Proposed Amendments (added text to the code is: underlined, deleted text to the code is: ~~struck through~~)

ITEM NUMBER	ARTICLE	SUMMARY	PROPONENT	ACTION
		Proposed		
IECC – 2023 - 1	**IECC - Amendments**	Revise IECC Amendments to read as follows **R402.4.1.3 Low-rise R-2 multifamily testing (Mandatory)**. Low-rise R-2 multifamily dwellings shall be tested to less than ~~7.0~~ 5.0 air changes per hour at 50 Pascals (ACH50). As an alternative to ACH50, compliance for Low-rise R-2 dwellings may be attained by achieving an Envelope Leakage Ratio at 50 Pascals (ELR50) of less than ~~0.35~~ 0.30 (ELR50 < ~~0.35~~ 0.30, where ELR50 = CFM50 / Envelope Shell Area, in square feet).	Mike Barcik, Southface, Abe Kruger, SK Collaborative, Diana Burk, New Buildings Institute, Eric Lacey, Responsible Energy Codes Alliance	
IECC – 2023 - 2	**IECC - C402.5**	Revise IECC section C402.5 to read as follows Amend this section of 2015 IECC: **C402.5 Air leakage—thermal envelope (Mandatory).** The *thermal envelope* of buildings shall comply with Sections C402.5.1 through C402.5.~~8~~ 9, or the building *thermal envelope* shall be tested in accordance with ASTM E 779 at a pressure differential of 0.3 inch water gauge (75 Pa) or an equivalent method approved by the code official and deemed to comply with the provisions of this section when the tested air leakage rate of the building thermal envelope is not greater than 0.40 cfm/ft$_2$ (0.2 L/s · m$_2$). Where compliance is based on such testing, the building shall also comply with Sections C402.5.5, C402.5.6 and C402.5.7. *Add new section of 2015 IECC: **C402.5.9 Air leakage—thermal envelope for Mid- and High-rise multifamily (Mandatory).** The *thermal envelope* for buildings classified as R-2 Mid- and High-rise shall comply with Sections C402.5.9.1 and C402.5.9.2 **C402.5.9.1** All commercial type R-2 multifamily dwellings (regardless of number of stories of dwelling units) shall be tested to less than 5.0 air changes per hour at 50 Pascals	Mike Barcik, Southface, Abe Kruger, SK Collaborative, Diana Burk, New Buildings Institute, Eric Lacey, Responsible Energy Codes Alliance	

		(ACH50). As an alternative to ACH50, compliance for commercial type R-2 dwellings may be attained by achieving an Envelope Leakage Ratio at 50 Pascals (ELR50) of less than 0.30 (ELR50 < 0.30, where ELR50 = CFM50 / Envelope Shell Area, in square feet). **C402.5.9.2** Commercial type R-2 multifamily dwellings (regardless of number of stories of dwelling units) may (optionally) employ either one or both of the following testing protocols: 1. Utilize multiple fans in adjacent units (commonly referred to as Guarded Blower Door testing) to minimize effect of leakage to adjacent units (not required). 2. Envelope testing of less than 100 percent shall be acceptable assuming a maximum sampling protocol of 1 in 4 dwelling units per floor (if sampled unit passes, the remaining up to three units are deemed to comply; if sampled unit fails, it must be sealed and retested and the remaining up to three units shall also be tested). *Amend this section of IECC 2015: C401.2 Application Commercial buildings shall comply with one of the following: 1. The requirements of ANSI/ASHRAE/IESNA 90.1 and Section C402.5.9 (Air leakage—thermal envelope for Mid- and High-rise multifamily (Mandatory))		
ISPSC – 2023 - 3	**ISPSC – 305.6**	Revise ISPSC section 305.6 to read as follows 305.6 Natural Barriers. In the case where the pool or spa area abuts and within 100 feet of the edge of a lake or other natural body of water, ~~public access is not permitted or allowed along the shoreline, and required barriers extend to and beyond the water's edge not less than 18 inches (457mm~~), a barrier is not required ~~between the natural body of water shoreline and the pool or spa.~~	Ibrahim Maslamani	

