

**CTC Meeting #28  
September 16 - 17, 2013  
Care Facilities**

The following 2013 Group B changes have been compiled for the above noted CTC Area of Study. Included in this report are code changes which received a public comment following the 2013 Group B Committee Action Hearings. These changes are intended to serve as the agenda for the CTC in order to establish CTC positions, if any, for the upcoming 2013 Group B Public Comment Hearings. THIS REPORT ONLY INCLUDES THOSE CODE CHANGES FOR WHICH CTC HAS TAKEN A POSITION ON A CODE CHANGE

**EB26-13**

**EB33-13**

**EB46-13**

**F30-13**

**F54-13**

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**EB26-13**

**803.6 (NEW)**

**Proposed Change as Submitted**

**Proponent:** Robert J. Davidson, Davidson Code Concepts, LLC, representing self (rjd@davidsoncodeconcepts.com) and David S. Collins, FAIA, The Preview Group, Inc. (dcollins@preview-group.com), representing The American Institute of Architects

**Add new text as follows:**

**803.6 Fire-resistance ratings.** Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 of the *International Building Code* has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code. The building is required to meet the other applicable fire protection requirements of Chapter 9 of the *International Building Code*.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, conditions of occupancy, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted.

**Reason:** The topic of allowing the ability to apply sprinkler protection trade-offs that exist in the current code has been a matter of discussion in the code development arena for some time. How to apply the allowance for a potential reduction in fire-resistance ratings and in what code they belong have been discussed without a consensus.

The concept is that once a building without sprinkler protection has been sprinklered throughout, whether due to renovations or retroactive code application, the designer should be permitted to allow the same fire resistance rating provisions for

new construction in an existing sprinklered building. The issue is how to provide for that application of code and ensure a proper review by the building code official is performed to ensure there are no impediments to granting an approval that may result in the reduction of existing levels of protection.

This proposal attempts to provide for that process by adding a new section to the IEBC under Section 806 Building Elements and Materials. The suggested language provides that once an existing building is sprinklered throughout and meets the other fire protection requirements of Chapter 9 of the IBC, plans, investigation and evaluation reports, and other data can be submitted seeking approval of the code official for the assignment of the new fire-resistance ratings which might be a reduction, or potentially an increase.

The suggested language also requires that any special construction features, conditions of occupancy, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted. This is to ensure special conditions are identified that may prevent a reduction in fire-resistance ratings.

**Cost Impact:** This code change proposal will not increase the cost of construction.

803.6 (NEW)-EB-DAVIDSON.doc

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### **Committee Action Hearing Results**

**Committee Action:**

**Approved as Modified**

**Modify the proposal as follows:**

**803.6 Fire-resistance ratings.** Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code* has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code. The building is required to meet the other applicable fire protection requirements of Chapter 9 of the *International Building Code*.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, conditions of occupancy, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted.

**Committee Reason:** The proposal was approved based upon the fact that it provides flexibility in existing buildings and encourages the installation of sprinkler systems. The proposal was preferred to F212 Part II. It was noted that it would be more consistent if this method was also allowed for the other compliance methods found in the IEBC. The modification simply recognizes this allowance for both NFPA 13 and NFPA 13R systems.

**Assembly Action:**

**None**

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### **Individual Consideration Agenda**

**This item is on the agenda for individual consideration because public comments were submitted.**

*Public Comment 1:*

**Tony Crimi, A.C. Consulting Solutions Inc, representing International Firestop Council (IFC), requests Approval as Modified by this Public Comment.**

**Further modify the proposal as follows:**

**803.6 Fire-resistance ratings.** Where approved by the building code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code* has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code provided, the building ~~is required to meet~~ also complies with the other applicable fire protection requirements of Chapter 9 and Chapter 10 of the *International Building Code*.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, conditions of occupancy, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted.

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**Committer's Reason:** This modification adds a critical element that is lacking in the current proposal. The proponents have indicated, the proposed change is intended to add minimum requirements for existing hospitals (Group I-2, Condition 2) into Chapter 11. However, as a revision to Chapter 8 of the IEBC, this proposal will in fact apply to all buildings undergoing Level 2 alterations.

