



CODE CORRELATION MEETING NOVEMBER 17, 2022

CORRELATION ITEMS FOR CONSIDERATION

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CCC M1-22 Copyright © 2022 International Code Council, Inc.

Correlation request by: ICC Staff requests the CCC approve the suggested language below as editorial.

2021 International Mechanical Code

Further revise as follows:

1109.2.2 Refrigerant pipe enclosure. Refrigerant piping shall be protected by locating it within the building elements or within protective enclosures.

Exception: Piping protection within the building elements or protective enclosure shall not be required in any of the following locations:

1. Where installed without ready access or located more than 7 feet 3 inches (2210 mm) above the finished floor.
2. Where located within 6 feet (1829 mm) of the refrigerant unit or *appliance*.
3. Where located in a *machinery room* complying with Section 1105.
4. Outside the building:
 - 4.1. Where protected from damage from the weather, including but not limited to hail, ice, and snow loads, and from damage within the expected foot or traffic path
 - 4.2. Where outside underground installed not less than 8 inches (200 mm) below finished grade and protected against corrosion.

Reason: M83, in part, provides the following language that was approved As Submitted. To be consistent with I-codes format and style, the proposed language above combines items 4.1 and 4.2 as they are intended to apply together. Further, the above language adds “Where”, again for consistency with I-codes format and the previous items in the exception.

M83-21

IMC: TABLE 1107.4, TABLE 1107.5, 1107.7, 1109.2.2, 1109.2.3, 1109.2.6, 1109.2.7, 1109.3, 1109.3.1, 1109.3.2, 1109.4, 1109.4.1, 1109.4.2, 1109.7, 1110.3, 1110.3.1 (New), 1110.5, 1110.5.2, 1110.5.1, 1110.6, 1110.7, ASTM Chapter 15 (New)

Proponents: Emily Toto, representing ASHRAE (etoto@ashrae.org)

2021 International Mechanical Code

1109.2.2 Refrigerant pipe enclosure. Refrigerant piping shall be protected by locating it within the building elements or within protective enclosures.

Exception: Piping protection within the building elements or protective enclosure shall not be required in any of the following locations:

1. Where installed without ready access or located more than 7 feet 3 inches (2210 mm) above the finished floor.
2. Where located within 6 feet (1829 mm) of the refrigerant unit or *appliance*.
3. Where located in a *machinery room* complying with Section 1105.
4. Outside the building:
 - 4.1. Protected from damage from the weather, including, but not limited to, hail, ice, and snow loads, and
 - 4.2. Protected from damage within the expected foot or traffic path
 - 4.3. Outside underground installed not less than 8 inches (200 mm) below finished grade and protected against corrosion.

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Correlation request by: ICC Staff requests the CCC approve the suggested language below as a correlation of M79-22, M83-22 and M84-22 as related to Section 1110.3.

2024 International Mechanical Code

Further revise as follows:

1110.3 Test gases. The medium used for pressure testing the ~~refrigerant~~ refrigeration system shall be one of the following inert gases: oxygen-free nitrogen, helium, ~~or~~ argon or premixed nonflammable oxygen-free nitrogen with a tracer gas of hydrogen or helium. For R-744 ~~refrigerant~~ refrigeration systems, carbon dioxide shall be allowed as the test medium. For R-718 ~~refrigerant~~ refrigeration systems, water shall be allowed as the test medium. ~~Oxygen, air, combustible gases and mixtures containing such gases shall not be used as a test medium. Systems erected on the premises with tubing not exceeding 5/8 inch (15.9 mm) outside diameter shall be allowed to use the refrigerant identified on the nameplate label or marking as the test medium.~~

1110.3.1 Test procedure. Tests shall be performed with dry nitrogen or other nonflammable, nonreactive, dried gas. Oxygen, air, or mixtures containing them shall not be used. The means used to build up the test pressure shall have either a pressure limiting device or a pressure-reducing device and a gauge on the outlet side. The pressure-relief device shall be set above the test pressure but low enough to prevent permanent deformation of the system's components.