IBC – 2023 - 4	**IBC – 1511.1**	Revise IBC Section 1511.1 to read as follows **1511.1 General.** Materials and methods of application for recovering or replacing an existing *roof covering* shall comply with the requirements of Chapter 15. **Exception 1** *Roof replacement* or *roof recover* of existing low-slope *roof coverings* shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section 1507 for roofs that provide *positive roof drainage* and meet the requirements of Section 1608.3 and Section 1611.2. **Exception 2** Recovering or replacing an existing *roof covering* shall not be required to meet the requirement for secondary (emergency overflow) drains or scuppers in Section ~~1503.4~~ 1502.2 for roofs that provide for *positive roof drainage* and meet the requirements of Section 1608.3 and Section 1611.2. For the purposes of this exception, existing secondary drainage or *scupper systems* required in accordance with this code shall not be removed unless they are replaced by secondary drains or *scuppers* designed and installed in accordance with Section ~~1503.4~~ 1502.2.	Christian N. Dawkins, P.E.	
IMC – 2023 - 5	**IMC - 908**	Revise IMC section 908 to read as follows **Section 908 Cooling Towers, Evaporative Condensers and Fluid Coolers** **908.1 General** A cooling tower used in conjunction with an air-conditioning appliance shall be installed in accordance with the manufacturer's instructions. Factory-built cooling towers shall be listed in accordance with UL 1995 or UL/CSA 60335-2-40. The standards related to high efficiency cooling towers shall include without limitation the minimum standards prescribed by ASHRAE 90.1.	Robert Glass	

IMC – 2023 - 6	**IMC - 918**	Revise IMC section 918 to read as follows **Section 918 Forced-Air Warm-Air Furnaces** **918.1 Forced-air furnaces** Oil-fired furnaces shall be tested in accordance with UL 727. Electric furnaces shall be tested in accordance with UL 1995 or UL/CSA 60335-2-40. Solid fuel furnaces shall be tested in accordance with UL 391. Forced-air furnaces shall be installed in accordance with the listings and the manufacturer's instructions. **918.2 Heat pumps** Electric heat pumps shall be tested in accordance with UL 1995 or UL/CSA 60335-2-40.	Robert Glass	
IMC – 2023 – 7	**IMC - 1101**	Revise IMC section 1101 to read as follows **Section 1101 General** **1101.2 Factory-built equipment and appliances** Listed and labeled self-contained, factory-built equipment and appliances shall be tested in accordance with UL 207, 412, 471, ~~or~~ 1995, UL/CSA 60335-2-40 or UL/CSA 60335-2-89. Such equipment and appliances are deemed to meet the design, manufacture and factory test requirements of this code if installed in accordance with their listing and the manufacturer's instructions.	Robert Glass	
IMC – 2023 - 8	**IMC – Table 1103.1**	Revise IMC Table 1103.1 to read as follows **TABLE 1103.1** **REFRIGERANT CLASSIFICATION, AMOUNT AND OEL** Footnote: f. The ASHRAE Standard 34 flammability classification for this refrigerant is 2L, ~~which is a subclass of Class 2.~~	Robert Glass	

IMC – 2023 – 9	**IMC - 1104**	Revise IMC section 1104 to read as follows **SECTION 1104** **SYSTEM APPLICATION REQUIREMENTS** **1104.3.1 Air conditioning for human comfort.** <u>High probability systems used for human comfort shall use Group A1 or A2L refrigerant.</u> In other than industrial occupancies where the quantity in a single independent circuit does not exceed the amount in Table 1103.1, Group B1, B2 and B3 refrigerants shall not be used in high-probability systems for air conditioning for human comfort.	Robert Glass	
IMC – 2023 - 10	**IMC – Reference**	**ASHRAE** 15—~~2016~~ <u>2022</u> Safety Standards for Refrigeration Systems — ASHRAE 1791 Tullie Circle, NE Atlanta, GA 30329 — 1105.3, 1106.6, 11 Amendments 34—~~2016~~ <u>2022</u> Designation and Safety Classification of Refrigerants — 202, 1102.2.1, 110 **UL** 1995—~~2011~~ <u>2015</u> Heating and Cooling Equipment – UL LLC 333 Pfingsten Road Northbrook, IL 60062-2096 — 908.1, ~~911.1,~~ 916.	Robert Glass	

			~~with revisions through July 2015~~	918.2, 1101.2		
		UL/CSA 60335-2-40-2022	Household And Similar Electric Appliances - Safety - Part 2-40: Particular Requirements for Electric Heat Pumps, Air-Conditioners and Dehumidifiers	908.1, 916.1, 918.1, 918.2, 1101.2		
		UL/CSA 60335-2-89-2021	Household And Similar Electric Appliances - Safety - Part 2-89: Particular Requirements for Commercial Refrigerating Appliances with an Incorporated or Remote Refrigerant Units or Compressor	1101.2		
IRC – 2023 - 11	**IRC – M1402**	Revise IRC Section M1402 to read as follows **Section M1402 Central Furnaces** **M1402.1 General** Oil-fired central furnaces shall conform to ANSI/UL 727. Electric furnaces shall conform to UL 1995 or UL/CSA~~/ANCE~~ 60335-2-40.			Robert Glass	
IRC – 2023 - 12	**IRC – M1403**	Revise IRC Section M1403 to read as follows **Section M1403 Heat Pump Equipment** **M1403.1 Heat pumps** Electric heat pumps shall be listed and labeled in accordance with UL 1995 or UL/CSA~~/ANCE~~ 60335-2-40.			Robert Glass	

