change in direction or decrease in clearances required by Section 505.3 or 505.5~~. Extensions shall return to a wall, guard, or floor, or shall be continuous to ~~the~~ an adjacent handrail ~~of an adjacent ramp run~~.

505.10.2 Top extension at stairs. At the top of a stair flight, handrails shall extend horizontally ~~beyond~~ above the landing nosing for 12 inches (305 mm) minimum, starting at the landing's ~~nosing and shall extend the required minimum length before any change in direction or decrease in clearances required by Section 505.3 or 505.5~~. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to ~~the~~ an adjacent handrail ~~of an adjacent stair flight~~.

505.10.3 Bottom extension at stairs. At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance equal to one tread depth beyond the bottom tread nosing ~~and shall extend the required minimum length before any change in direction or decrease in clearances required by Section 505.3 or 505.5~~. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to ~~the~~ an adjacent handrail ~~of an adjacent stair flight~~.

REASON: Handrail extensions continue to be one of the most widely misinterpreted, incorrectly designed and inspected items in the built environment for accessibility. A previous proposal approved by the committee, 05-19-2021, clarified the main section of 505.10, however, there are a few areas that still needed additional clarification and are being submitted with this public comment.

For context, this is what passed for 05-19, in the first round as modified.

05-19-2021 AM
~~505~~ 506**.10 Handrail extensions.** ~~Handrails~~ Handrail extensions shall be in accordance with Section 505.10 and shall extend not less than the minimum required distance beyond and in the same direction of stair flights and ramp runs without any change in direction or a decrease in clearances required by Sections ~~505~~ 506.5 and ~~505~~ 506.6 ~~in accordance with Section 505.10~~.

The current Exception 1 in section 505.10 allows for a handrail extension to be exempt at the inside turn of stairs and ramps, but does not define all the requirements it must comply with for when allowed. This leaves open and requires the reader to also interpret the intended requirements in 505.10.1 through 505.10.3 for the additional requirement of when this exception is allowed at those inside turns.

Let's first look at the last sentence in 505.10.1, which only allows a ramp handrail extension to connect and be continuous to another ramp, or it must return to a wall, guard, or landing surface. It defines no option to be continuous to another handrail of a stair flight, even after exceeding the minimum extension requirement. This however is done all the time in the field, and to date has not been called out or failed that I am aware of, except when the minimum extensions are not

completed before connecting the handrails. However the text is the text and should be discussed at a minimum for intent and technically when splitting hairs is allowed or not.

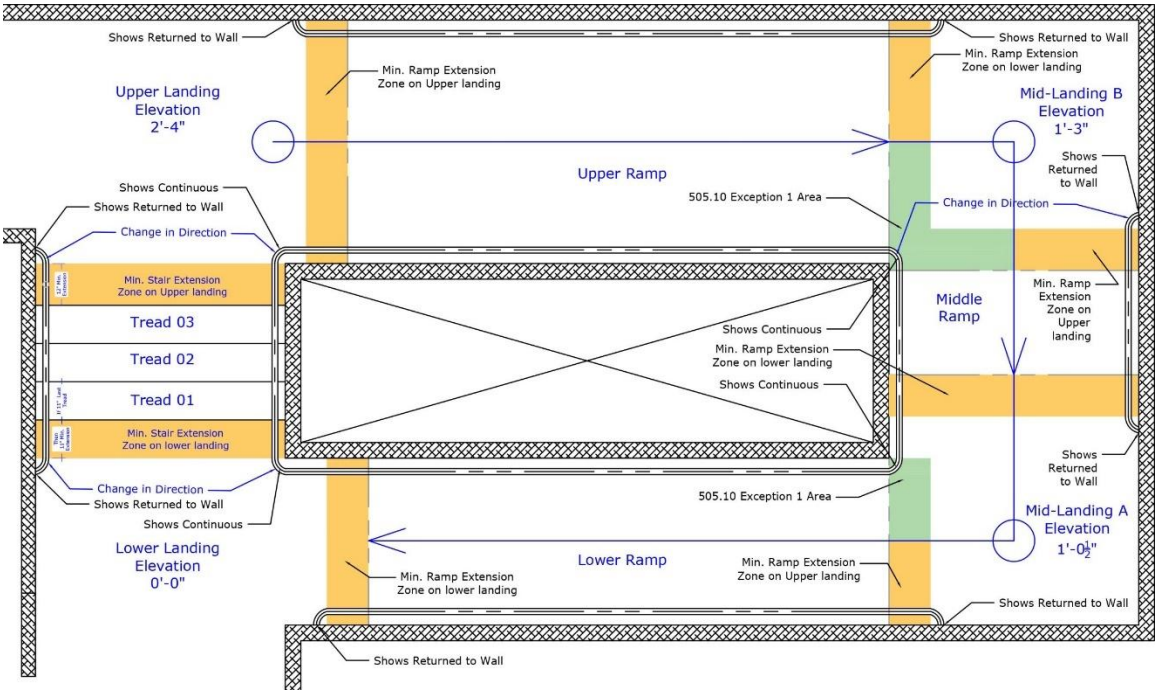
In the last sentence in 505.10.2, which only allows the handrail extension at the top of a stair flight to connect and be continuous to another stair flight handrail, or it must return to a wall, guard, or landing surface. It clearly defines no option to be continuous to a handrail of a ramp, even after exceeding the minimum extension requirements for both the ramp and stair.

