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

ITEM NUMBER	ARTICLE	SUMMARY	PROPONENT	ACTION
IMC-2024-1	**Scope**	*Add 'Scope' to read as follows: **SCOPE:** The provisions of the *Georgia State Minimum Standard Mechanical Code* shall regulate the design, installation, maintenance, *alteration* and inspection of mechanical systems that are permanently installed and utilized to provide control of environmental conditions and related processes within buildings. This code shall also regulate those mechanical systems, system components, *equipment* and appliances specifically addressed herein. The installation of fuel gas distribution piping and *equipment*, fuel gas-fired appliances and fuel gas-fired *appliance* venting systems shall be regulated by the *Georgia State Minimum Standard Gas Code (International Fuel Gas Code with Georgia Amendments*.) **Exception:** Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade with separate means of egress and their accessory structures shall comply with *Georgia State Minimum Standard One- and Two-Family Dwelling Code* (*the International Residential Code for One- and Two-Family Dwellings with Georgia State Amendments).*	2020	
IMC-2024-2	**Scope**	*Add 'Code Reference Guide' as an Exception to 'Scope' as follows: **Exception:** The following table titled 'Codes Reference Guide' establishes specific primary and supplementary code applications and is to be applied by the authority having jurisdiction. **CODES REFERENCE GUIDE** **Area** | **Primary** | **Supplement** Occupancy Classification | LSC | IBC	2020	

<table>
<tr>
<td></td>
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<table>
<tr><td>Building Construction Types Including allowable height, allowable building areas, and the requirements for sprinkler protection related to minimum building construction types.</td><td>IBC</td><td>LSC</td></tr>
<tr><td>Means of Egress</td><td>LSC</td><td>NONE</td></tr>
<tr><td>Standpipes</td><td>IBC</td><td>IFC</td></tr>
<tr><td>Interior Finish</td><td>LSC</td><td>NONE</td></tr>
<tr><td>HVAC Systems</td><td>IMC</td><td>NONE</td></tr>
<tr><td>Vertical Openings</td><td>LSC</td><td>NONE</td></tr>
<tr><td>Sprinkler Systems minimum construction standard</td><td>LSC</td><td>NONE</td></tr>
<tr><td>Fire Alarm Systems</td><td>LSC</td><td>NONE</td></tr>
<tr><td>Smoke Alarms and Smoke Detection Systems</td><td>State Statute and LSC</td><td>NONE</td></tr>
<tr><td>Portable Fire Extinguishers</td><td>IFC</td><td>NONE</td></tr>
<tr><td>Cooking Equipment</td><td>LSC and NFPA 96</td><td>NONE</td></tr>
<tr><td>Fuel Fired Appliances</td><td>IFGC</td><td>NFPA 54</td></tr>
<tr><td>Liquid Petroleum Gas</td><td>NFPA 58</td><td>NFPA 54</td></tr>
<tr><td>Compressed Natural Gas</td><td>NFPA 52</td><td>NONE</td></tr>
</table>
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<td></td>
<td></td>
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<tr>
<td>IMC-2024-3</td>
<td>Scope</td>
<td>The State’s minimum requirements for boilers/water heaters and pressure vessels over 200,000 BTU/h (58.61 kW), 210 degrees Fahrenheit or 120 gallons capacity shall be established by O.C.G.A. Title 25, Chapter 15 and the Rules and Regulations of the Office of Insurance and</td>
<td>2020</td>
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</table>