IRC – 2023 - 13	**IRC – M1412**	Revise IRC Section M1412 to read as follows **Section M1412 Absorption Cooling Equipment** **M1412.1 Approval of equipment** Absorption systems shall be installed in accordance with the manufacturer's instructions. Absorption equipment shall comply with UL 1995 or UL/CSA~~/ANCE~~ 60335-2-40.	Robert Glass	
IRC – 2023 - 14	**IRC – M1413**	Revise IRC Section M1413 to read as follows **Section M1413 Evaporative Cooling Equipment** **M1413.1 General** Evaporative cooling equipment and appliances shall comply with UL 1995 or UL/CSA~~/ANCE~~ 60335-2-40 and shall be installed:	Robert Glass	
IRC – 2023 - 15	**IRC – M2006**	Revise IRC Section M2006 to read as follows **Section M2006 Central Furnaces** **M2006.1 General** Pool and spa heaters shall be installed in accordance with the manufacturer's installation instructions. Oil-fired pool heaters shall comply with UL 726. Electric pool and spa heaters shall comply with UL 12161. Pool and spa heat pump water heaters shall comply with UL 1995, UL/CSA~~/ANCE~~ 60335-2-40 or CSA C22.2 No. 236.	Robert Glass	
IRC – 2023 - 16	**IRC – Reference**	~~**ANCE**~~ ~~Association of the Electric Sector~~ ~~Av. Lázaro Cardenas No. 869~~ ~~Col. Nueva Industrial Vallejo~~	Robert Glass	

				~~C.P. 07700 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~~	~~M1403.1, M1412. M1413.1~~	
		ASHRAE			ASHRAE 1791 Tullie Circle NE Atlanta, GA 30329	
		34—~~2016~~ 2022		Designation and Safety Classification of Refrigerants	M1411.1	
		UL			UL LLC 333 Pfingsten Road Northbrook, IL 60062	
		1995—~~2011~~2015		Heating and Cooling Equipment ~~– with revisions through July 2015~~	M1402.1, M1403. ~~M1407.1,~~ M1412. M1413.1, M2006.	

		UL/CSA~~/ANCE~~ 60335-2-40—~~2012~~2022	Standard for Household and Similar Electrical Appliances – Safety –, Part 2-40: Particular Requirements for ~~Motor compressors~~ Electrical Heat Pumps, Air-Conditioners and Dehumidifiers	M1402.1, M1403.1, M1412.1, M1413.1, M2006.1		
IMC – 2023 - 17	**IMC – 1104.3.2**	Revise IMC Section 1104.3.2 to read as follows DESCRIPTION: **1104.3.2 ~~Nonindustrial occupancies~~ Group A2, A3, B2, and B3 refrigerants.** Group A2 and B2 refrigerants shall not be used in high-probability systems ~~where the quantity of refrigerant in any independent refrigerant circuit exceeds the amount shown in Table 1104.3.2.~~ Group A3 and B3 refrigerants shall not be used except where *approved*. **Exceptions:** This section does not apply to ~~laboratories~~ : 1.Laboratories where the floor area per occupant is not less than 100 square feet (9.3 m). 2. Listed self-contained systems having a maximum of 0.331 pounds (150 g) of Group A3 refrigerant. 3. Self-contained systems listed per UL 60335-2-89 having a maximum of 1.1 pounds (500g) of Group A3 refrigerant. 4. Industrial occupancies. 5. Equipment listed for and used in residential occupancies containing a maximum of 6.6 pounds (3 kg) of Group A2 or B2 refrigerant. 6. Equipment listed for and used in commercial occupancies containing a maximum of 22 pounds (10		Mary Koban	

<table>
<tr><td></td><td></td><td>kg) of Group A2 or B2 refrigerant.