In the last sentence in 505.10.3, which only allows the handrail extension at the bottom of a stair flight to connect and be continuous to another stair flight handrail, or it must return to a wall, guard, or landing surface. It again defines no option, as does 505.10.2, to be continuous to a handrail of a ramp.

The addition of the clarifying text currently in 505.10.1 through 505.10.3 being moved into exception 1, clarifies the intent of the exception is only allowed from a ramp to a ramp or stair to a stair, and not a stair to a ramp.

With the clarification now clearly defined in exception 1, when the minimum extension requirement is exempt. The revision of the text in 505.10.1 through 505.10.3 can simply state the extension can be continuous to another handrail period and meet the current text's requirements in a clearer manner and not to be obscured.

Additionally, though more of an editorial committee review, the figures within 505.10, sections 1, 2 and 3 do not properly show that the extension is required to pass through the minimum distance before terminating or changing in any direction. This public comment proposes 3 new figure replacements, or at a minimum, the concept to replace the current badly misrepresented intent of the terminations presently in the standard. Additionally, the plan view diagram below in the reason statement shows how the new diagrams fit within a floor plan layout in context.



Committee Action for Public Comment 2: No action

REPORT OF HEARING:

Modification (if any):

Committee Reason:

05-21 Zuzik.doc

05-21 – 2021 1st draft Committee Action

Committee Action for First Ballot: Final action is AFM by PC1 with modification

REPORT OF HEARING:

Modification (if any):

Committee Reason: This would clarify that where a stairway and a ramp come together at the same landing full extensions are required. Where a stairway and ramp join at a corner, they should both have full extensions since different people are using each – this is not continuous like a stair to stair. This will clarify that the larger landing is needed to accommodate the extensions. The changes to 505.10.1, 505.10.2, and 505.10.3 are consistent with that decision.

05-21 – 2021 2nd draft Ballot Comment 1
505.10, 505.10.1, 505.10.2, 505.10.3

Proponent: Kimberly Paarlberg, ICC
Vote: negative with comment; D

Request Disapproval.

If the committee prefers a more surgical approach, revise as follows:

506.10 Handrail extensions. Handrail extensions shall comply with Section 506.10 and shall extend not less than the minimum required distance beyond and in the same direction of stair flights and ramp runs without any change in direction or a decrease in clearances required by Sections 506.5 and 506.6.

Exceptions:

1. Continuous handrails at the inside turn of stairs ~~to another stair~~ and ramps ~~to another ramp~~.
2. Handrail extensions shall not be required in aisles serving seating where the handrails are discontinuous to allow access to seating and to permit crossovers within the aisle.
3. In alterations, full extensions of handrails shall not be required where such extensions would be hazardous due to plan configuration.

506.10.1 Top and bottom extension at ramps. Ramp handrails shall extend horizontally above the landing 12 inches (305 mm) minimum beyond the top and bottom of ramp runs. Extensions shall return to a wall, guard, or floor, or shall be continuous to the handrail of an adjacent ramp run or ~~continuous to the handrail extension of an~~ adjacent flight of stairs.

Figure 506.10.1

TOP AND BOTTOM HANDRAIL EXTENSION AT RAMPS

506.10.2 Top extension at stairs. At the top of a stair flight, handrails shall extend horizontally above the landing nosing for 12 inches (305 mm) minimum. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight or ~~continuous to the handrail extension of~~ an adjacent ramp run.

Figure 506**.10.2**

TOP HANDRAIL EXTENSION AT STAIRS

506.10.3 Bottom extension at stairs. At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance equal to one tread depth beyond the bottom tread nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight or ~~continuous to the handrail extension of~~ an adjacent ramp run.

Figure 506.10.3

BOTTOM HANDRAIL EXTENSION AT STAIRS

REASON: This modification would require landings where stairways and ramps to come together to be 1 foot wider in each direction to accommodate the handrail extension. This is an issue for several reasons; this is not coordinated with any of the building codes, this is additional cost for a problem that was a question – not an identified use or hazard issue; the extra size may be an issue for sites with limited space.