		Safety Fire Commissioner.		
IMC-2024-4	**Chapter 1**	*Delete Chapter 1 'Administration' without substitution. Chapter 1 to remain in the Code as a reference and guide for local governments in the development of their own *Administrative Procedures*.	2020	
IMC-2024-5	**202**	*Add Definition of 'MAKE-UP AIR' to read as follows: **MAKE-UP AIR**. SEE ENVIRONMENTAL AIR	2020	
IMC-2024-6	**301.1**	*Revise Section 301.1 ' Scope' to read as follows: **301.1 Scope.** This chapter shall govern the approval and installation of all equipment and appliances that comprise parts of the building mechanical systems regulated by this code.	2020	
IMC-2024-7	**301.2**	*Revise Section 301.2 'Energy utilization' to read as follows: **301.2 Energy utilization.** Heating, ventilating and air-conditioning systems of all structures shall be designed and installed for efficient utilization of energy in accordance with the *International Energy Conservation Code*. Cooling towers installed in new construction shall be in compliance with ASHRAE, Standard 90.1.	2020	
IMC-2024-8	**301.7**	*Revise Section 301.7 ' Listed and labeled' to read as follows: **301.7 Listed and labeled.** Appliances regulated by this code shall be *listed* and *labeled* for the application in which they are installed and used, unless otherwise approved. **Exception** to remain unchanged.	2020	
IMC-2024-9	**301.19**	*Add new Section 301.19 'Related Fire Codes' to read as follows: **301.19 Related fire codes.** Any reference to the *International Fire Code* and/or NFPA standards in any chapter of this code shall be to the latest edition as adopted and amended by the	2020	

		Georgia Insurance and Safety Fire Commissioner.		
IMC-2024-10	**306.3**	*Revise Section 306.3 'Appliances in attics' to add new Exception #3 to read as follows **Exceptions:** 3. In Residential Occupancies, attics containing appliances or mechanical equipment service shall be accessible by pull down stairs or other permanent steps and at a minimum be sized to allow the removal of the largest appliance.	2020	
IMC-2024-11	**401.7**	*Add new Section 401.7 'Alternative ventilation procedures' to read as follows: **401.7 Alternative ventilation procedures.** As an alternative to Chapter 4, the following shall be permitted: 1. Ventilation Rate Procedure, Natural Ventilation Procedure or Indoor Air Quality Procedure, as prescribed by ASHRAE 62.1. Software programs to calculate outdoor ventilation air may be used to demonstrate ASHRAE 62.1 compliance, as approved by authority having jurisdiction. 2. …or a combination of ASHRAE 62.1 and ANSI/ASHRAE/ASHE Standard 170 may be utilized for different occupancy types within a single building.	2020	
IMC-2024-12	**501.3**	*Revise Section 501.3 'Exhaust discharge' Exception #1 to read as follows: Exceptions: 1. Whole-house ventilation-type attic fans shall be permitted to discharge into the ventilated attic space of *dwelling units* having private attics, provided the installed system meets paragraph 501.4 requirements for pressure equalization.	2020	
IMC-2024-13	**505.3.1**	*Add new Section 505.3.1 'Exhaust ducts for domestic range hoods installed in commercial applications' to read as follows 505.3.1 Exhaust Ducts for domestic range hoods installed in commercial applications	2020	

		Exhaust ducts for domestic range hoods installed in commercial applications shall be vented to the outside and shall be constructed of (a) Type B vent, or (b) smooth wall duct constructed of galvanized or stainless steel with a minimum duct thickness of 0.0157 inches (0.40 mm) or constructed of aluminum or copper with a minimum duct thickness of 0.023 inches (0.58mm).		
IMC-2024-14	**505.7**	*Add new Section 505.7 **'**Commercial installations of domestic systems' to read as follows: **505.7 Commercial installations of domestic systems.** Commercial installations of domestic systems shall comply with the current Life Safety Code NFPA 101 and 96 standards as adopted and amended by the Georgia Insurance and Safety Fire Commissioner.	2020	
IMC-2024-15	**506.1**	*Delete Section 506.1 'General' and substitute the following: **506.1 General.** The State's minimum requirements for Type I commercial kitchen hood ventilation system ducts and exhaust equipment shall be designed, constructed and installed in accordance with the Life Safety Code NFPA 101 and NFPA 96 as adopted and amended by the Georgia Insurance and Safety Fire Commissioner. Other commercial kitchen hood ventilation system ducts and exhaust equipment shall comply with the requirements of this section.	2020	
IMC-2024-16	**507.1**	*Delete Section 507.1 'General' and substitute the following: **507.1 General.** The State's minimum requirements for Type I commercial kitchen hoods shall be designed, constructed and installed in accordance with the Life Safety Code NFPA 101 and NFPA 96 as adopted and amended by the Georgia Insurance and Safety Fire Commissioner. Other commercial kitchen hoods shall comply with the requirements of this section.	2020	
IMC-2024-17	**507.1.2**	*Delete Section 507.1.2 **'**Domestic cooking appliances used for commercial purposes' without substitution.	2020	
IMC-2024-18	**509.1**	*Delete Section 509.1 'Where required' and substitute the following: **509.1 Where required.** The State's minimum requirements for fire suppression systems for commercial cooking equipment shall be established by the Life Safety Code NFPA 101 and NFPA 96 as adopted and amended by the Georgia Insurance and Safety	2020	