Exceptions:

1. Mixtures of dry nitrogen, inert gases, or a combination of them with Class 1 refrigerant in concentrations of a refrigerant weight fraction (mass fraction) not exceeding 5 percent shall be permitted for tests.
2. Mixtures of dry nitrogen, inert gases, or a combination of them with Class 2L, Class 2 and Class 3 refrigerants in concentrations not exceeding the lower of a refrigerant weight fraction (mass fraction) of 5 percent or 25 percent of the LFL shall be permitted for tests.
3. Compressed air without added refrigerants shall be permitted for tests, provided the system is subsequently evacuated to less than 1000 microns (0.1333 kPa) before charging with refrigerant. The required evacuation level is atmospheric pressure for systems using R-718 (water) or R-744 (carbon dioxide) as the refrigerant.
4. Systems erected on the premises using Group A1 refrigerant and with copper tubing not exceeding 0.62 of an inch (15.7 mm) outside diameter shall be tested by means of the refrigerant charged into the system at the saturated vapor pressure of the refrigerant at not less than 68°F (20°C).

1110.3.2 Test Gases Not Permitted. Oxygen, air, refrigerants other than those identified in Section 1110.3, combustible gases and mixtures containing such gases shall not be used as the pressure test medium.

Reason: M79-22 and M83-22 revise Section 1110.3, whereas M84-22 deletes and replaces Section 1110.3. The proposed correlation keeps Section 1110.3 as revised (M79/M83), places the proposed 1110.3 (M84) as a subsection (1110.3.1) and revised the title as shown to differentiate it from the retained 1110.3. The applicable portions of M79-22, M83-22 and M84-22 are shown below.

M79-21

IMC: 1107.3, 1107.6, 1107.7, 1108.1, 1108.3.3, 1109.8.1, 1109.8.2, 1110.3, 1110.5.1

Proponents: Emily Toto, ASHRAE, representing ASHRAE (etoto@ashrae.org)

2021 International Mechanical Code

1110.3 Test gases. The medium used for pressure testing the ~~refrigerant refrigeration~~ system shall be one of the following inert gases: oxygen-free nitrogen, helium or argon. For R-744 ~~refrigerant refrigeration~~ systems, carbon dioxide shall be allowed as the test medium. For R-718 ~~refrigerant refrigeration~~ systems, water shall be allowed as the test medium. Oxygen, air, combustible gases and mixtures containing such gases shall not be used as a test medium. Systems erected on the premises with tubing not exceeding $\frac{5}{8}$ inch (15.9 mm) outside diameter shall be allowed to use the refrigerant identified on the nameplate label or marking as the test medium.

M83-21

IMC: TABLE 1107.4, TABLE 1107.5, 1107.7, 1109.2.2, 1109.2.3, 1109.2.6, 1109.2.7, 1109.3, 1109.3.1, 1109.3.2, 1109.4, 1109.4.1, 1109.4.2, 1109.7, 1110.3, 1110.3.1 (New), 1110.5, 1110.5.2, 1110.5.1, 1110.6, 1110.7, ASTM Chapter 15 (New)

Proponents: Emily Toto, representing ASHRAE (etoto@ashrae.org)

2021 International Mechanical Code

Revise as follows:

1110.3 Test gases. The medium used for pressure testing the refrigerant system shall be one of the following inert gases: oxygen-free nitrogen, helium ~~or argon~~ or premixed nonflammable oxygen-free nitrogen with a tracer gas of hydrogen or helium. For R-744 refrigerant systems, carbon dioxide shall be allowed as the test medium. For R-718 refrigerant systems, water shall be allowed as the test medium. ~~Oxygen, air, combustible gases and mixtures containing such gases shall not be used as a test medium. Systems erected on the premises with tubing not exceeding $\frac{5}{8}$ inch (15.9 mm) outside diameter shall be allowed to use the refrigerant identified on the nameplate label or marking as the test medium.~~

Add new text as follows:

1110.3.1 Test Gases Not Permitted. Oxygen, air, refrigerants other than those identified in Section 1110.3, combustible gases and mixtures containing such gases shall not be used as the pressure test medium.

M84-21

IMC: 1110.3

Proponents: Emily Toto, ASHRAE, representing ASHRAE (etoto@ashrae.org)

2021 International Mechanical Code

Delete and substitute as follows:

~~**1110.3 Test gases.** The medium used for pressure testing the refrigerant system shall be one of the following inert gases: oxygen-free nitrogen, helium or argon. For R-744 refrigerant systems, carbon dioxide shall be allowed as the test medium. For R-718 refrigerant systems, water shall be allowed as the test medium. Oxygen, air, combustible gases and mixtures containing such gases shall not be used as a test medium. Systems erected on the premises with tubing not exceeding $\frac{5}{8}$ inch (15.9 mm) outside diameter shall be allowed to use the refrigerant identified on the nameplate label or marking as the test medium.~~

1110.3 Test gases.

Tests shall be performed with dry nitrogen or other nonflammable, nonreactive, dried gas. Oxygen, air, or mixtures containing them shall not be used. The means used to build up the test pressure shall have either a pressure limiting device or a pressure-reducing device and a gauge on the outlet side. The pressure-relief device shall be set above the test pressure but low enough to prevent permanent deformation of the system's components.