If the committee feels that clarifying that the handrail can extend from a ramp to a stairway is important, the modification removes the additional requirement.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

05-21 – 2021 2nd 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 *05-21– 2021*		
Committee decision: D	***Committee Vote at Meeting:*** 32-0-2	***Committee Vote on Ballot:39-1-1***
REPORT OF HEARING: Modification (if any):		
Committee Reason: The language is confusing. The reason is not specific on why this change in needed. No supporting data was submitted. There is concern that 'continuous' handrails should be along the same path and direction of travel, not a ramp and stairway that come up to the same landing.		
Committee decision: AM PC1	***Committee Vote at Meeting: 16-8-5; 13-12-3***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any): **Replace with the following:** **SECTION 505** **HANDRAILS** **505.10 Handrail extensions.** Handrails shall extend beyond and in the same direction of stair flights and ramp runs in accordance with Section 505.10. **Exceptions:** 1. Continuous handrails at the inside turn of stairs to another stair and ramps to another ramp. 2. Handrail extensions shall not be required in aisles serving seating where the handrails are discontinuous to provide access to seating and to permit crossovers within the aisle. 3. In alterations, full extensions of handrails shall not be required where such extensions would be hazardous due to plan configuration.		

Report for *05-21– 2021*
505.10.1 Top and bottom extension at ramps. Ramp handrails shall extend horizontally above the landing 12 inches (305 mm) minimum beyond the top and bottom of ramp runs. Extensions shall return to a wall, guard, or floor, or shall be continuous to the handrail of an adjacent ramp run or continuous to the handrail extension of an adjacent flight of stairs. **505.10.2 Top extension at stairs.** At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beginning directly above the landing nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight or continuous to the handrail extension of an adjacent ramp run. **505.10.3 Bottom extension at stairs.** At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance equal to one tread depth beyond the bottom tread nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight or continuous to the handrail extension of an adjacent ramp run.
Committee Reason: This would clarify that where a stairway and a ramp come together at the same landing full extensions are required. Where a stairway and ramp join at a corner, they should both have full extensions since different people are using each – this is not continuous like a stair to stair. This will clarify that the larger landing is needed to accommodate the extensions. The changes to 505.10.1, 505.10.2, and 505.10.3 are consistent with that decision.

Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		
Committee Reason:		

05-24 – 2021 overview

Proposal number	Proponent	Standard Sections	Committee Actions	Mtg. Date	Notes; Groups; groupings
05-24	Mazz	507.1	AS 25-1-4	7-28-2022 1-4-2024	Final Action AS

Comment 1st draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Anderson, AHLA	Negative	D 13-17-3 failed	1-4-2024	
BC2	Cooper, SMA	Affirmative	AS 3-28-4 failed	1-4-2024	
BC3	McNamara, Target	Negative	NA	1-4-2024	

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

Comment 2nd draft	Proponent	Requested Action	Committee Action	Mtg. Date	Notes; Groups; groupings
BC1	Paarlberg, ICC	D			

05-24 – 2021
507.1

Proponent: Marsha Mazz, representing United Spinal Association

Revise as follows:

SECTION 507
ACCESSIBLE ROUTES THROUGH PARKING

507.1 General. Where accessible routes pass through parking facilities, they shall be physically ~~separated~~ protected from vehicular traffic.

Exceptions:

1. Accessible routes crossings drive aisles shall not be required to comply with this section.
2. Accessible routes only from parking spaces complying with Section 502 and passenger loading zones complying with Section 503 to accessible entrances shall not be required to comply with this section.

REASON: Users are confused as to the meaning of the requirement to "physically separate" routes through parking from vehicular traffic. They ask if this means that the route must be raised above the traffic lanes and how high or if a yellow line would suffice. When considering this proposal, the committee also struggled with this wording. We believe the word "protected" works better

than "separated" and is a more acceptable performance standard as it better conveys the purpose. The designer would have to determine how to protect the route – they might elevate it to curb level, provide barriers such as wheel stops, jersey barriers, railings, or anything else that affords some physical protection. A pavement marking would not comply because although it is a physical element, it fails to afford "protection". Under the current text, however, a pavement marking could be construed to meet the requirement for "physical separation".

Staff Note: Held to next meeting.

Committee Action: 25-1-4 As Submitted
REPORT OF HEARING:
Modification (if any):

Committee Reason: The term 'protect' better explains the purpose of this requirement.