		Fire Commissioner.		
IMC-2024-19	**606.2.1**	*Rename Section 606.2.1 'Return air systems' and revise to read as follows: **606.2.1 Supply air systems**. Smoke detectors shall be installed in supply air systems with a design capacity greater than 2,000 cfm($0.9m^3/s$), in the supply air duct downstream of any filters, fan motors, outdoor air connections, and upstream of any branch connections or decontamination equipment and appliances. **Exception:** Smoke detectors are not required in the supply air system where all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system in accordance with NFPA 72. The area smoke detection system shall comply with Section 606.4.	2020	
IMC-2024-20	**606.2.2**	*Revise Section 606.2.2 'Common supply and return air systems' to read as follows: **606.2.2 Common supply and return air systems.** Where multiple air-handling systems share common supply or return air ducts or plenums with a combined design capacity greater than 2,000 cfm ($0.9m^3/s$), the supply air system shall be provided with smoke detectors in accordance with Section 606.2.1. **Exception:** Individual smoke detectors shall not be required for each fan-powered unit, provided that such units do not have an individual design capacity greater than 2,000($0.9m^3/s$) cfm and will be shut down by activation of one of the following; 1. Smoke detectors required by Sections 606.2.1 and 606.2.3. 2. An approved area smoke detector system located in the supply air duct serving such units. 3. An area smoke detector system as prescribed in the exception to Section 606.2.1. In all cases, the smoke detectors shall comply with sections 606.4 and 606.4.1.	2020	
IMC-2024-21	**606.4.1**	*Revise Section 606.4.1 'Supervision' first sentence to read as follows:	2020	

		606.4.1 Supervision. The duct smoke detectors shall be connected to a fire alarm system where a fire alarm system is required by the Life Safety Code NFPA 101 and NFPA 96 as adopted and amended by the Georgia Insurance and Safety Fire Commissioner.		
IMC-2024-22	**804.3.8**	*Revise Section 804.3.8 'Mechanical draft systems for manually fired appliances and fireplaces' numbers 2 and 3 to read as follows: **804.3.8 Mechanical draft systems for manually fired appliances and fireplaces.** **#2** A device shall be installed that produces visible and audible warning upon failure of the mechanical draft device or loss of electrical power, at any time that the mechanical draft device is turned on. This device shall be installed in an approved location, receive power from the building wiring and equipped with a battery backup. **#3** A smoke detector shall be installed in the room with the *appliance* or fireplace. This device shall receive power from the building wiring and equipped with a battery backup.	2020	
IMC-2024-23	**908.1**	* Revise Section 908.1 'General' to read as follows: **908.1 General.** A cooling tower used in conjunction with an air-conditioning appliance shall be installed in accordance with the manufacturer's installation instructions. Factory-built cooling towers shall be listed in accordance with UL 1995. The standards related to high efficiency cooling towers shall include without limitation the minimum standards prescribed by the ASHRAE, Standard 90.1.	2020	
IMC-2024-24	**917.1**	*Revise Section 917.1 'Cooking appliances' to add new Exception to read as follows: **Exception**: *Listed* and l*abeled* commercial cooking appliances may be installed in *dwelling units* and domestic kitchens when such installation is designed by a Georgia Licensed Professional Engineer and accepted by the local authority having jurisdiction.	2020	
IMC-2024-25	**917.2**	*Delete Section 917.2 'Domestic appliances' without substitution.	2020	
IMC-2024-26	**1001.1**	*Revise Section 1001.1 'Scope' to add the following at the end of first paragraph: **1001.1 Scope.** …and pressure vessels. The State's minimum requirements for boilers/water heaters	2020	