Exceptions:

1. Mixtures of dry nitrogen, inert gases, or a combination of them with Class 1 refrigerant in concentrations of a refrigerant weight fraction (mass fraction) not exceeding 5 percent shall be permitted for tests.
2. Mixtures of dry nitrogen, inert gases, or a combination of them with Class 2L, Class 2 and Class 3 refrigerants in concentrations not exceeding the lower of a refrigerant weight fraction (mass fraction) of 5 percent or 25 percent of the LFL shall be permitted for tests.
3. Compressed air without added refrigerants shall be permitted for tests, provided the system is subsequently evacuated to less than 1000 microns (0.1333 kPa) before charging with refrigerant. The required evacuation level is atmospheric pressure for systems using R-718 (water) or R-744 (carbon dioxide) as the refrigerant.
4. Systems erected on the premises using Group A1 refrigerant and with copper tubing not exceeding 0.62 of an inch (15.7 mm) outside diameter shall be tested by means of the refrigerant charged into the system at the saturated vapor pressure of the refrigerant at not less than 68°F (20°C).

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Correlation request by: ICC Staff requests the CCC approve the suggested language below as a correlation of ADM14-22, ADM34-22 Part I and ADM36-22 Part I. Note that these code changes affect multiple I-codes and that this request is to extend to those codes also.

2024 International Mechanical Code

Further revise as follows:

105.2 104.2.3 Alternative materials, design and methods of construction and equipment.

The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. ~~An alternative material, design or method of construction shall be approved where the code official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons why the alternative was not approved.~~

Exception: Performance-based alternative materials, designs or methods of construction and equipment complying with the ICC Performance Code. This exception shall not apply to alternative structural materials or to alternative structural designs.

[A] 104.2.3.1 Approval authority. An alternative material, design or method of construction shall be approved where the code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

[A] 104.2.3.2 Application and disposition. Where required, a request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.3.3 Compliance with code intent. An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety

Reason: ADM14-22 combines Sections 104 and 105 by relocating and revising sections currently in 105 into 104. ADM34-22 Part I and ADM36-22 Part I revise section 105.2. A portion of ADM14-22 relocates and revises this section to become section 104.2.3 as shown above. We believe this section and new sections 104.2.3.3 and 104.2.3.4 appropriately correlates the changes approved in ADM34-22 Part I and ADM36-22 Part I. Portions of ADM34-22 Part I and ADM36-22 Part I related to the sections in question are shown below.

ADM34-22 Part I

IEBC: [A] 104.11, [A] 104.11.1; IFC: [A] 104.10, [A] 104.10.1; IFGC: [A] 105.2, [A] 105.2.1; IMC: [A] 105.2, [A] 105.2.1; IPC: [A] 105.2, [A] 105.2.1; IPMC: [A] 106.2, [A] 106.6; IPSDC: [A] 105.2, [A] 105.2.1; ISPSC: [A] 104.10, 104.10.1 (New); IWUIC: [A] 105.3, 105.3.1 (New); IGCC: 105.4, 105.4.1

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

Revise as follows:

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, and that
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in as it pertains to the following:
 - 2.1. Quality;
 - 2.2. Strength;
 - 2.3. Effectiveness;
 - 2.4. Fire effectiveness;
 - 2.5. Durability and
 - 2.6. Safety.

ADM36-22 Part I

IBC: [A] 104.11, [A] 104.11.1 (New), [A] 104.11.2 (New), [A] 104.11.1, [A] 104.11.2; IEBC: [A] 104.11, [A] 104.11.1 (New), [A] 104.11.2 (New), [A] 104.11.1, [A] 104.11.2; IFC: [A] 104.10, [A] 104.10.1 (New), [A] 104.10.2 (New), [A] 104.10.1, [A] 104.10.2; IFGC: [A] 105.2, [A] 105.2.1 (New), [A] 105.2.2 (New), [A] 105.2.1; IMC: [A] 105.2, [A] 105.2.1 (New), [A] 105.2.2 (New), [A] 105.2.1; IPC: [A] 105.2, [A] 105.2.1 (New), [A] 105.2.2 (New), [A] 105.2.1; IPMC: [A] 106.2, [A] 106.2.1 (New), [A] 106.2.2 (New); IWUIC: [A] 105.3, [A] 105.3.1 (New), [A] 105.3.2 (New)

Proponents: Marcelo Hirschler, representing GBH International (mmh@gbhint.com)

2021 International Mechanical Code

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, durability, fire safety, and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

[A] 105.2.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

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Correlation request by: ICC Staff requests direction from the CCC on how to proceed with the correlation of, M72-21 (AS), RM6-21 (AS) and ADM52-22. Approved results of M72-21 and RM6-21 are shown below. Below that is information related to ADM52-22 specific to the standard in question.

Summary: In the Group A 2021 cycle M72-21 and RM6-21 were approved As Submitted and included an update to the UL/CSA 60335-2-40 and CSA C22.2 No. 60335-2-40 standards to the 2019 edition, with specific language that makes reference to the standard. In Group B 2022 ADM52-22 indicated updates from both UL and CSA that updated the UL/CSA 60335-2-40 and CSA C22.2 No. 60335-2-40 standards to the 2019 edition. This is consistent with the updates in the 2021 cycle. At the ADM committee hearings, a modification was requested to update the reference to UL/CSA 60335-2-40 standard to the 2022 edition, which was recommended for approval by the ADM Committee (Note that this modification was only addressing UL/CSA 60335-2-40). At the PCH a public comment was submitted to move the 2022 edition of UL/CSA 60335-2-40 back to the 2019 edition. The vote on that public comment failed, resulting in approval of an update to UL/CSA 60335-2-40 2022 edition.

Issue: Group A approved the 2019 edition for both UL/CSA 60335-2-40 and CSA C22.2 No. 60335-2-40, whereas Group B approved the 2022 edition only for UL/CSA 60335-2-40.

To review hearing videos:

M72-21: <https://www.cdpassess.com/videos/3545/>

RM6-21: <https://www.cdpassess.com/videos/3447/>

ADM52 CAH (ADM52-BALLANCO-6): <https://www.cdpassess.com/videos/5520/> (11 minutes and 55 seconds into testimony)

ADM52 PCH (Public Comment No. 22): <https://www.cdpassess.com/videos/5595/>

M72-21

IMC: 1101.2.1 (New), UL Chapter 15

Proponents: Helen Walter-Terronni, AHRI, representing AHRI; Julius Ballanco, representing Daikin US (JBENGINEER@aol.com); Andrew Klein, representing The Chemours Company (andrew@asklein.com); Joe Nebbia, Newport Partners, representing Natural Resources Defense Council (jnebbia@newportpartnersllc.com)

2021 International Mechanical Code

Add new text as follows:

1101.2.1 Group A2L, A2, A3 and B1 high probability equipment. High probability equipment using Group A2L, A2, A3, or B1 refrigerant shall comply with UL 484, UL/CSA 60335-2-40, or UL/CSA 60335-2-89.

Revise as follows:

UL

UL LLC
333 Plingsten Road
Northbrook IL 60062-2096

UL/CSA 60335-2-40—17 2019: Household and Similar Electrical Appliances—Safety—Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers

RM6-21

IRC: M1411.1, M1411.2 (New), M1411.3 (New), M1411.4 (New), M1411.5 (New), M1411.6 (New), M1411.7 (New), ANCE Chapter 44, CSA Chapter 44, UL Chapter 44

Proponents: Helen Walter-Terroni, AHRI, representing AHRI (helen.a.walter-terrioni@outlook.com); Julius Ballanco, representing Dakin US (JBEngineer@aol.com)

2021 International Residential Code

M1411.1 Approved refrigerants. Refrigerants used in direct refrigerating systems shall conform to the applicable provisions of ANSI/ASHRAE 34.

Add new text as follows:

M1411.2 Refrigeration system listing. Refrigeration systems using Group A2L refrigerants shall be listed and labeled to UL 60335-2-40/CAN/CSA C22.2 No. 60335-2-40. Refrigeration systems using Group A1 refrigerants shall be listed to UL 60335-2-40/CAN/CSA C22.2 No. 6-335-2-40 or UL 1995/CSA C22.2 No. 236. The equipment shall be installed in accordance with the listing.

M1411.3 Refrigeration system installation. Refrigeration systems shall be installed in accordance with the manufacturer's installation instructions. After installation, the manufacturer's installation instructions, owner's manuals, service manuals, and any other product literature provided with the equipment shall be attached to the indoor unit or left with the homeowner.

M1411.4 Field installed accessories. All field installed accessories shall be installed in accordance with the accessory and equipment manufacturer's installation instructions. Accessories installed in the ductwork of Group A2L refrigeration systems shall not contain electric heating elements, open flames, or devices switching electrical loads greater than 2.5 kVA.

M1411.5 Signs and identification. Each refrigeration system using Group A2L refrigerant shall have the following information legibly and permanently indicated on a markable label provided by the equipment manufacturer.

1. Contact information of the responsible company that installed the refrigeration system, and
2. The system refrigerant charge and the refrigerant number.

M1411.6 Refrigerant charge. All refrigeration systems shall have refrigerant charge in compliance with the equipment manufacturer's installation instructions and the requirements of the listing. Group A2L refrigerant charge for an individual refrigeration system shall not exceed 34.5 lbs. (15.7 kg).

M1411.7 Group A2L refrigerant piping testing. The piping system containing Group A2L refrigerant shall be tested in accordance with the manufacturer's installation instructions and the requirements of the listing.

Delete without substitution:

ANCE

Association of Standardization and
Certification
Av. Lázaro Cárdenas No. 869 Fraccion 3
Col. Nva. Industrial Vallejo Deleg. Gustavo
A. Madero México, D.F.

~~NMX-J-521-2-40-ANCE—2014/CAN/CSA-22.2 No. 60335-2-40—12/UL-60335-2-40: Safety of Household and Similar Electric Appliances, Part 2-40: Particular Requirements for Heat Pumps, Air-Conditioners and Dehumidifiers~~

Revise as follows:

CSA

CSA Group
8501 East Pleasant Valley Road
Cleveland OH 44131-5516

~~UL 60335-2-40-2019/CAN/CSA/C22.2 No. 60335-2-40—2012 19: Standard for Safety of Household and Similar Electrical Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers~~

UL

UL LLC
333 Pfingsten Road
Northbrook IL 60062

~~UL/CSA/ANCE 60335-2-40—2012 2019/CAN/CSA C22.2 No. 60335-2-40-19: Standard for Safety Household and Similar Electrical Appliances, - Safety - Part 2, -40: Particular Requirements for Electrical Heat Pumps, Air Conditioners and Dehumidifiers Motor-compressors~~

ADM52-22

CSA	Canadian Standards Association		
Standard Reference Number	Title	Referenced in Code(s):	

CAN/CSA-C22.2 No. 60335-2-40 2012 <u>2019</u>	Safety of Household and Similar Electrical Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers	IMC	ISPSC	IRC®
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UL	UL LLC	
Standard Reference Number	Title	Referenced in Code(s):

UL/CSA 60335-2-40— 17 <u>2019</u>	Household and Similar Electrical Appliances—Safety—Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers <u>Motor-Compressors</u>	IMC
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FLOOR MODIFICATION ADM52-22-BALLANCO-6

Proponent: Julius Ballanco, representing Daikin U.S. (jbengineer@aol.com)

UL/CSA 60335-2-40— 2010 <u>2022</u>	Household and Similar Electrical Appliances—Safety—Part 2: Particular Requirements for Motor-Compressors	IMC
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UL	UL LLC	
Standard Reference Number	Title	Referenced in Code(s):

Public Comment 22:

Proponents: Jay Peters, representing Honeywell (peters.jay@me.com) requests As Modified by Public Comment

Further modify as follows:

UL	UL LLC	
Standard Reference Number	Title	Referenced in Code(s):
UL/CSA 60335-2-40— 2022 <u>2019</u>	Household and Similar Electrical Appliances—Safety—Part 2: Particular Requirements for Motor-Compressors	IMC

