

UPDATES TO THE 2015 DISCUSSION GUIDE & PUBLIC COMMENT AGENDA

Updated 9/23/2015

2015 ICC CODE DEVELOPMENT CYCLE TECHNICAL UPDATES TO THE 2015 PUBLIC COMMENT AGENDA FOR THE PROPOSED CHANGES TO THE:

INTERNATIONAL PLUMBING CODE®
INTERNATIONAL MECHANICAL CODE®
INTERNATIONAL EXISTING BUILDING CODE®
INTERNATIONAL BUILDING CODE®
-EGRESS
-FIRE SAFETY
-GENERAL

SUMMARY OF UPDATES:

INTERNATIONAL PLUMBING CODE:

P20-15 Part I: Changed the word “plastic” to “PEX” in the Exception for Public Comment 2.
P20-15 Part II: Changed the word “plastic” to “PEX” in the Exception for Public Comment 2.
P117-15 Part II: Public Comment 1 has been withdrawn.
P136-15 The standard is missing in Public Comment 2.

INTERNATIONAL MECHANICAL CODE:

M98-15: Public Comment 1 and Public Comment 2 are duplicate proposals and are therefore combined into Public Comment 1, with Mike Fischer and Marcelo Hirschler as co-commenters. Reason statement from Hirschler for Public Comment 2 applies to Public Comment 1 with Fischer’s reason statement.
M99-15 Public Comment 1 has been withdrawn
M128-15: Public Comment 1 and Public Comment 2 are duplicate proposals and are therefore combined into Public Comment 1, with Jeff Shapiro and Maureen Traxler as co-commenters. Reason statement from Traxler for Public Comment 2 applies to Public Comment 1 with Shapiro’s reason statement.

INTERNATIONAL EXISTING BUILDING CODE:

EB88-15: Correction made to Table 1401.6.17 in Public Comment 1

INTERNATIONAL BUILDING CODE:

EGRESS
E56-15: Public Comment 1 has been replaced.

FIRE SAFETY
FS7-15: Correction to the Proponent line for Public Comment 1. Jonathan Siu has been removed as a co-commenter.
FS118-15: Proposed code change has been withdrawn.
FS124-15: Public Comment 1 has been withdrawn.
FS125-15: Proposed code change has been withdrawn.
FS126-15: Proposed code change has been withdrawn.
FS127-15: Public Comment 1 has been withdrawn.
FS150-15: Proponent name change on Public Comment 2
FS159-15: Proponent name change on Public Comment 3
FS171-15: Replace “Table 1: Comparison of Proposed Provisions with Existing Codes and Standard” in the Reason statement of Public Comment 1

GENERAL

G9-15: Public Comment 1 has been withdrawn.
G42-15: Proposed code change has been withdrawn.
G77-15: Missing attachments for reason statement to Public Comment 9.
G118-15: Proposed code change has been withdrawn.
G119-15: Proposed code change has been withdrawn.
G127-15: Public Comment 1 has been replaced.
G185-15: Correction to the Proponent line for Public Comment 1. Jonathan Siu has been removed as a co-commenter.

INTERNATIONAL PLUMBING CODE

Updated 9/18/2015

P20-15 Part I: Changed the word “plastic” to PEX” in the Exception for Public Comment 2.

P20-15 Part I

Public Comment 2:

312.1 Required tests. The permit holder shall make the applicable tests prescribed in Sections 312.2 through 312.10 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the plumbing work is ready for tests. The equipment, material, power and labor necessary for the inspection and test shall be furnished by the permit holder and he or she shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests. All plumbing system piping shall be tested with either water or, for piping systems other than plastic, by air. After the plumbing fixtures have been set and their traps filled with water, the entire drainage system shall be submitted to final tests. The code official shall require the removal of any cleanouts if necessary to ascertain whether the pressure has reached all parts of the system

Exception: For plastic PEX piping systems, testing with a compressed gas shall be an alternative to hydrostatic testing where compressed air or other gas pressure testing is specifically authorized by all of the manufacturer's instructions for the plastic PEX pipe and fittings products installed at the time the system is being tested, and compressed air or other gas testing is not otherwise prohibited by applicable codes, laws, or regulations outside of this code.