		and pressure vessels over 200,000 BTU/h (58.61 kW), 210 degrees Fahrenheit or 120 gallons capacity shall be established by O.C.G.A. Title 25, Chapter 15 and the as adopted and amended Rules and Regulations of the Office of Insurance and Safety Fire Commissioner.		
IMC-2024-27	**1105.3**	*Renumber Section [F] 1105.3 **'**Refrigerant detector' as 1105.3 and revise to read as follows: **1105.3 Refrigerant detector.** Refrigerant detectors in machinery rooms shall be provided as required in accordance with ASHRAE 15.	2020	
IMC-2024-28	**1106.6**	*Renumber Section [F] 1106.6 **'**Remote controls' as 1106.6 and revise to read as follows: **1106.6 Remote controls.** Remote control of the mechanical equipment and appliances located in the machinery room shall be provided as required in accordance with ASHRAE 15.	2020	
IMC-2024-29	**1106.7**	*Renumber Section [F] 1106.7 **'**Emergency signs and labels' as 1106.7 and revise to read as follows: **1106.7 Emergency signs and labels.** Refrigeration units and systems shall be provided with *approved* emergency signs, charts and labels in accordance with ASHRAE 15.	2020	
IMC-2024-30	**1206.8**	*Revise Section 1206.8 'Steam piping pitch' to add the following at the end of the paragraph: **1206.8 Steam piping pitch.** …the steam piping. Branch piping from steam mains shall be taken off at the top of the pipe.	2020	
IMC-2024-31	**1301.1**	*Revise Section 1301.1 'Scope' to add the following at the end of the paragraph: **1301.1 Scope.** …International Fire Code. The State's minimum requirements for fuel oil piping and storage shall be as established by the Georgia State Minimum Fire Safety Standards and the as adopted and amended Rules and Regulations of the Georgia Insurance and Safety Fire Commissioner. Any areas not addressed by the Georgia State Minimum Fire Safety Standards shall be regulated by this chapter.	2020	

IMC-2024-32	**1402.4**	*Revise Section 1402.4 'Protection from freezing' to read as follows: **1402.4 Protection from freezing** …at the lowest ambient temperatures that will be encountered. Freeze… (Remainder of paragraph to remain unchanged)	2020	
IMC-2024-33	**1403.2.1**	*Add new Section 1403.2.1 'Protection of drains' to read as follows: **1403.2.1 Protection of drains.** Drains serving heat transfer fluids over 140°F (60°C) or which are toxic or corrosive shall be protected in accordance with the requirements of t*he International Plumbing Code*.	2020	
IMC-2024-34		*Revise Chapter 15 'Referenced Standards' to add the following: American Society of Heating, Refrigeration and Air Conditioning Engineers, Inc. 1791 Tullie Circle, NE ASHRAE Atlanta, GA 30329-2305 Standard reference number / Title / Referenced in code section number 90.1--2016 / Energy Standard for Buildings Except Low-Rise Residential Buildings / 301.2, 908.1 GA Amendments	2020	

		62.1--2016 Ventilation for Acceptable Indoor Air Quality — 401.7 GA Amendments 15--2016 Safety Standard for Refrigeration Systems — 1105.3, 1106.6, 1106.7, GA Amendments 170-2017 Ventilation of Health Care Facilities — 401.7, GA Amendments National Fire Protection Association Battery march Park NFPA Standard reference number / Title / Referenced in code section number 96 Standard for Ventilation and Fire Protection of Commercial Cooking Operations — 505.7,506.1, 507.1, 508. 509.1, GA Amendments 101 Life Safety Code — 506.1, 507.1, 508.1, 509.1 GA Amendments		
IMC-2024-35	**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	2024	

<table>
<tr><td></td><td></td><td>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.</td><td></td><td></td></tr>
<tr><td>IMC-2024-36</td><td>IMC - 918</td><td>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.</td><td>2024</td><td></td></tr>
<tr><td>IMC-2024-37</td><td>IMC - 1101</td><td>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.