Commenter's Reason: The proponent's reasoning statement provided to the committee for this modification was completely inaccurate. The original proposal for the inclusion of edition of UL 60335-2-40 should be upheld. The 2022 edition of the standard was not complete when the proponent incorrectly testified that it was complete. There is no debate as to the technical aspects or merits of the standard. ICC Procedures do not allow for a standard to be approved unless completed by the deadline. UL 60335-2-40 2022 Edition was not, and is still not complete today. This proposal should be disapproved for procedural and policy issues and not updated until the next cycle. If this standard edition is approved as modified, there will be technical and safety conflicts between this standard and the ASHRAE 15 as the code adopts the 2019 edition of ASHRAE 15 and there are conflicting provisions between the new 2-40 and the adopted 15 standard. It makes no practical sense to adopt a more recent listing standard for flammable refrigerant containing equipment than the installation standard that correlates with it. Other codes have, thus far, also voted to NOT include the 2022 edition of UL 60335-2-40 in the 2024 codes. Moreover the CANENA WG14 agreed unanimously to require an external discharge safety valve as part of the installation standard. This also is not complete yet and one further example this is not ready to be adopted yet.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. No change to code.

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Correlation request by: ICC Staff requests the CCC approve the suggested language below as editorial.

2021 International Property Maintenance Code

Further revise as follows:

303.2 Enclosures. Private swimming pools, hot tubs and spas, containing water more than 24 inches (610 mm) in depth shall be completely surrounded by a fence or barrier not less than 48 inches (1219 mm) in height above the finished ground level measured on the side of the barrier away from the pool. Gates and doors in such barriers shall be self-closing and self-latching. Where the self-latching device is less than 54 inches (1372 mm) above the bottom of the gate, the release mechanism shall be located on the pool side of the gate. Self-closing and self-latching gates shall be maintained such that the gate will positively close and latch when released from an open position of 6 inches (152 mm) from the gatepost. An existing pool enclosure shall not be removed, replaced or changed in a manner that reduces its effectiveness as a safety barrier.

Exceptions:

1. Spas or hot tubs equipped with a lockable safety cover that complies with ASTM F1346.

2. Private swimming pools equipped with a power safety cover that complies with ASTM F1346 and in working condition by the control switch.

Reason: As shown on the following page, PM3-21 provides the language that was approved As Submitted. To be consistent with I-codes format and style, the proposed language above breaks the exception into 2 separate and distinct exceptions as they relate to different subject matter; Spa's or hot tubs, and Private swimming pools.

PM3-21

IPMC: SECTION 202, (New), 303.2

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jhatfield@phta.org)

2021 International Property Maintenance Code

SECTION 202 GENERAL DEFINITIONS.

Add new definition as follows:

POWER SAFETY COVER. A pool cover that is placed over the water area, and is opened and closed with a motorized mechanism activated by a control switch.

SAFETY COVER. A structure, fabric or assembly, along with attendant appurtenances and anchoring mechanisms, that is temporarily placed or installed over an entire pool, spa or hot tub and secured in place after all bathers are absent from the water.

Revise as follows:

303.2 Enclosures. Private swimming pools, hot tubs and spas, containing water more than 24 inches (610 mm) in depth shall be completely surrounded by a fence or barrier not less than 48 inches (1219 mm) in height above the finished ground level measured on the side of the barrier away from the pool. Gates and doors in such barriers shall be self-closing and self-latching. Where the self-latching device is less than 54 inches (1372 mm) above the bottom of the gate, the release mechanism shall be located on the pool side of the gate. Self-closing and self-latching gates shall be maintained such that the gate will positively close and latch when released from an open position of 6 inches (152 mm) from the gatepost. An existing pool enclosure shall not be removed, replaced or changed in a manner that reduces its effectiveness as a safety barrier.

Exception: Spas or hot tubs equipped with a lockable safety cover that complies with ASTM F1346 and private swimming pools equipped with a power safety cover in working condition by the control switch that complies with ASTM F1346 shall be exempt from the provisions of this section.

Reason Statement: This proposal seeks to harmonize the *International Property Maintenance Code* and the *International Swimming Pool and Spa Code* on the subject of enclosures. The *International Swimming Pool and Spa Code* allows an exception on enclosures for pools that meet the appropriate ASTM standard while the current *International Property Maintenance Code* does not. This proposal also includes the *International Swimming Pool and Spa Code* definitions for power safety cover and safety cover to ensure conformity in the definitions used throughout the I-Codes.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.

CCC IWUIC1-22

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Correlation request by: ICC Staff requests that the CCC approve the suggested language below as a correlation of IWUIC9-21 and IWUIC7-21.

2021 International Wildland Urban Interface Code

Further revise as follows:

503.2 Ignition-resistant building material. Ignition-resistant building materials shall comply with any one of the following:

- 1.1 Material shall exhibit a flame spread index not exceeding 25 and shall not show evidence of progressive combustion following the extended 30-minute test.
- 1.2 Material shall exhibit a flame front that does not progress more than 10 1/2 feet (3200 mm) beyond the centerline of the burner at any time during the extended 30-minute test.
- 1.3 The material shall also maintain its performance under conditions of use by meeting performance requirements for weathering, including exposure to temperature, moisture and ultraviolet radiation, in accordance with the following: Weathering. Ignition-resistant building materials shall maintain their performance in accordance with this section under conditions of use. Materials shall meet the performance requirements for weathering (including exposure to temperature, moisture and ultraviolet radiation) contained in the following standards, as applicable to the materials and the conditions of use:
 - 1.3.1 Ignition resistant materials shall demonstrate compliance with the requirements of 503.2 Item 1 after weathering in accordance with Method A “Test Method for Accelerated Weathering of Fire-Retardant Treated Wood for Fire Testing” in ASTM D2898. Method A “Test Method for Accelerated Weathering of Fire-Retardant Treated Wood for Fire Testing” in ASTM D2898, for fire-retardant-treated wood, wood-plastic composite and plastic lumber materials.
 - 1.3.2 ASTM D7032 for wood-plastic composite materials. Wood-plastic composite materials shall demonstrate acceptable fire performance after weathering by the following procedure: first testing in accordance with ASTM E1354, at an incident heat flux of 50 kW/m² in the horizontal orientation, then weathering in accordance with ASTM D7032, and then retesting in accordance with ASTM E1354 and exhibiting an increase of no more than 10% in peak rate of heat release when compared to the peak heat release rate of the non-weathered material.
 - 1.3.3 ASTM D6662 for plastic lumber materials. Plastic lumber composite materials shall demonstrate acceptable fire performance after weathering by the following procedure: first testing in accordance with ASTM E1354, at an incident heat flux of 50 kW/m² in the horizontal orientation, then weathering in accordance with ASTM D6662, and then retesting in accordance with ASTM E1354 and exhibiting an increase of no more than

10% in peak rate of heat release when compared to the peak heat release rate of the non-weathered material.

Reason: The suggested language retains the more detailed requirements of WUIC7-21 as the less detailed requirements of WUIC9-21 part of these detailed requirements. The applicable requirements approved by both WUIC9 and WUIC7 are shown below as they relate to the same subject matter

WUIC9-21 AMPC1

503.2.4.3.2 Wood-plastic composite materials. Wood-plastic composite materials shall be evaluated after weathering in accordance with ASTM D7032.

WUIC7-21 AM approved text from Section 503.2 Item 1.3.2:

1.3.2 Wood-plastic composite materials shall also demonstrate acceptable fire performance after weathering by the following procedure: first testing in accordance with ASTM E1354, at an incident heat flux of 50 kW/m² in the horizontal orientation, then weathering in accordance with ASTM D7032, and then retesting in accordance with ASTM E1354 and exhibiting an increase of no more than 10% in peak rate of heat release when compared to the peak heat release rate of the non-weathered material.

WUIC9-21 AMPC1

503.2.4.3.3 Plastic lumber materials. Plastic lumber materials shall be evaluated after weathering in accordance with ASTM D6662.

WUIC7-21 AM approved text from Section 503.2 Item 1.3.3:

1.3.3 Plastic lumber composite materials shall also demonstrate acceptable fire performance after weathering by the following procedure: first testing in accordance with ASTM E1354, at an incident heat flux of 50 kW/m² in the horizontal orientation, then weathering in accordance with ASTM D6662, and then retesting in accordance with ASTM E1354 and exhibiting an increase of no more than 10% in peak rate of heat release when compared to the peak heat release rate of the non-weathered material.

Proponents

WUIC7-21

IWUIC: 503.2, ASTM Chapter 07 (New)

Proponents: Michael O'Brian, representing FCAC (fcac@iccsafe.org)

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WUIC9-21

IWUIC: 503.2, 503.2.1 (New), 503.2.2 (New), 503.2.2.1 (New), 503.2.3 (New), 503.2.4 (New), 503.2.4.1 (New), 503.2.4.2 (New), 503.2.4.3 (New), 503.2.4.4 (New)

Proponents: Marcelo Hirschler, GBH International, representing self (mmh@gbhint.com)