~~**TABLE 1104.3.2 MAXIMUM PERMISSIBLE QUANTITIES OF REFRIGERANTS**~~

<table>
<tr><th rowspan="2">~~TYPE OF REFRIGERATION SYSTEM~~</th><th colspan="4">~~MAXIMUM POUNDS FOR VARIOUS OCCUPANCIES~~</th></tr>
<tr><th>~~Institutional~~</th><th>~~Public assembly~~</th><th>~~Residential~~</th><th>~~All other occupancies~~</th></tr>
<tr><td>~~**Sealed absorption system**~~</td><td></td><td></td><td></td><td></td></tr>
<tr><td>~~In exit access~~</td><td>~~0~~</td><td>~~0~~</td><td>~~3.3~~</td><td>~~3.3~~</td></tr>
<tr><td>~~In adjacent outdoor locations~~</td><td>~~0~~</td><td>~~0~~</td><td>~~22~~</td><td>~~22~~</td></tr>
<tr><td>~~In other than exit access~~</td><td>~~0~~</td><td>~~6.6~~</td><td>~~6.6~~</td><td>~~6.6~~</td></tr>
<tr><td>~~**Unit systems**~~</td><td></td><td></td><td></td><td></td></tr>
<tr><td>~~In other than exit access~~</td><td>~~0~~</td><td>~~0~~</td><td>~~6.6~~</td><td>~~6.6~~</td></tr>
</table>

~~For SI: 1 pound = 0.454 kg.~~</td><td></td><td></td></tr>
<tr><td>**IBC – 2023 - 18**</td><td>**IBC - 202**</td><td>Revise IBC Section 202 to read as follows
IBC Section 202
FLAMMABLE GAS. A material which is a gas at 68°F (20°C) or less at 14.7 pounds per square inch atmosphere (psia) (101 kPa) of pressure [a material that has a boiling point of 68°F (20°C) or less at 14.7 psia (101 kPa)] ~~which~~ subdivided as follows:
1.~~Is~~ Category 1A
~~1~~. ~~Is~~ A gas which is ignitable at 14.7 psia (101 kPa) when in a mixture of 13 percent or less by volume with air; or
2. ~~Has~~ A gas with a flammable range at 14.7 psia (101 kPa) with air of not less than 12 percent, regardless of the lower
~~limit.~~limit, unless data shows compliance with Category 1B

2. Category 1B.
A gas which meets the flammability criteria for Category 1A, is not pyrophoric or chemically unstable, and meets one or more of the following:
1. A lower flammability limit of more than 6% by volume of air; or
2. A fundamental burning velocity of less than 3.9 in/s (10 cm/s).
The limits specified shall be determined at 14.7 psi (101 kPa) of pressure and a temperature of 68°F (20°C) in accordance with ASTM E681.
Where not otherwise specified, the term "flammable gas" includes both Category 1A and 1B.</td><td>Mary Koban</td><td></td></tr>
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<table>
<tr>
<td>IBC – 2023 - 19</td>
<td>IBC – Table 414.5.1</td>
<td>Revise IBC Table 414.5.2 to read as follows

IBC
TABLE 414.5.1 EXPLOSION CONTROL REQUIREMENTS
Portions of table not shown remain unchanged.
<table>
<tr><th rowspan="2">MATERIAL</th><th rowspan="2">CLASS</th><th colspan="2">EXPLOSION CONTROL METHODS</th></tr>
<tr><th>Barricade construction</th><th>Explosion (deflagration) venting or explosion (deflagration) prevention systems[b]</th></tr>
<tr><td>HAZARD CATEGORY</td><td colspan="3"></td></tr>
<tr><td rowspan="2">Flammable gas</td><td>Gaseous</td><td>Not Required</td><td>Required[k]</td></tr>
<tr><td>Liquefied</td><td>Not Required</td><td>Required[k]</td></tr>
</table>
a. See Section 414.1.3.
b. See the International Fire Code.
c. Combustible dusts where manufactured, generated or used in such a manner that the concentration and conditions create a fire or explosion hazard based on information prepared in accordance with Section 104.8.2 of the International Fire Code. See definition of "Combustible dust" in Chapter 2.
d. Storage or use.
e. In open use or dispensing.
f. Rooms containing dispensing and use of hazardous materials where an explosive environment can occur because of the characteristics or nature of the hazardous materials or as a result of the dispensing or use process.
g. A method of explosion control shall be provided where Class 2 water-reactive materials can form potentially explosive mixtures.
h. Explosion venting is not required for Group H-5 fabrication areas complying with Section 415.11.1 and the International Fire Code.
i. Where explosion control is required in Section 1207 of the International Fire Code.
<u>k Not required for Category 1B Flammable Gases having a burning velocity not exceeding 3.9 in/s (10 cm/s).</u></td>
<td>Mary Koban</td>
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</tr>
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