The current proposal as modified by the Committee would permit all of the sprinkler tradeoffs permitted for new construction in the IBC, even though the means of egress of the existing building have not been evaluated. If a building falls short of the IBC's requirements for means of egress (IBC Chapter 10), allowing that building to then take all of the IBC's sprinkler trade-offs and cease maintenance of fire safety features that would be traded away for sprinklers will result in reducing the level of fire safety of that existing building well below its current levels, and well below the level envisioned by the IBC. The minimum requirements of the IBC for means of egress are clearly stipulated in Chapter 10. These minimums are assumed to be in place and thus required before the sprinkler tradeoff provisions are permitted in other sections of the Code. The IBC goes as far as to state the following:

**"1001.2 Minimum requirements.** It shall be unlawful to alter a building or structure in a manner that will reduce the number of *exits* or the capacity of the *means of egress* to less than required by this code."

By attempting to take advantage of all of the permitted reductions in fire-resistance ratings permitted by the IBC under these assumptions, this proposal needs to ensure that the base level of fire safety is also maintained. A fully adequate (safe) means of egress is an absolute bare minimum requirement. With a building already having egress deficiencies as compared to the current IBC, there should not be a possibility to further reduce fire safety features in that building.

As just one example, if an existing building had egress stairs that were narrower than the current IBC would allow, then allowing existing fire-rated egress corridors to lose their fire resistance rating could be a very detrimental loss of an essential fire safety feature for the evacuating occupants, who could be forced to wait much longer in the corridors before being able to enter the stairway.

An additional part of this Code Change Comment clarifies that the responsibility for reviewing these evaluations, which are based solely on the new construction requirements of the IBC, rests with the Building Official rather than the Fire Code Official. It is the building officials that have the training and experience to review a building for compliance to the IBC. It cannot be assumed that all Fire Official have the required knowledge of the IBC to critically evaluate a building against IBC requirements.

### *Public Comment 2:*

**William E. Koffel, P.E., Koffel Associates, Inc. representing Firestop Contractors International Association (FCIA), requests Approval as Modified by this Public Comment.**

**Further modify the proposal as follows:**

**803.6 Fire-resistance ratings.** Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code* has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code. The building is required to meet the other applicable ~~fire protection~~ requirements of ~~Chapter 9~~ of the *International Building Code*.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features including fire resistance rated assemblies and smoke resistive assemblies, conditions of occupancy, means of egress conditions, fire code deficiencies, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted.

**Committer's Reason:** Referring solely to Chapter 9 is problematic in that in one sense it is limiting and can infer that other provisions of the IBC need not be considered. In a similar manner, there may be requirements in Chapter 9 that are not relevant to the construction feature being evaluated. In lieu of creating a laundry list of code requirements to be met, the proposed language relies on the evaluation report addressing the issues to be considered and evaluated.

With respect to fire code deficiencies, the IEBC requires compliance with the IFC. However, as an existing building there may be some deficiencies that are existing but part of plan for correction. These should be included in the evaluation reports.

### *Public Comment 3:*

**Vickie Lovell, InterCode Inc, representing Fire Safe North America, formerly known as Alliance for Fire and Smoke Containment and Control requests Approval as Modified by this Public Comment.**

**Further modify the proposal as follows:**

**803.6 Fire-resistance ratings.** Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code* has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code. The building is required to meet the other applicable fire and smoke features in Chapter 7, the fire protection requirements of Chapter 9, and the means of egress requirements in Chapter 10 of the *International Building Code* as determined by a registered design professional.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, conditions of occupancy, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted.

**Commenter's Reason:** The current proposal as modified by the committee is very limited as to how the requirements of Chapter 9 are to be applied, and very non-specific about who decides which requirements of Chapter 9 are to be applied. This modification clarifies that neither the owner nor a code or fire official can arbitrarily determine what provisions of the code should apply, but that a design professional should make the determination. The code official approves the design. It also requires that the relevant information in Chapter 7 for fire and smoke containment features and also the essential components of the means of egress in chapter 10 be considered. It is not intended to require that ALL requirements in these chapter should apply; only what is appropriate and applicable as determine by a design professional.

#### *Public Comment 4:*

**Maureen Traxler, City of Seattle Department of Planning & Development, requests Approval as Modified by this Public Comment.**

**Further modify the proposal as follows:**

**301.3 803.6 Fire-resistance ratings.** Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code* has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code. The building is required to meet the other applicable fire protection requirements of Chapter 9 of the *International Building Code*.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, conditions of occupancy, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted.

**Commenter's Reason:** This modification would move the language of the proposal to Chapter 3 where it would apply to all three of the IEBC's compliance methods. The rationale for the proposal is not specific to the work area method, and we can see no reason it should not apply to the prescriptive and performance methods.

#### *Public Comment 5:*

**John Williams, ICC Ad Hoc Committee on Health Care, requests Approval as Modified by this Public Comment.**

**Further modify the proposal as follows:**

**803.6 Fire-resistance ratings.** Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code* has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code. ~~The building is required to meet the other applicable fire protection requirements of Chapter 9 of the *International Building Code*.~~

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, conditions of occupancy, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted.

**Reason:** While the AdHoc Healthcare (AHC) committee supports this change, The AHC believes the language in the 1st paragraph needs clarification. Fire protection is addressed in IEBC Section 804. IEBC Section 803 deals with building elements and materials, a reference to Chapter 9 may be out of place here. A reference to IBC Chapter 9 could be interpreted to require pressurized stairways, fire command centers, or smoke control in other parts of the building – which have little or no effect on the fire-resistance

ratings of building elements. The plans, investigation and evaluation reports required in the second in the second paragraph will provide the code official with the information needed to determine where it is reasonable to consider the requirements of the new building code.

This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering, a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April 2011, the AHC has held 8 open meetings and over 150 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: <http://www.iccsafe.org/cs/AHC/Pages/default.aspx>.

### *Public Comment 6:*

### **Thomas S. Zaremba, Roetzel & Andress, representing Alliance of Primary Fire Rated Glazing Manufacturers, requests Approval as Modified by this Public Comment.**

#### **Further modify the proposal as follows:**

**803.6 Fire-resistance ratings.** Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code* has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code. The building is required to meet the other applicable fire protection requirements of Chapter 9 of the *International Building Code* and such other provisions of the current building code as required by the code official.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, conditions of occupancy, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted. Such evaluation reports shall be submitted by the applicant and the code official is authorized, without charge to the jurisdiction, to require such evaluation reports to be prepared by, or adopted by, and bear the stamp of, a registered design professional.

**Commenter's Reason:** Three modifications to the proposal are being added to the modification made by the Committee in order to provide the code official with greater flexibility and control over the outcome of alterations involving sprinkler retrofits of existing buildings.

The first change, simply, adds the word "Code" in the first paragraph since it appears to have been inadvertently left out in the original proposal.

Second, while the original proposal provides that the "building is required to meet "the other applicable fire protection requirements of Chapter 9 of the *International Building Code*," there are provisions in other Chapters of the current building code that the code official may want the building to comply with as a condition of allowing fire-resistance ratings to meet current code. For example, although sprinklered throughout, the existing building may not be in compliance with a variety of means of egress requirements found in Chapter 10 of the current code. Without including the additional language proposed in paragraph 1, the code official would have no basis to require compliance with provisions of Chapter 10.

Third, the second paragraph of the proposal requires supporting "plans, investigation and evaluation reports and other data" to be submitted to the code official. The code official should have the option, under this paragraph, to require those supporting evaluation reports to be prepared or adopted by a registered design professional. Otherwise, the code official is tasked with verifying the accuracy and quality of the supporting evaluation reports. While there may be cases where the code official is willing to do that, the proposed modification provides the code official with the option of requiring the involvement of a registered design professional in the application process. (References to the use of registered design professionals in connection with evaluation reports such as these can be found throughout the International Codes. For example, see sections 104.2.1.1 and 106.1 of the *International Existing Building Code*; section 104.7.2 of the *International Fire Code*; and section 107.3.4 of the *International Building Code*).

I urge you to vote against the standing motion to approve as modified by the Committee, and to vote in favor of approving this proposal as modified by this Public Comment.

#### **EB26-13**

Final Action:                      AS                      AM                      AMPC\_\_\_\_                      D

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### **EB33-13**

#### **804.4.1.3**

#### **Proposed Change as Submitted**

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Group B

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**Proponent:** John Williams, CBO, Chair, ICC Ad Hoc Committee on Healthcare (John.Williams@DOH.WA.GOV) and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (cbaldassarra@rjagroup.com)

**Revise as follows:**

**804.4.1 Occupancy requirements.** A fire alarm system shall be installed in accordance with Sections 804.4.1.1 through 804.4.1.7. Existing alarm-notification appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm-notification appliances within the *work area* shall be provided and automatically activated.

**Exceptions:**

1. Occupancies with an existing, previously approved fire alarm system.
2. Where selective notification is permitted, alarm notification appliances shall be automatically activated in the areas selected.

**804.4.1.3 Group I-2.** A fire alarm system shall be installed in work areas of Group I-2 occupancies as required by the International Fire Code for ~~existing~~ new Group I-2 occupancies.

**Reason:** This proposed change is a joint proposal from the ICC Ad Hoc Committee on Healthcare (AHC) and the Code Technology Committee (CTC). The scope of the AHC deals with Group I-2 hospitals (now Group I-2 Condition 2 as a result of approved code change G257-12) and the scope of the CTC's investigation of the area of study entitled "Care Facilities" addresses Group I-1 and Group I-2 Condition 1 (nursing homes).

This section in the IEBC refers you to the IFC for fire alarm requirements in existing buildings undergoing a Level 2 Alteration. Section 1103.7.3 of the IFC refers back to the new construction requirements of Section 907.2.6.2. This proposal removes the circuitous references by stipulating that the fire alarm system needs to be installed as required for new construction.

This is a joint proposal submitted by the ICC Ad Hoc Committee for Healthcare and the ICC Code Technology Committee.

The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering, a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April 2011, the AHC has held 8 open meetings and over 150 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: <http://www.iccsafe.org/cs/AHC/Pages/default.aspx>.

The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. This proposal is submitted by the ICC Code Technology Committee. The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: <http://www.iccsafe.org/cs/CTC/Pages/default.aspx>. Since its inception in April/2005, the CTC has held twenty-five meetings - all open to the public. In 2012, three of the 25 face-to face meetings were held. In addition to the CTC meetings, the CTC established Study Groups (SG) of interested parties for each of the areas of study. These SG's are responsible for reviewing the available information and making recommendations to the CTC. All totaled, the SG's held over 70 conference calls in 2012.

**Cost Impact:** This code change proposal will not increase the cost of construction.

804.4.1.3-EB-BALDASSARRA-WILLIAMS-ADHOC.doc

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### **Committee Action Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** This proposal was felt to conflict with the IFC for existing Group I-2 occupancies. Other concerns related to the fact that this provision should be dealt with in the change of occupancy requirements for new installations.

**Individual Consideration Agenda**

This item is on the agenda for individual consideration because a public comment was submitted.

*Public Comment:*

**John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee, request Approval as Modified by this Public Comment.**

Replace the proposal as follows:

**804.4.1 Occupancy requirements.** A fire alarm system shall be installed in accordance with Sections 804.4.1.1 through 804.4.1.7. Existing alarm-notification appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm-notification appliances within the *work area* shall be provided and automatically activated.

**Exceptions:**

1. Occupancies with an existing, previously approved fire alarm system.
2. Where selective notification is permitted, alarm notification appliances shall be automatically activated in the areas selected.

**804.4.1.3 Group I-2.** A fire alarm system shall be installed ~~in work areas of~~ throughout Group I-2 occupancies as required by the International Fire Code ~~for existing Group I-2 occupancies.~~

**Commenter's Reason:** The proposal was not intended to address new vs. existing occupancies. The intent is to send the designer to the correct location for fire alarms as required in IFC and maintaining correlation in the codes. Section 804.4.1 could be confusing for designers. Fire Codes and CMS require fire alarms throughout a Group I-2 already. See IFC Section 907.2.6.2 reprinted below. By virtue of this reference the difference is that you will pick up manual fire alarm pull stations. Note that the existing requirements in Section 1103.7 would permit a previously approved fire alarm system to remain. Whereas, this proposed language would require the fire alarm system to be upgraded to new standards based on rehabilitation work.

**907.2.6.2 Group I-2.** An automatic smoke detection system shall be installed in *corridors* in nursing homes, long-term care facilities, detoxification facilities and spaces permitted to be open to the *corridors* by Section 407.2 of the *International Building Code*. The system shall be activated in accordance with Section 907.5. Hospitals shall be equipped with smoke detection as required in Section 407 of the *International Building Code*.

**Exceptions:**

1. *Corridor* smoke detection is not required in smoke compartments that contain *sleeping units* where such units are provided with smoke detectors that comply with UL 268. Such detectors shall provide a visual display on the *corridor* side of each *sleeping unit* and shall provide an audible and visual alarm at the care provider station attending each unit.
2. *Corridor* smoke detection is not required in smoke compartments that contain *sleeping units* where *sleeping unit* doors are equipped with automatic door-closing devices with integral smoke detectors on the unit sides installed in accordance with their listing, provided that the integral detectors perform the required alerting function.

**EB33-13**

Final Action: AS AM AMPC\_\_\_ D

**EB46-13**

**902.2, 902.2.1**

**Proposed Change as Submitted**

**Proponent:** Carl Baldassarra, P.E., Chair, ICC Code Technology Committee

**Revise as follows:**

**902.2 Boiler and furnace equipment rooms.** Boiler and furnace equipment rooms adjacent to or within Groups I-1, I-2, I-4, R-1, R-2 and R-4 occupancies ~~the following facilities~~ shall be enclosed by 1-hour fire-resistance-rated construction: ~~day nurseries, children's shelter facilities, residential childcare facilities, and similar facilities with children below the age of 21/2 years or that are classified as Group I-2 occupancies, shelter facilities, residences for the developmentally disabled, group homes, teaching family homes, transitional living homes, rooming and boarding houses, hotels, and multiple dwellings.~~

**Exceptions:**

1. ~~Furnace and Steam boiler equipment of low-pressure type, operating at pressures of 15 pounds per square inch gauge (psig) (103.4 KPa) or less for steam equipment or is not required to be enclosed.~~
2. ~~Hot water boilers operating at pressures of 170 psig (1171 KPa) or less for hot water equipment, when installed in accordance with manufacturer recommendations are not required to be enclosed.~~
3. ~~2-~~ Furnace and boiler equipment of residential R-3 type with 200,000 400,000 British thermal units (Btu) ~~(2.14~~ 4.22 ~~× 108 J)~~ per hour input rating or less is not required to be enclosed.
4. ~~3-~~ Furnace rooms protected with automatic ~~sprinkler protection~~ fire-extinguishing system are not required to be enclosed.

**902.2.1 Emergency controls.** ~~Emergency controls for boilers and furnace equipment shall be provided in accordance with the International Mechanical Code in all buildings classified as day nurseries, children's shelter facilities, residential childcare facilities, and similar facilities with children below the age of 21/2 years or that are classified as Group I-2 occupancies, and in group homes, teaching family homes, and supervised transitional living homes in accordance with the following:~~

1. ~~Emergency shutoff switches for furnaces and boilers in basements shall be located at the top of the stairs leading to the basement; and~~
2. ~~Emergency shutoff switches for furnaces and boilers in other enclosed rooms shall be located outside of such room.~~

**Reason:** The list of occupancies is outdated and unclear in both Section 902.2 and 902.2.1. The exceptions in 902.2 should be consistent with IBC Table 508.2.5 for new construction, not have a much lower threshold for renovations versus new. The remainder of the revisions is a clarification of the existing language. Emergency controls for boilers and furnace equipment is never required in the IMC, so Section 902.2.1 should be deleted.

The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: <http://www.iccsafe.org/cs/CTC/Pages/default.aspx>. Since its inception in April/2005, the CTC has held twenty five meetings - all open to the public.

**Cost Impact:** This code change proposal will not increase the cost of construction.

902.2-EB-BALDASSARRA-CTC.doc

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### **Committee Action Hearing Results**

**Committee Action:**

**Approved as Submitted**

**Committee Reason:** This proposal was approved as it fixes out dated descriptions of occupancies that are now clearly addressed by the IBC. These revisions were felt to make application of the I-Codes more consistent.

**Assembly Action:**

**None**

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### **Individual Consideration Agenda**

**This item is on the agenda for individual consideration because a public comment was submitted.**

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Group B

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*Public Comment:*

**Jeffrey M. Hugo, CBO, National Fire Sprinkler Association, requests Approval as Modified by this Public Comment.**

**Modify the proposal as follows:**

**902.2 Boiler and furnace equipment rooms.** Boiler and furnace equipment rooms adjacent to or within Groups I-1, I-2, I-4, R-1, R-2 and R-4 occupancies shall be enclosed by 1-hour fire-resistance-rated construction:

**Exceptions:**

1. Steam boiler equipment operating at pressures of 15 pounds per square inch gauge (psig) (103.4 KPa) or less or is not required to be enclosed.
2. Hot water boilers operating at pressures of 170 psig (1171 KPa) or less are not required to be enclosed.
3. Furnace and boiler equipment of with 400,000 British thermal units (Btu) (4.22\_x 10<sup>8</sup> J) per hour input rating or less is not required to be enclosed.
4. Furnace rooms protected with an automatic sprinkler fire-extinguishing system are not required to be enclosed.

**Commenter's Reason:** The term "automatic sprinkler system" is consistent with Table 509 (or Table 508.2 in 2009 IBC).

**EB46-13**

Final Action:                    AS                    AM                    AMPC\_\_\_\_                    D

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**F30-13**

**404.3.2, Table 405.2, 408.5.1.1 (New), 408.5.1.2 (New), 408.5.3, 408.5.5, 408.5.6 (New), 408.10.1.1 (New), 408.10.5, 408.10.6 (New)**

**Proposed Change as Submitted**

**Proponent:** Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (cbaldassarra@RJAGroup.com)

**Revise as follows:**

**404.3.2 Fire safety plans.** Fire safety plans shall include the following:

1. The procedure for reporting a fire or other emergency.
2. The life safety strategy and procedures for notifying, relocating or evacuating occupants, including occupants who need assistance.
3. Site plans indicating the following:
  - 3.1. The occupancy assembly point.
  - 3.2. The locations of fire hydrants.
  - 3.3. The normal routes of fire department vehicle access.
4. Floor plans identifying the locations of the following:
  - 4.1. Exits.
  - 4.2. Primary evacuation routes.
  - 4.3. Secondary evacuation routes.
  - 4.4. Accessible egress routes.
  - 4.5. Areas of refuge.
  - 4.6 Refuge areas
  - 4.7 4.6. Exterior areas for assisted rescue.
  - 4.8 4.7. Manual fire alarm boxes.
  - 4.9 4.8. Portable fire extinguishers.
  - 4.10 4.9. Occupant-use hose stations.

- 4.11 4-10. Fire alarm annunciators and controls.
5. A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.
  6. Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.
  7. Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard sources.

**TABLE 405.2  
FIRE AND EVACUATION DRILL  
FREQUENCY AND PARTICIPATION**

<b>GROUP OR OCCUPANCY</b>	<b>FREQUENCY</b>	<b>PARTICIPATION</b>
Group A	Quarterly	Employees
Group B <sup>c</sup>	Annually	Employees
Group E	Monthly <sup>a</sup>	All occupants
Group F	Annually	Employees
Group I	Quarterly on each shift <sup>a</sup>	Employees <sup>b</sup>
Group R-1	Quarterly on each shift	Employees
Group R-2 <sup>d</sup>	Four annually	All occupants
Group R-4	Quarterly on each shift <sup>a</sup>	Employees <sup>b</sup>
High-rise buildings	Annually	Employees

- a. The frequency shall be allowed to be modified in accordance with Sections 408.3.2, 408.5.6 and 408.10.6.
- b. Fire and evacuation drills in residential care assisted living facilities shall include complete evacuation of the premises in accordance with Section 408.10.5. Where occupants receive habilitation or rehabilitation training, fire prevention and fire safety practices shall be included as part of the training program.
- c. Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
- d. Applicable to Group R-2 college and university buildings in accordance with Section 408.3.

**408.5.1.1 Fire evacuation plan.** The fire evacuation plan required by Section 404 shall include a description of special staff actions. Plans shall include the following in addition to the requirements of Section 404.

1. In Group I-1 Condition 2 occupancies, procedures for evacuation through a refuge area in an adjacent smoke compartment and then to an exterior assembly point.

**408.5.1.2 Fire safety plans.** A copy of the plan shall be maintained at the facility at all times. Plans shall include the following in addition to the requirements of Section 404:

1. Location and number of any residents sleeping rooms.
2. Location of any special locking or egress control arrangements.

**408.5.3 Resident training.** Residents capable of assisting in their own evacuation shall be trained in the proper actions to take in the event of a fire. In Group I-1 Condition 2 occupancies training shall include evacuation through an adjacent smoke compartment and then to an exterior assembly point. The training shall include actions to take if the primary escape route is blocked. Where the resident is given rehabilitation or habilitation training, training in fire prevention and actions to take in the event of a fire shall be a part of the rehabilitation training program. Residents shall be trained to assist each other in case of fire to the extent their physical and mental abilities permit them to do so without additional personal risk.

**408.5.5 Resident participation.** Emergency evacuation drills shall involve the actual evacuation of residents to a selected assembly point and shall provide residents with experience in exiting through all required exits. All required exits shall be used during emergency evacuation drills.

**408.5.6 Emergency evacuation drill deferral.** In severe climates, the *fire code official* shall have the authority to modify the emergency evacuation drill frequency specified in Section 405.2.

**408.10.1.1 Fire safety plans.** A copy of the plan shall be maintained at the facility at all times. Plans shall include the following in addition to the requirements of Section 404:

1. Location and number of any residents sleeping rooms.
2. Location of any special locking or egress control arrangements.

**408.10.5 Resident participation.** Emergency evacuation drills shall involve the actual evacuation of residents to a selected assembly point and shall provide residents with experience in exiting through all required exits. All required exits shall be used during emergency evacuation drills.

**Exception:** Actual exiting from emergency escape and rescue windows shall not be required. Opening the emergency escape and rescue window and signaling for help shall be an acceptable alternative.

**408.10.6 Emergency evacuation drill deferral.** In severe climates, the *fire code official* shall have the authority to modify the emergency evacuation drill frequency specified in Section 405.2.