507.1-MAZZ.doc

05-24 – 2021 Ballot Comments

BALLOT COMMENT 1- FIRST DRAFT:
Proponent: *Doug Anderson, AHLA*
Desired Action: Negative with comment
Modification:
Reason: Vague language
BALLOT COMMENT 2- FIRST DRAFT:
Proponent: **David Cooper representing SMA**
Desired Action: Affirmative with comment
Modification: See Ballot Comment 2
Reason: Although this change offers improved understanding, the term protection lacks specificity and could be widely interpreted. Perhaps a laundry list as offered in the modification below is needed.
BALLOT COMMENT 3- FIRST DRAFT:
Proponent: **Sean McNamara representing Target**
Desired Action: Negative with Comment
Modification:
Reason: Requiring physical "protection" from vehicular traffic is still ambiguous and not much better than the existing physical "separation" requirement. Specifying protection is also setting a potentially high bar for designers to comply with this requirement. To many code users, unless clearer direction is provided, "physically protected" would require the use of a vehicle barrier to protect pedestrians. Per IBC §1607.10 vehicle barriers for

passenger vehicles shall be designed to resist a concentrate load of 6000lbs. in accordance with §4.5.3 of ASCE 7. None of the options listed in the reason statement (curb, wheel stops, jersey barriers, railings, or anything else that affords some physical protection) appear to meet this high bar when evaluated under the conditions in ASCE 7.

4.5.3 Loads on Vehicle Barrier Systems (ASCE 7-10)
Vehicle barrier systems for passenger vehicles shall be designed to resist a single load of 6,000 lb
(26.70 kN) applied horizontally in any direction to the barrier system, and shall have anchorages or attachments capable of transferring this load to the structure. For design of the system, the load shall be assumed to act at heights between 1 ft 6 in. (460 mm) and 2 ft 3 in. (686 mm) above the floor or ramp surface, selected to produce the maximum load effect.
The load shall be applied on an area not to exceed 12 in. by 12 in. (305 mm by 305 mm) and located so as to produce the maximum load effects. This load is not required to act concurrently with any handrail or guardrail system loadings specified in Section 4.5.1.

05-24 – 2021 Ballot Comment 2

507.1

Proponent: David Cooper, SMA

Further revise as follows:

SECTION 507
ACCESSIBLE ROUTES THROUGH PARKING

507.1 General. Where accessible routes pass through parking facilities, they shall be physically separated and protected from vehicular traffic by wheel stops, a barrier no less than curb height above the parking surface, or by elevating the walking surface to curb height.

Exceptions:

1. Accessible routes crossings drive aisles shall not be required to comply with this section.
2. Accessible routes only from parking spaces complying with Section 502 and passenger loading zones complying with Section 503 to accessible entrances shall not be required to comply with this section.

REASON: Although this change offers improved understanding, the term protection lacks specificity and could be widely interpreted. Perhaps a laundry list as offered in the modification below is needed.

Committee Action for Ballot Comment 2: AS 3-28-4 failed

REPORT OF HEARING:

Modification (if any):

Committee Reason: The last part of the sentence is approaching a laundry list. In addition, there are many other options that are acceptable.

05-24 Cooper.doc

05-24 – 2021 1st draft Committee Action

Committee Action for First Ballot: D 13-17-3 failed - Final Action AS

REPORT OF HEARING:

Modification (if any):

Committee Reason: See the original committee reason.

05-24 – 2021 2nd draft Ballot Comment 1

507.1

Proponent: Kimberly Paarlberg, ICC
Vote: negative with comment

Request Disapproval

REASON: The change from 'separated' to 'protected' will be interpreted in the opposite way intended by the proponent. Protected will be read to require bollards or raised sidewalks – which is an issue for access from the accessible parking spaces as this route passes them. Separated can be a painted path with concrete parking barriers to stop people from parking over them.

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

REPORT OF HEARING:

Modification (if any):

Committee Reason:

05-24 – 2021 2nd 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 05-24– 2021		
Committee decision: AS	***Committee Vote at Meeting: 25-1-4***	***Committee Vote on Ballot:37-3-1***
REPORT OF HEARING: Modification (if any):		
Committee Reason: The term 'protect' better explains the purpose of this requirement.		
Committee decision: BC1, BC2	***Committee Vote at Meeting:*** ***BC1 – D 13-17-3 failed*** ***BC2 – AS 3-28-4 failed***	***Committee Vote on Ballot:***
REPORT OF HEARING – FIRST DRAFT		
Modification (if any):		
Committee Reason: See the original committee reason.		
Committee decision: AS/AM/D	***Committee Vote at Meeting:***	***Committee Vote on Ballot:***
FINAL ACTION:		
Modification (if any):		

Report for 0*5-24– 2021*
Committee Reason: