

FACT SHEET

2021 National Fuel Gas Code – Summary List of Revisions REV. 1-3-2020



This fact sheet provides a summary of the significant revisions to the 2018 National Fuel Gas Code approved by the National Fuel Gas Code Committee, ASC Z223 / NFPA 54. These revisions are preliminary and subject to final committee ballot and ANSI BSR approval. Once approved, they will be published in the 2021 edition of the National Fuel Gas Code.

The requirements in previous code editions, in local jurisdictions, or in specific situations, may differ. The fact sheet is not intended to replace knowledge of applicable local and national codes or address specific situations. The user should consult a competent professional and be thoroughly familiar with all applicable local codes, and the specific manufacturer’s installation instructions.

| Section Numbering | | Subject | Description of Change | Reason |
|-------------------|-----------------|--|--|--|
| 2018 | 2021 | | | |
| Various | Various | Engineering methods | REVISED – Terminology changes throughout the code to use a standard phrase “engineering methods” and delete the qualifier “other.” | The term is revised to be used consistently throughout the code. |
| 1.4 | 1.4 | Equivalency | REVISED – Add “appliances” and “equipment” to the list of installations that can be approved under equivalency. | This revision corrects an omission to the code. |
| Chapter 2 | Chapter 2 | Referenced Standards | REVISED – Add newly referenced standards and updated existing. | Updating references to their most recent editions. Newly referenced standards in the code are added to the chapter in accordance with the style manual. |
| 3.3.3 | – | <i>Air Conditioning</i> definition | DELETED | Air Conditioning is a widely used term that does not need to be defined in the Code as the definition is essentially identical to the dictionary definition. |
| 3.3.5 | 3.3.4 | <i>Appliance</i> definition | REVISED – Updated to include appliances that compress fuel gas. | The revision will include CNG fueling appliances under the appliance definition and make them subject to the code’s requirements. CNG fuel appliances are used to compress natural gas. |
| 3.3.5.1 | – | <i>Automatically Controlled Appliance</i> definition | DELETED | The term is not used in the Code, other than in the definition. Terms that are not used in the document should not be defined. |
| – | 3.3.34 | <i>Engineering Methods</i> definition | NEW – General definition added. | The term “engineering method” has been used in the Code for a number of years, and there have been different interpretations of who can perform designs using an engineering method. The results of some engineering calculations can be summarized in tables, and graphs, or automated in software. |
| – | 3.3.78 | <i>Point of Delivery</i> definition | NEW – Definition added and reference to 1.1.1.1 (A). | The point of delivery term is used in many locations within the code but there was no definition provided. The term is defined in scoping section 1.1.1.1 (A) which may be overlooked or hard to find by code users. |
| 3.3.81 | 3.3.82 | <i>Qualified Agency</i> definition | REVISED – The term is expanded to include “design” as part of the qualified agency’s responsibility. | The revision does not change the meaning or intent of the definition but further clarifies the stages of a project that must comply with the code. |
| 4.1 | 4.1 | Qualified Agency | REVISED – Revise to include “design” and “installation” to the list requiring the use of a qualified agency. | This change is a result of a revision to 3.3.82 definition and also editorial changes to improve grammar. |
| – | 4.5 A.4.5(3) | Engineering Methods | NEW – Coverage added that where an engineering method is used the AHJ has the authority to require submittal of various types of documentation. New Annex A guidance added providing a description of the types of persons that can undertake an engineering method. | This revision clarifies what an engineering method is and who can use such method. This codifies what has been allowed in the Code for decades, the use of pipe and vent sizing tables which are used by designers and the Authority Having Jurisdiction. It also will require the person submitting the calculation to provide their qualifications on the method used. |

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| 2018 | 2021 | | | |
| 5.5.4 | 5.4.4 | Maximum operating pressure in buildings | REVISED – Piping using joints made with LC4 fittings can exceed the 5-psi maximum limit in buildings. | Press-connect fittings listed to ANSI LC4 are listed for up to 125 psi fuel gas systems. This revision includes an additional joining method for systems over 5 PSI inside buildings. |
| 5.6.1.3 | – | Other materials | DELETED | Materials not specified in the code are covered by the equivalency clause in Section 1.4 and this deletion removes subjective language. |
| 5.6.6.4 | 5.5.6.4 5.5.6.4.2 5.5.6.4.3 | Thread joint sealing | REVISED – The term “compounds” is revised to “sealing materials” and the use of a sealing material is now required. The sealing materials must be compatible with the pipe and fittings and the material must be non-hardening and suitable to the fuel gas to be supplied. | The text is revised to define the material in the requirement and the definition in Chapter 3 is deleted. The specific mention of LP-gas was removed as the requirement is applicable to all fuel gases. In addition, the code did not previously require the use of sealing materials, so a requirement has been added to reflect industry practice. |
| 5.6.6 (2) A.5.6 | 5.5.8 (2) A.5.6 | Plastic piping joints and fittings | REVISED – Polyamide heat fusion fittings are added along with its ASTM standard. The existing code coverage for ASTM D2513 is updated to refer to only polyethylene fittings. | ASTM now has a separate polyamide standard. Both polyamide and polyethylene are acceptable plastic piping materials. |
| 5.8.5 | 5.7.5 | Regulator vents | REVISED – Section is revised to refer to the regulator vent installation requirements under a new section 5.14. | All regulator coverage consolidated under new section 5.14 |
| 5.8.5.1 5.8.5.2 | – | Line and gas appliance pressure regulators | DELETED | All regulator coverage consolidated under new section 5.14 |
| 5.8.6 | – | Bypass piping | DELETED | The paragraph is not needed since it allowed a bypass which is not prohibited by the code. |
| 5.12 | 5.11 Table 5.11 | Shutoff valves | REVISED – The selection of a manual shutoff valve shall be in accordance with the new Table 5.11. The table includes various valves by rated operating pressure and requires valves to meet the shown product standard. The existing requirement that valves sized 1 in. or smaller be listed is retained but they also now must be labeled. The outdoor use of any selected valve must be in accordance with the manufacturer’s recommendation. | This revision provides code users with a valve selection table based on available and acceptable valve standards. The table will help ensure the appropriate valve is selected for the intended application. The requirement to be labeled has been added to facilitate inspection and to identify that the device complies with a standard. |
| – | 5.14 | Pressure regulator and pressure control venting | NEW – All of the existing installation requirements for line and gas appliance regulators is consolidated. | The code had addressed venting of pressure control devices in several sections. The change would improve clarity by placing them all into one section. |
| Table 6.3.1(d) | Table 6.3.1(d) | Undiluted propane sch. 40 sizing table | REVISED – All capacities above the 60 ft length are corrected. | The pre-2006 Table 6.3.1(d) excluded pipe length rows 70 ft and 90 ft, which was inconsistent with all other LP pipe sizing tables. The error occurred when transferring the excel spreadsheet calculated capacities to this table since the excel spreadsheet included 70 ft and 90 ft. The result is overstating capacities for all pipe lengths above 60 ft. |

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| 2018 | 2021 | | | |
| 7.1.2.1 (B) A.7.1.2 (B) | 7.1.2.1(B) A.7.1.2 (B) | Buried pipe protection | REVISED – The requirement that a conduit be used to protect buried gas lines when a minimum of 12 in. ground cover is used is applied to both pipe and tubing (piping). The allowance for bridging (shielded) is deleted. Annex A guidance is added on types of conduit material and its purpose. | “Pipe” includes only rigid pipe products such as schedule 40. “Piping” includes both rigid and tubing products. Tubing should be allowed to be installed less than the 12–inch minimum where it is protected. In addition, bridge (shielded) was removed because it is too ambiguous. Annex material was added to clarify that conduit is not limited to electrical conduit. |
| 7.1.5 | 7.1.5 (3) | Piping through foundation wall | NEW – Requires sealants be compatible with the piping and sleeve materials. | This revision eliminates the use of sealant materials that could hasten corrosion or other chemical reaction of the affected components. The revision will also promote consistency with other building and plumbing codes. |
| – | 7.2.1 (5) | Piping elevation above grade or roof | NEW – Require a minimum 3 ½ inches. | Installing above the ground will help ensure that piping is not in contact with corrosive environments and does not sit in standing water. The 3 ½ inch clearance allows for debris to pass underneath rather than be caught. |
| – | 7.2.1 (6) | Piping through above ground walls | NEW – Require compatible sealants. | This revision eliminates the use of sealant materials that could hasten corrosion or other chemical reaction of the affected components. The revision will also promote consistency with other building and plumbing codes. |
| 7.2.2 | 7.2.2 A.7.2.2 | Protective coating | NEW – Annex A material added to clarify that paint can be used to protect against corrosion. | Annex material is added to clarify that painting is an acceptable method. |
| 7.2.6.4 | 7.2.6.4 7.2.6.4.1 7.2.6.4.2 | Piping on roofs | REVISED – The generic requirement that piping be elevation above the roof is deleted replaced by a 3 ½ inch minimum. | 3 ½ inch minimum elevation provides an enforceable minimum dimension and is consistent with other building codes. |
| 7.8.2.1 | 7.8.1 through 7.8.1.2 | Accessibility of gas valves | RELOCATED – The requirements are relocated and split into subsections. “Main gas” valves are renamed “system shutoff” to be consistent with definition changes. | A new section and definition is added for "System Shutoff Valves" to replace "Main Gas Shutoff Valve" and clarify the difference between the service shutoff valve and system shutoff valve. The section is being revised to reflect this change. |
| – | 7.8.4 A.7.8.4 | System shutoff valves | NEW – New coverage for these valves. | The natural gas utility’s service shutoff valve has been used to serve as a building owner’s maintenance valve and the emergency shutoff valve. Federal regulations now require that these valves be operated only by a qualified person. Home owners and other members of the public are not considered to be a qualified person. Some gas utilities have begun to install a second whole building shutoff valve that can be operated by the home owner or agency after the point of delivery. |
| 7.12.4 | 7.12.4 | Electrical isolation of piping | NEW – Require a dielectric fitting prior to entering the building where piping is installed underground. | Underground piping may be subject to increased corrosive forces where it is not isolated from the aboveground piping systems. |
| 9.1.3 | 9.1.3 | Types of gases | REVISED – Require listed appliances to be converted only where permitted by manufacturer’s instructions. | Listed appliances should only be converted where permitted by the manufacturer and in accordance with their specific instructions. The committee has become aware of certain gas suppliers converting listed unvented heaters without referring to the manufacturer's installation instructions. |
| 9.1.16 | – | Adequate capacity of piping | DELETED | Delete duplicate coverage. The section was moved into 5.1.2 for the 2018 edition. |