**Reason:** The intent of this proposal is to clarify the requirements for Group I-1 and R-4 assembly points. It also clarifies the implementation of smoke compartments in the new Group I-1 Condition 2 as was approved for the 2015 IBC in the G 31-12. Finally it proposes severe climate flexibility for fire drill frequency.

The proposed change clarifies that Group I-1 Condition 2 "smoke compartment" refuge areas, as required in the G 31-12 Section 420, can be used as a temporary "refuge area" during evacuation prior to complete building evacuation..

The proposed code change allows for severe climate deferrals, similar to current Group E deferrals that are already allowed. This takes into consideration the possible danger to seniors inhabiting these occupancies, when they are required to go outside during fire drills when possible inclement weather is occurring. The proposal allows the fire code official to modify drill frequency. The provision is left as a general provision purposely due to the variations of severe climate throughout the country, whether it be hot or cold, winter or summer or from storms. It leaves up to local discretion, the opportunity to allow modifications. (This is reflected in the additional section references in Note a to Table 405.2.) The modifications in actual practice may also include still conducting the drill, while not requiring residents to actually go outside during the drill at certain times of the year. The residents would still be trained to go outside to the outdoor assembly point during a real emergency situation.

The assembly point aspects of the proposed change are more clerical. The revisions are proposed essentially from the current wording in Group E clarifying that an assembly point is outdoors coinciding with the building evacuation concepts of both Group I-1 and R-4 irrelevant of the "Condition."

These changes are stand alone but have been coordinated with the Ad Hoc committee proposed IFC changes for Group I-2 so as not to conflict with those proposed changes. These changes have also been coordinated with the separate CTC proposed IFC changes for the Table 405.2 for fire and safety evacuation drills for both Groups I-1 and R-4.

The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: <http://www.iccsafe.org/cs/CTC/Pages/default.aspx>. Since its inception in April/2005, the CTC has held twenty five meetings - all open to the public.

**Cost Impact:** None

404.3.2-F-BALDASSARRA-CTC

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### **Committee Action Hearing Results**

**Committee Action:**

**Approved as Submitted**

**Committee Reason:** The committee approved the code change based on the proponent's reason statement that it clarifies the text and provides the fire code official with flexibility in requiring drills during inclement weather.

**Assembly Action:**

**None**

## **Individual Consideration Agenda**

This item is on the agenda for individual consideration because a public comment was submitted.

### *Public Comment:*

**Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee and Adolf Zubia, Chairman IAFC Fire and Life Safety Section, representing ICC Fire Code Action Committee, request Approval as Modified by this Public Comment.**

**Modify the proposal as follows:**

**404.3.2 Fire safety plans.** Fire safety plans shall include the following:

1. The procedure for reporting a fire or other emergency.
2. The life safety strategy and procedures for notifying, relocating or evacuating occupants, including occupants who need assistance.
3. Site plans indicating the following:
  - 3.1. The occupancy assembly point.
  - 3.2. The locations of fire hydrants.
  - 3.3. The normal routes of fire department vehicle access.
4. Floor plans identifying the locations of the following:
  - 4.1. Exits.
  - 4.2. Primary evacuation routes.
  - 4.3. Secondary evacuation routes.
  - 4.4. Accessible egress routes.
    - ~~4.4.1~~ ~~4.5~~. Areas of refuge.
    - ~~4.4.2~~ ~~4.7~~. Exterior areas for assisted rescue.
    - ~~4.5~~ ~~4.6~~ Refuge areas associated with smoke barriers and horizontal exits
    - ~~4.6~~ ~~4.8~~. Manual fire alarm boxes.
    - ~~4.7~~ ~~4.9~~. Portable fire extinguishers.
    - ~~4.8~~ ~~4.10~~ Occupant-use hose stations.
    - ~~4.9~~ ~~4.14~~. Fire alarm annunciators and controls.
5. A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.
6. Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.
7. Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard sources.

*(Portions of proposal not shown remain unchanged.)*

**Reason:** There was concern that the three terms, “areas of refuge”, “exterior area for assisted rescue” and “refuge area”, may be confused. However, all three are necessary information for the fire safety plan. The relocation will eliminate confusion and clarify the distinction between the elements that can be found in a building.

This proposal is co-sponsored by the ICC Fire Code Action Committee (FCAC). This ICC committee was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the Fire-CAC has held 6 open meetings and numerous Regional Work Group and Task Group meetings and conference calls which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: <http://www.iccsafe.org/cs/CAC/Pages/default.aspx>.

**F54-13****604.1.2 (New) (IBC [F] 2702.1.2), Chapter 80****Proposed Change as Submitted**

**Proponent:** John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care  
(john.williams@doh.wa.gov)

**Add new text as follows:**

**604.1.1 (IBC [F] 2702.1.1) Stationary generators.** Stationary emergency and standby power generators required by this code shall be *listed* in accordance with UL 2200

**604.1.2 (IBC [F] 2702.1.2) Group I-2 Occupancies.** In Group I-2 occupancies, where an essential electrical system is located in flood hazard areas established in Section 1612.3 of the *International Building Code*, the system shall be located and installed in accordance with ASCE 24.

**Add new standard to Chapter 80 as follows:**

ASCE 24-05 \_\_\_\_\_ Flood Resistant Design and Construction \_\_\_\_\_ 604.1.2

**Reason:** This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering, a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 5 open meetings and over 80 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: <http://www.iccsafe.org/cs/AHC/Pages/default.aspx>.

There is no way to get to the requirements or limitations regarding generator placement for healthcare facilities that are in the standard if the code text for the specific code section does not take you there.

The Adhoc committee on healthcare identified this coordination oversight as it has been identified in healthcare facilities and that generators are being installed in areas subject to flooding, and although they were designed to meet the structural loads for the flooding, they would operationally fail.

There is no cost impact for these requirements because the compliance with ASCE 24 is required for these facilities; specific reference to ASCE for coordination of requirements applicable to healthcare facilities that require emergency or standby power systems per federal, state and licensing agency requirements and references. Also, both this section and this proposal are not intended to be retroactive in application. The AHC has a separate code change that would require facilities to do a risk assessment of existing installations.

It is an installation construction requirement that is not specifically addressed in the code; emergency and standby power by generators is necessary for life safety and preservation for healthcare and for other occupancies and uses as specified in 2702.

Note that G80-12 added requirements for essential electrical systems in I-2 occupancies. This is simply a continuation of that concept. This proposal is furthering the reliability of the essential electrical systems when they will be needed most by specifically referencing to ASCE 24. The additional language referencing Section 1612.3 is similar to that used in Section 3001.2 for elevators.

**Cost impact:** The code change proposal should not increase the cost of construction because compliance is already required by facility licensure requirements.

**Analysis:** The standard proposed for inclusion in the code, ASCE 24-05, is currently referenced in the IBC. An update in the year edition of that standard will be accomplished by an administrative standards update code change to be heard by the ADM Code Development Committee.

604.1.2 (NEW)-F-WILLIAMS-ADHOC

### **Committee Action Hearing Results**

For staff analysis of the content of ASCE/SEI 24-05 relative to CP#28, Section 3.6, please visit:  
<http://www.iccsafe.org/cs/codes/Documents/2012-2014Cycle/Proposed-B/ProposedStandards.pdf>

**Committee Action:**

**Approved as Modified**

**Modify the proposal as follows:**

**604.1.2 (IBC [F] 2702.1.2) Group I-2 Occupancies.** In Group I-2 occupancies, in new construction or where the building is substantially damaged, where an essential electrical system is located in flood hazard areas established in Section 1612.3 of the *International Building Code*, the system shall be located and installed in accordance with ASCE 24.

*(Portions of proposal not shown remain unchanged.)*

**Committee Reason:** The committee approved the code change based on the proponent's reason statement and agreed that the proposal provides for important protection for critical systems. The modification clarifies that the applicability of the section would be to existing buildings only when they sustain substantial damage such as from the recent east coast hurricane.

**Assembly Action:**

**None**

### **Individual Consideration Agenda**

**This item is on the agenda for individual consideration because a public comment was submitted.**

*Public Comment:*

**John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care, requests Approval as Modified by this Public Comment.**

**Further modify the proposal as follows:**

**604.1.2 (IBC [F] 2702.1.2) Group I-2 Occupancies.** In Group I-2 occupancies, ~~in new construction or where the building is substantially damaged~~, where an essential electrical system is located in flood hazard areas established in Section 1612.3 of the *International Building Code*, and where new or replacement essential electrical system generators are installed, the system shall be located and installed in accordance with ASCE 24.

*(Portions of proposal not shown remain unchanged.)*

**Commenter's Reason:** The Adhoc committee recommends that generators be protected from floods sooner than when a building is substantially damaged. However, the Adhoc committee did not feel that generators should have to be protected if a flood plane was revised and no alterations were planned at that time. This modification will work with the hospital hazard vulnerability analysis and risk assessments. We believe that this proposal would require modifications when a substantial change is contemplated the trigger being the generator.

**F54-13**

Final Action:

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