Updated 9/18/2015

P20-15 Part II: Changed the word “plastic” to PEX” in the Exception for Public Comment 2.

P20-15 Part II

Public Comment 2:

P2503.7 Water-supply system testing. Upon completion of the water-supply system or a section of it, the system or portion completed shall be tested and proved tight under a water pressure of not less than the working pressure of the system or, for piping systems other than plastic, by an air test of not less than 50 psi (345 kPa). This pressure shall be held for not less than 15 minutes. The water used for tests shall be obtained from a potable water source.

Exception: For plastic PEX piping systems, testing with a compressed gas shall be an alternative to hydrostatic testing where compressed air or other gas pressure testing is specifically authorized by all of the manufacturer's instructions for the plastic PEX pipe and fittings products installed at the time the system is being tested, and compressed air or other gas testing is not otherwise prohibited by applicable codes, laws, or regulations outside of this code.

Updated 9/18/2015

P136-15: The standard is missing in Public Comment 2.

P136-15

Public Comment 2:

Modify standard(s) as follows:

ANSI/ASHRAE 188 – DRAFT_4th Public Review_09262014 188-2015 Legionellosis: Risk Management for Building Water Systems

INTERNATIONAL EXISTING BUILDING CODE

Updated 9/18/2015

EB88-15: Correction made to Table 1401.6.17 in Public Comment 1. Remove the footnote b from column e.

EB88-15

Public Comment 1:

OCCUPANCY	CATEGORIES					
	a ^a	b ^a	c	d	e ^b	f ^b
A-1, A-3, F, M, R, S-1	-6	-3	0	2	4	6
A-2	-4	-2	0	1	2	4
A-4, B, E, S-2	-12	-6	0	3	6	12
I-2	NP	NP	NP	8	10	NP

INTERNATIONAL BUILDING CODE – EGRESS

Updated 9/18/2015

E56-15: Public Comment 1 has been replaced with the public comment listed below.

E56-15

Public Comment 1:

Proponent: John Woestman, Kellen, representing Builders Hardware Manufacturers Association (BHMA) (jwoestman@kellencompany.com) requests Approve as Modified by this Public Comment.

Modify as Follows:

SECTION 202 DEFINITIONS

CONTROL VESTIBULE A space with a door locking arrangement of ~~two interlocked doors interconnected~~ such that ~~the first while one door must close or lock before of the second door vestibule is openable and unlocked open all other doors are locked temporarily.~~

1010.1.4.4 Control vestibule. Doors in the means of egress configured as a control vestibule shall provide for emergency egress and shall be subject to approval by the code official. Control vestibules in the means of egress shall comply with all of the following:

1. An approved override shall be provided on the egress side of each door of a control vestibule.
2. An approved override shall be provided on the ingress side of the outer door of a control vestibule.
3. Upon activation of the automatic sprinkler system or automatic fire detection system, the interlock function of the doors of the control vestibule shall deactivate.
4. Upon loss of power to the interlock function of the doors, the interlock function of the doors of the control vestibule shall deactivate.
5. The egress path from any point shall not pass through more than one set of two doors configured as a control vestibule unless approved by the code official.
6. The control vestibule locking system units shall be listed in accordance with UL 294.

Commenter's Reason: Addressing the committee reasons for disapproval, we are proposing a revised definition for "control vestibule" and proposing detailed requirements for control vestibules. The significant difference between two doors in the means of egress in series (i.e. one after the other) and doors in the means of egress configured as a control vestibule is the doors of a control vestibule are interlocked such that when one door of a control vestibule is open, all other doors of the control vestibule are temporarily locked; and conversely, in the means of egress when all doors of a control vestibule are closed, any one door may be opened.

Control vestibules are most commonly configured as a space with two doors (in series). But, some control vestibules are configured with more than one inner door and / or more than one outer door, with all doors opening into the vestibule. For example, where a control vestibule is required to help keep clean rooms clean, there may be inner doors from three different clean rooms opening into the control vestibule, and one outer door for leaving the control vestibule in the direction of egress.

Item 1: A needed requirement to address the potential situation where one of the doors on the control vestibule is propped open (example: a person faints at the outer door), other occupants may need to be able to egress through the control vestibule, especially in emergency situations. It is common the activation of an override would set off an alarm, and / or the activation of an override without a valid reason results in disciplinary action (i.e. employee gets fired).

Item 2: In the event the inner door of a control vestibule is propped open (example: a person faints at the inner door), an override allows access into the control vestibule. The required override on the ingress side of the outer door allows for emergency access into the control vestibule, if needed. This override commonly requires a higher level of authorization for use and / or is provided for responding emergency crews.

Items 3 and 4: Requires the interlock function to be disabled in the event of fire, actuation of the fire detection system, or power loss to the interlock system.

Item 5 requires that egressing through the control vestibule involves no more than two doors, unless approved by the code official. While not common, there are situations where more than one control vestibule may be needed in the means of egress.

Item 6 requires the units of the control vestibule locking system to be listed in accordance with UL 294, the same standard required for units for other electrical locking system units.

Together, the revised definition and proposed requirements provide for egress and emergency egress where control vestibules are installed.

INTERNATIONAL BUILDING CODE – FIRE SAFETY

Updated 9/18/2015

FS7-15: Correction to the Proponent line for Public Comment 1. Jonathan Siu has been removed as a co-commenter.

FS7-15

Public Comment 1:

Proponent: Lee Kranz, City of Bellevue, WA, representing Washington Association of Building Officials Technical Code Development Committee (lkranz@bellevuewa.gov) requests Approve as Modified by this Public Comment.

Updated 9/18/2015

FS150-15: Proponent name change on Public Comment 2.

FS150-15

Public Comment 2:

Proponent: Shari Jackson, American Chemistry Council, representing Foam Sheathing Committee (shari_jackson@americanchemistry.com) requests Approve as Modified by this Public Comment.

Updated 9/18/2015

FS159-15: Proponent name change on Public Comment 3.

FS159-15

Public Comment 3:

Proponent: Shari Jackson, American Chemistry Council, representing Foam Sheathing Committee (shari_jackson@americanchemistry.com) requests Approve as Modified by this Public Comment.

Updated 9/23/2015

FS171-15: Replace “Table 1: Comparison of Proposed Provisions with Existing Codes and Standard” in the Reason statement of Public Comment 1

FS171-15

Public Comment 1:

Table 1: Comparison of Proposed Provisions with Existing Codes and Standards

Proposed Code Section	Proposed Code Language	Summary of Relevant Existing Codes and Standards for Insulation Protection
2603.3.1 (1)	<u>Vertical insulation installed a minimum of 6 inches (152 mm) below finished exterior grade.</u>	IECC Section C303.2.1 and ASCE 32 require that an “opaque and weather-resistant protective covering” for exterior foundation wall insulation extend at least 6 inches below exterior finished grade. This covering is intended to protect against “ultraviolet radiation, physical damage, or other sources of deterioration.” At depths greater than 6 inches, no protective covering is required.

2603.3.1 (2)	<u>Horizontal insulation installed a minimum of 12 inches (304 mm) below finished exterior grade and extending no more than 24 inches outward from the foundation edge.</u>	IBC Section 1809.5 allows for frost protection of shallow foundations in accordance with ASCE 32. ASCE 32 does not require additional protection of insulation when installed at least 12 inches below finished exterior grade, provided that it does not extend outward more than 24 inches from the foundation edge. IECC Section 402.2.6 requires such insulation to be protected by a minimum of 10 inches of soil. The more conservative depth of 12 inches was used for this proposed change.
2603.3.1 (3)	<u>Horizontal insulation installed below finished exterior grade and protected by a concrete slab on the ground surface directly above the insulation.</u>	ASCE 32 requires that horizontal insulation installed at a depth less than 12 inches below the ground surface, or any portion “extending outward more than 24 inches from the foundation edge shall be protected from damage by concrete or asphalt pavement on the ground surface directly above the insulation,” or by other approved materials placed directly on the top surface of the insulation. IRC Section R403.3.2 requires that the concrete protection of such insulation be “a concrete slab” subject to requirements of IBC Section 1907 Minimum slab provisions , which stipulates a minimum thickness of 3.5 inches (89 mm). IECC Section C402.2.6 requires that “insulation extending away from the building...be protected by pavement or by a minimum of 10 inches (254 mm) of soil.” The proposed change uses the most conservative of these requirements, which is protection of sub-grade insulation by a concrete slab at least 3.5 inches thick.

INTERNATIONAL BUILDING CODE – GENERAL

Updated 9/18/2015

G77-15: Missing attachments for reason statement to Public Comment 9.

G77-15

Public Comment 9:



CODE CONSULTANTS, INC.

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St. Louis, Missouri
63146-4136
314-991-2633 phone
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The Fire Protection and
Life Safety Experts

- Code Consultation
- Alarm Systems Design
- Fire Sprinkler Design

July 27, 2005

Mr. Gary Nelson
International Code Council
Chicago Regional Office
4051 West Flossmoor Road
Country Club Hills, IL 60478-5795

RE: SECTION 402.4.6
2003 INTERNATIONAL BUILDING CODE

Dear Mr. Nelson:

I greatly appreciate the time that you recently extended to discuss the intent of Section 402.4.6. Pursuant to our conversation, this letter requests your opinion regarding whether utilities are permitted to penetrate and run within exit passageways of a covered mall building.

Section 402.4.6 permits mechanical rooms, electrical rooms, building service areas and service elevators to open directly into exit passageways provided that the exit passageway is separated from such rooms with 1-hour fire resistance rated walls and 1-hour opening protectives. Although this section does not specifically mention having utilities penetrate and run within exit passageways, we believe that it is the intent of the code to permit such.

As indicated in the 2003 International Building Code Commentary, "it is necessary to provide for services to the tenant spaces that are maintained by the mall management (e.g., water, electricity, telephone and fire protection). These services must be located in a common space controlled by the mall management and, therefore, cannot be located within the tenant spaces. Frequently, these services are logically located with direct access to exit passageways at the rear of the tenant spaces."

These statements recognize the need for the mall management to have control of these services and that the exit passageways at the back of the tenant spaces are necessary to be used for these purposes.

The commentary also states "Exit passageways are generally treated similar to exit stairs in that only openings from normally occupied spaces are permitted. This would prohibit door or utility penetrations to such mechanical/electrical rooms." This statement is specifically stating that for a typical exit passageway (in a building other than a covered mall building) doors and utility penetrations would not be permitted from the mechanical/electrical rooms into the exit passageways. However, the statement that follows in the commentary is "In the case of covered malls the code allows an exception to that general rule, provided that the fire-resistance rating of the exit enclosure is maintained by appropriate opening protection, such as fire doors, fire dampers

Mr. Gary Nelson
July 27, 2005
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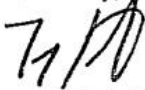
and through-penetration firestopping." This statement recognizes that utility penetrations would be permitted within an exit passageway provided that the opening protection is accommodated (e.g., through-penetration firestops).

Based on the verbage within the commentary, it appears that the intent of Section 402.4.6 is not only to permit building service rooms to open onto exit passageways, but also to permit utilities to penetrate and run within the exit passageways.

We would greatly appreciate your opinion regarding this issue. Thus, the question is whether the intent of Section 402.4.6 is to permit utilities to penetrate and run within exit passageways within a covered mall building?

If you have any questions, please contact me at your convenience. Thank you again for taking the time to provide your opinion regarding this issue.

Sincerely,



Terry Schultz, P.E.
Principal

es/psk

Updated 9/18/2015

G127-15: Public Comment 1 has been replaced with the public comment listed below.

G127-15

Public Comment 1:

Proponent: Robert Snyder, City of Bellevue, representing Washington Association of Building Officials Technical Code Development Committee (rsnyder@bellevuewa.gov) requests Approve as Modified by this Public Comment.

Replace Proposal as Follows:

427.1 Medical gas systems General. ~~Medical gas~~ Storage of medical gases at health care-related facilities intended for Patient care, inhalation or sedation including, but not limited to, analgesia systems for dentistry, podiatry, veterinary and similar uses shall comply with Section 5306 Sections 427.2 through 427.2.3 in addition to requirements of Chapter 53 of the International Fire Code.

427.2 Interior supply location Medical gases shall be stored in areas dedicated to the storage of such gases without other storage or uses. Where containers of medical gases in quantities greater than the permit amount are located inside buildings, they shall be in a 1-hour exterior room, a 1-hour interior room or a gas cabinet in accordance with Section 427.2.1, 427.2.2 or 427.2.3, respectively. Rooms or areas where medical gases are stored or used in quantities exceeding the maximum allowable quantity per control area as set forth in Section 307.1 shall be in accordance with provisions for high-hazard Group H occupancies.

427.2.1 One-hour exterior room. A 1-hour exterior room shall be a room or enclosure separated from the remainder of the building by fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both, with a fire-resistance rating of not less than 1 hour. Openings between the room or enclosure and interior spaces shall be provided with self-closing smoke and draft-control assemblies having a fire protection rating of

not less than 1 hour. Rooms shall have not less than one exterior wall that is provided with not less than two nonclosable louvered vents. Each vent shall have a minimum free opening of 24 square inches (155 cm²) for each 1,000 cubic feet (28 m³) at normal temperature and pressure (NTP) of gas stored in the room and shall be not less than 72 square inches (465 cm²) in aggregate free open area. One vent shall be within 6 inches (152 mm) of the floor and one shall be within 6 inches (152 mm) of the ceiling. Rooms shall be provided with at least one automatic sprinkler to provide container cooling in case of fire.

427.2.2 One-hour interior room. Where an exterior wall cannot be provided for the room a 1-hour interior room or enclosure shall be provided and separated from the remainder of the building by fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711 or both, with a fire resistance rating of not less than 1 hour. Openings between the room or enclosure and interior spaces shall be provided with self-closing smoke and draft control assemblies having a fire protection rating of not less than 1 hour. An automatic sprinkler system shall be installed within the room. The room shall be exhausted through a duct to the exterior. Supply and exhaust ducts shall be enclosed in a one-hour rated shaft enclosure from the room to the exterior. Approved mechanical ventilation shall comply with the *International Mechanical Code* and be provided with a minimum rate of one cubic foot per minute per square foot (0.00508 m³/(s.m²)) of the area of the room.

427.2.3 Gas cabinets. Gas cabinets shall be constructed in accordance with Section 5003.8.6 of the *International Fire Code* and shall comply with the following:

1. Constructed of not less than 0.097 inch (2.5 mm) No. 12 ga steel.
2. Provided with self-closing limited access ports or noncombustible windows to give access to equipment controls.
3. Exhausted to the exterior through dedicated exhaust duct system installed in accordance with Chapter 5 of the International Mechanical Code.
4. Supply and exhaust ducts shall be enclosed in a one-hour rated shaft enclosure from the cabinet to the exterior. The average velocity of ventilation at the face of access ports or windows shall be not less than 200 feet per minute (1.02 m/s) with a minimum of 150 feet per minute (0.076 m/s) at any point of the access port or window.
5. Provided with an automatic sprinkler system internal to the cabinet.

Commenter's Reason: Provisions for the construction of medical gas system storage facilities are currently found in Section 5306 of the International Fire Code. Since most of the medical gas construction related requirements in the IFC reference the IBC, it is logical for those requirements to be incorporated into the IBC also. Only construction related requirements are being copied into the IBC. This proposal duplicates those requirements in the IBC by creating a new Section in Chapter 4. At the Code Development Committee Hearings, while the committee was reluctant to approve the creation of a whole new section to provide a pointer to the medical gas construction provisions in the IFC only, the committee indicated support of moving those provisions into the IBC which is what this public comment accomplishes.

It must be noted that for the vast majority of the text of this public comment, the text is mirrors that of Section 5306 of the IFC. There are minor changes to reflect placement into the IBC. In addition, it was discovered that while Section 5306.2.2 was titled "One-hour interior room" there are no criteria in this section specifying how the 1-hour is achieved. Section 5306.2.1 for One-hour exterior rooms has such text. For this public comment, we copied text from 5306.2.1 and put it in the new one-hour interior room section. In next year's cycle a code change can be submitted to fix the IFC to address this gap in Sec. 5306.2.2.

Updated 9/18/2015

G185-15: Correction to the Proponent line for Public Comment 1. Jonathan Siu has been removed as a co-commenter.

G185-15

Public Comment :

Proponent : Lee Kranz, City of Bellevue, WA, representing Washington Association of Building Officials Technical Code Development Committee (lkranz@bellevuewa.gov) requests Approve as Modified by this Public Comment.