TABLE 1101.2 FACTORY-BUILT EQUIPMENT AND APPLIANCES
<table>
<tr><th>FACTORY-BUILT EQUIPMENT AND APPLIANCES EQUIPMENT</th><th>STANDARDS</th></tr>
<tr><td>Refrigeration fittings, including press-connect, flared and threaded</td><td>UL 109 and UL 207</td></tr>
</table></td><td>2024</td><td></td></tr>
</table>

<table>
<tr><td></td><td></td><td>
<table>
<tr><td>Air-conditioning equipment</td><td>UL 1995 or UL/CSA 60335-2-40</td></tr>
<tr><td>Packaged terminal air conditioners and heat pumps</td><td>UL 484 or UL/CSA 60335-2-40</td></tr>
<tr><td>Split-system air conditioners and heat pumps</td><td>UL 1995 or UL/CSA 60335-2-40</td></tr>
<tr><td>Dehumidifiers</td><td>UL 474 or UL/CSA 60335-2-40</td></tr>
<tr><td>Unit coolers</td><td>UL 412 or UL/CSA 60335-2-89</td></tr>
<tr><td>Commercial refrigerators, freezers, beverage coolers and walk-in coolers</td><td>UL 471 or UL/CSA 60335-2-89</td></tr>
<tr><td>Refrigerating units and walk-in coolers</td><td>UL 427 or UL 60335-2-89</td></tr>
<tr><td>Refrigerant-containing components and accessories</td><td>UL 207</td></tr>
</table>
</td><td></td><td></td></tr>
<tr><td>IMC-2024-38</td><td>IMC – Table 1103.1</td><td>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.~~</td><td>2024</td><td></td></tr>
<tr><td>IMC-2024-39</td><td>IMC - 1104</td><td>Revise IMC section 1104 to read as follows

SECTION 1104
SYSTEM APPLICATION REQUIREMENTS</td><td>2024</td><td></td></tr>
</table>

		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.		
		*Rename Section 1104.3.2 'Nonindustrial occupancies' to 'Group A2, A3, B2 and B3 refrigerants', delete Table 1104.3.2 'Maximum Permissible Quantities of Refrigerants' and revise to read as follows: **1104.3.2 Group A2, A3, B2 and B3 refrigerants.** Group A2 and B2 refrigerants shall not be used in high-probability systems. Group A3 and B3 refrigerants shall not be used except where approved. **Exceptions:** This section does not apply to: 1. Laboratories where the floor area per occupant is not less than 100 square feet (9.3 m2). 2. Listed self-contained systems having a maximum of 0.331 pounds (150 g) of Group A3 refrigerant. 3. Industrial occupancies. 4. Equipment listed for and used in residential occupancies containing a maximum of 6.6 pounds (3 kg) of Group A2 or B2 refrigerant. 5. Equipment listed for and used in commercial occupancies containing a maximum of 22 pounds (10 kg) of Group A2 or B2 refrigerant. (Effective January 1, 2024)	2024	
IMC-2024-40	**IMC – Reference**	**ASHRAE** ASHRAE 1791 Tullie Circle, NE Atlanta, GA 30329 15—~~2016~~ <u>2022</u> Safety Standards for 1105.3, 1106.6, 1106.7, GA	2024	

				Refrigeration Systems	Amendments		
		34 ~~2016~~ 2022		Designation and Safety Classification of Refrigerants	202, 1102.2.1, 1103.1		
		UL			UL LLC 333 Pfingsten Road Northbrook, IL 60062-2096		
		1995 ~~2011~~ 2015		Heating and Cooling Equipment ~~with revisions through July 2015~~	908.1, ~~911.1,~~ 916.1, 918.1, 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 2-40: Particular Requirements for Electric Heat Pumps,	908.1, 916.1, 918.1, 918.2, 1101.2	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	

		Air-Conditioners and Dehumidifiers		
IMC-2024-41	**IMC - 1109**	* Revise IMC 1109.3.2 'Shaft ventilation' to read as follows: **1109.3.2 Shaft ventilation.** ~~Refrigerant~~ Required refrigerant pipe shafts with systems using Group A2L or B2L refrigerant shall be naturally or mechanically ventilated. Refrigerant pipe shafts with one or more systems using any Group A2, A3, B2 or B3 refrigerant shall be continuously mechanically ventilated and shall include a refrigerant detector. The shaft ventilation exhaust outlet shall comply with Section 501.3.1. Naturally ventilated shafts shall have a pipe, duct or conduit not less than 4 inches (102 mm) in diameter that connects to the lowest point of the shaft and extends to the outdoors. The pipe, duct or conduit shall be level or pitched downward to the outdoors. Mechanically ventilated shafts shall have a minimum airflow velocity in accordance with Table 1109.3.2. The mechanical ventilation shall be continuously operated or activated by a refrigerant detector. Systems utilizing a refrigerant detector shall activate the mechanical ventilation at a maximum refrigerant concentration of 25 percent of the lower flammable limit of the refrigerant. The detector, or a sampling tube that draws air to the detector, shall be located in an area where refrigerant from a leak will concentrate. The shaft shall not be required to be ventilated for double-wall refrigerant pipe where the interstitial space of the double-wall pipe is vented to the outdoors.	Greg Johnson	
IMC-2024-41	**IMC - 1109**	* Revise IMC 1109.3.2 'Shaft ventilation' to read as follows: **1109.3.2 Shaft ventilation.** Refrigerant pipe shafts with systems using Group A2L or B2L refrigerant shall be naturally or mechanically ventilated. Refrigerant pipe shafts with one or more systems using any Group A2, A3, B2 or B3 refrigerant shall be continuously mechanically ventilated and shall include a refrigerant detector. The shaft ventilation exhaust outlet shall comply with Section 501.3.1. Naturally ventilated shafts shall have a pipe, duct or conduit not less than 4 inches (102 mm) in	Greg Johnson	

		diameter that connects to the lowest point of the shaft and extends to the outdoors. The pipe, duct or conduit shall be level or pitched downward to the outdoors. Mechanically ventilated shafts shall have a minimum airflow velocity in accordance with Table 1109.3.2. The mechanical ventilation shall be continuously operated or activated by a refrigerant detector. Systems utilizing a refrigerant detector shall activate the mechanical ventilation at a maximum refrigerant concentration of 25 percent of the lower flammable limit of the refrigerant. The detector, or a sampling tube that draws air to the detector, shall be located in an area where refrigerant from a leak will concentrate. The shaft shall not be required to be ventilated for double-wall refrigerant pipe where the interstitial space of the double-wall pipe is vented to the outdoors. <u>For refrigeration systems used in residential occupancies serving only a single dwelling unit or sleeping unit, shaft ventilation shall not be required where the pipe or tube is continuous without fittings in the shaft.</u>		
IMC-2024-42	**IMC - 1109**	**1109.2.5 Refrigerant pipe shafts.** Refrigerant piping that penetrates two or more floor/ceiling assemblies shall be enclosed in a fire-resistance-rated shaft enclosure. The fire-resistance-rated shaft enclosure shall comply with Section 713 of the *International Building Code*. **Exceptions:** 1. *Refrigeration* systems using R-718 refrigerant (water). 2. Piping in a direct refrigeration system ~~using Group A1 refrigerant~~ where the refrigerant quantity does not exceed the limits of Table 1103.1 for the smallest occupied space through which the piping passes. 3. Piping located on the exterior of the *building* where vented to the outdoors.	Greg Johnson	