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| 9.1.18 | 9.1.17 | Gas appliance pressure regulators | REVISED – Gas appliance regulators must be listed to ANSI Z21.18/CSA 6.3. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the regulator is safe for the intended purpose. |
| 9.1.19 | – | Venting of gas appliance pressure regulators | DELETED | All regulator coverage consolidated under new section 5.14. |
| 9.4.2.3 | 9.4.2.3 | Electrical outlet | REVISED – Specific electrical outlet and disconnecting means deleted and a reference to NFPA 70 added. | Add a reference to the National Electrical Code (NEC-NFPA 70) to help ensure that the National Fuel Gas Code does not conflict with NEC requirements. The NEC may have additional requirements and may also have outlet requirements based on the type of installations (i.e., multiple appliances on the same roof) which may allow one outlet to serve multiple appliances. |
| 9.6.1 (5) | 9.6.1 (5) | Appliance connections using CSST | REVISED – Prohibit the use of CSST through an appliance’s metal housing where the appliance is also connected to a metallic vent that terminates above the roof. | The CSST product standard contains the same restriction which is being added to the code for consistency and to help ensure compliance. |
| – | 10.1.3 | Appliance locations with air handlers | NEW – Draft hood appliances are allowed in locations where a furnace or other air handling equipment is located if the furnace or air handling equipment is connected to ducts that terminate outside of the space. | This requirement was intended to apply to all draft hood-equipped appliances, not just water heaters (2018 code section 10.27.1.1). |
| – | 10.2.1 | Air conditioning appliance | NEW – Gas-fired air conditioning appliances are to be listed to ANSI Z21.40.1/CSA 2.91 or ANSI Z21.40.2/CSA 2.92. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.2.3 | 10.2.4 | Air conditioning clearances | REVISED – Unlisted appliance requirements are deleted. | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| 10.2.5 | 10.2.6 | Furnace plenums and air ducts | REVISED – The code requirements for furnace plenums supplied by the manufacturer or plenums to be constructed on site are deleted. | The code requires that all listed appliances be installed in accordance with manufacturers’ instructions in 10.1.1 which would include any plenums used with a listed air conditioning appliance. |
| 10.2.7 | 10.2.8 | Electrical switches | REVISED – Delete specific electrical location coverage and add a reference to NFPA 70. | This revision is to help ensure that the National Fuel Gas Code does not conflict with NEC requirements and to allow other types of installations that may be permitted by the NEC. . |
| – | 10.3.1 10.3.1.1 | Furnace and boiler | NEW – Furnaces and low pressure boilers with input of 400,000 Btu/hr or less are to be listed. Furnaces are to be listed to ANSI Z21.47/CSA 2.3 and low pressure boilers listed to ANSI Z21.13/CSA 4.9. | This revision requires products with input ratings up to 400,000 Btu/hr to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. This size was specified because it covers most common residential and commercial appliances. No appliance standards are specified for high pressure boilers of any input. |
| – | 10.3.1.2 | Furnace and boiler | NEW – Furnaces and boilers having input ratings greater than 400,000 Btu/hr are to be listed or be in accordance with 9.1.1.2 and 9.1.1.3. | The code continues to permit the installation of low pressure boilers and furnaces above 400,000 that meet, or are listed to, other industry standards. No appliance standards are specified for high pressure boilers of any input to allow for manufacturer flexibility. High input furnaces and boilers that are not listed must be approved and suitable for the installation as required in sections 9.1.1.2 and 9.1.1.3. |

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| 10.3.7.4 | 10.3.8.4 | Furnace ducts | REVISED – Return air prohibited from being taken from the mechanical room containing the furnace. | This revision would help to prevent some installers from claiming that the 10.3.7.4 return air duct sealing requirement is not needed when they add a small opening in the supply duct in the mechanical room. |
| – | 10.4.1 | Clothes dryers | NEW – Clothes dryers shall be listed in accordance with ANSI Z21.5.1/CSA 7.1 or ANSI Z21.5.2/CSA 7.2. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.4.1 | 10.4.2 | Clothes dryer clearance | REVISED – Unlisted requirements are deleted. | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| 10.4.5.4 | – | Exhaust ducts | DELETED | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| – | 10.6.1 | Decorative appliances | NEW – Decorative appliances for installation in vented fireplaces shall be listed in accordance with ANSI Z21.60/CSA 2.26. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.6.3.3 | – | Unlisted decorative appliances | DELETED | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| – | 10.7.1 | Vented gas fireplaces | NEW – Fireplaces shall be listed in accordance with ANSI Z21.50/CSA 2.22. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.7.2 (2) Table 10.6.2.3 | – | Unlisted fireplace installation | DELETED | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| 10.8 through 10.8.8 | 10.8 through 10.8.8 | Industrial air heaters, non-recirculating and recirculating | REVISED – The name of the appliances is updated to their current ANSI standard’s name. Sections 10.8 and 10.9 are consolidated. No new technical requirements are added. | Sections 10.8 and 10.9 covering the 2 types of gas-fired industrial air heaters are repetitive, so they have been combined to delete duplication. The titles for the appliances have been revised to reflect the name changes in the listing standards. Some requirements were revised to apply to both types of appliances because they are applicable to both. |
| 10.9 through 10.9.8 | – | Industrial air heaters, recirculating | DELETED | Recirculating direct gas fired heater coverage is consolidated with non-recirculating heaters in section 10.8. |
| – | 10.9.1 | Duct furnace | NEW – Duct furnaces with inputs of 10 mBtu/hr or less shall be listed in accordance with ANSI Z83.8/CSA 2.6. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. The 10 mBtu/hr limit was added since that is the limit in the standard. |
| 10.10.1 (2) | – | Unlisted duct furnace clearances | DELETED | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| 10.10.6.3 | – | Duct furnace, located upstream from cooling unit | DELETED | The requirement is vague and can lead to inconsistent enforcement. |
| 10.10.6.4 | 10.9.7.3 A.10.9.7.3 | Duct furnace, examples of corrosion resistant materials | REVISED – Delete the sentence which provides a list of materials that are considered corrosion resistant and relocate it to the annex. | This sentence is advisory and doesn't contain a requirement. |
| – | 10.10.1 | Floor furnaces | NEW – Floor furnaces shall be listed in accordance with ANSI Z21.86/CSA 2.32. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |

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| 2018 | 2021 | | | |
| 10.11.1 (2) 10.11.2.2 | – | Unlisted appliances | DELETED | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| – | 10.11.1 | Floor mounted food service appliances | NEW – Floor-mounted food service appliances shall be listed in accordance with ANSI Z83.11/CSA 1.8. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.12.3 | – | Unlisted appliance clearances | DELETED | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| – | 10.12.1 | Counter food service appliances | NEW – Food service counter appliances shall be listed to ANSI Z83.11/CSA 1.8. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.13.2 | 10.12.3 | Listed counter food service clearances | REVISED – Delete the listed examples of food service counter appliances and the requirement that they be installed on their own base for legs. | The list of examples of food service counter appliances is deleted as a list is never complete. The requirement that the appliances be set on their own bases or legs is deleted as this should be in the manufacturer's instructions. |
| 10.13.4 10.13.5 | – | Unlisted counter food service clearances | DELETED | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| – | 10.13.1 | Household cooking appliances | NEW – Household cooking appliances shall be listed in accordance with ANSI Z21.1/CSA 1.1. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.14.2 (2) | – | Household cooking appliances equipped with room heaters | DELETED | No such products are currently being manufactured. |
| 10.14.3 | – | Level installation of household cooking appliances | DELETED | This requirement is included in the listed appliance manufacturer's installation instructions. |
| – | 10.16.1 | Infrared heaters | NEW – Infrared heaters having an input rating of 400,000 Btu/hr or less shall be listed in accordance with ANSI Z83.19/CSA 2.35 or ANSI Z83.20/CSA 2.34. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.18.1 | 10.17.1 | Open-Top Broilers | REVISED – Open-top broiler units shall be listed in accordance with ANSI Z83.11/CSA 1.8 or ANSI Z21.1/CSA 1.1. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.18.2 | – | Unlisted open-top broilers | DELETED | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| 10.19 | 10.18 | Outdoor cooking appliances | REVISED - Outdoor cooking appliances shall be listed in accordance with ANSI Z83.11/CSA 1.8, ANSI Z21.58/CSA 1.6, or ANSI Z21.89/CSA 1.18. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.19.1 10.19.2 | – | Unlisted outdoor cooking appliances | DELETED | Unlisted appliance coverage deleted since the appliance is required to be listed. |

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| 2018 | 2021 | | | |
| – | 10.19.1 | Pool heaters | NEW – Pool heaters shall be listed in accordance with ANSI Z21.56/CSA 4.7. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.20.2 (3) 10.20.3.1 | – | Unlisted pool heaters | DELETED | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| – | 10.20.1 | Refrigerators | NEW – Refrigerators shall be listed in accordance with ANSI Z21.19/CSA 1.4. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| – | 10.21.1 10.21.1.1 10.21.1.2 | Room heaters | NEW – Vented room heaters shall be listed in accordance with ANSI Z21.86/CSA 2.32 or ANSI Z21.88/CSA 2.33. | This revision requires vented room heaters to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. Unvented room heaters were previously required to be listed and the requirement is relocated. |
| 10.22.2 | – | Unvented room heater listing | RELOCATED – The listing requirement moved to 10.21.1.2. | The provision is relocated for consistency with the format change adopted for other listed appliances and their referenced standard. |
| 10.22.4 | – | Clearances for room heaters | DELETED | Clearance requirements for all types of room heaters will be contained in the installation instructions for the listed appliances. All appliances are to be listed so coverage for unlisted appliances is deleted. |
| – | 10.24.1 | Unit heaters | NEW – Unit heaters shall be listed in accordance with ANSI Z83.8/CSA 2.6. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.25.2.1 (2) | – | Unlisted unit heaters clearances | DELETED | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| – | 10.25.1 | Wall furnaces | NEW – Wall furnaces shall be listed in accordance with ANSI Z21.86/CSA 2.32. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.26.1.2 | – | Unlisted wall furnaces | DELETED | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| – | 10.26.1 | Water heaters | NEW – Water heaters shall be listed in accordance with ANSI Z21.10.1/CSA 4.1 or ANSI Z21.10.3/CSA 4.3. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.27.1.1 | – | Water heaters in Locations with Air-Handlers | DELETED | Relocated to 10.1.3 and made applicable to all draft hood appliances. |
| 10.27.2.2 | – | Unlisted water heater clearances | DELETED | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| 10.27.3 | 10.26.4 | Pressure relief devices | REVISED – The relief device had been previously required to be listed and is revised to require listing to ANSI Z21.22/CSA 4.4. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.28 | 10.27 | Non-residential CNG fueling appliances | REVISED – Non-residential CNG fueling appliances coverage is added and they shall be listed in accordance with ANSI/CSA NGV 5.2. | An ANSI standard is available for non-residential CNG fueling appliances which differs from residential CNG fueling appliances. Coverage for these fueling appliances is added to require they be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |

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| 10.30 | 10.29 | Fuel cell power plants | REVISED – The fuel cell power plant had been previously required to be listed and is revised to require listing to the ANSI/CSA FC 1. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.31.1 | 10.30.1 | Outdoor open flame decorative appliances | REVISED - Outdoor open flame decorative appliances shall be listed in accordance with ANSI Z21.97/CSA 2.41. | This revision requires products to be listed to the applicable American National Standard which provides some assurance that the appliance is safe for the intended purpose. |
| 10.31.2 | – | Unlisted outdoor decorative appliances | DELETED | Unlisted appliance coverage deleted since the appliance is required to be listed. |
| – | 10.31 | Outdoor infrared patio heaters | NEW – Add new coverage for outdoor infrared heaters for residential and commercial applications and require them to be listed in accordance with ANSI Z83.26/CSA 2.27. | The proposal is intended to allow for the installation of outdoor infrared heaters in accordance with the standard in both residential and commercial applications. |
| – | 12.3.5.2 | Through-the-wall vent terminations | NEW – Direct vent appliances through-the-wall clearances shall be in accordance with a revised 12.9.1. | Side wall vent termination coverage including direct vent that were located under various sections are consolidated into a revised 12.9.1. |
| 12.4.3.6 | – | Side wall vent terminations | RELOCATED – The requirement moved to a new Table 12.9.1 and Figure 12.9.1. | Side wall vent termination coverage located under various sections has been consolidated into a revised 12.9.1. |
| 12.6.4.2 | – | Unlined chimney continued use | DELETED | The exception is removed because appliance efficiency has sufficiently changed so that this exception can no longer apply. |
| 12.9 12.9.1 12.9.2 12.9.3 12.9.4 | 12.9 Table 12.9.1 Figure 12.9.1 | Side wall vent clearances | REVISED - Reorganize current requirements into a new 12.9.1 and Figure 12.9.1. Add new clearance distances when specified by the manufacturer from non-openable window, soffit, outside corner and inside corner. Add new 12 in. minimum beneath veranda, porch, deck or balcony where two or more sides are open. | This revision coordinates the figure with clearances contained in the ANSI product standards. In addition, the clearances to vent terminals is expanded to cover commonly encountered installation situations such as inside corners, locations under decks and balconies, regulator vents, soffits, etc. The condensate drain requirement is being relocated to section 12.10. |
| 12.10.2 | 12.10.2 | Condensation disposal | REVISED – Delete the determination based on local experience. Relocation of the requirement that the drains and condensate disposal be in accordance with the manufacturer’s installation instructions. | This revision coordinates with the revision to section 12.9 that includes the nuisance or hazard consideration and therefore that coverage in section 12.10.2 is no longer needed. The requirement that drains be in accordance with the manufacturer's instructions is relocated from 12.9.4 to the more appropriate section 12.10.2. |
| – | 12.11.7 | Tee and wye fittings | NEW – The fittings must be of a manufactured type. | It has been common practice of cutting a hole in the side of a single-wall vent connector and inserting another vent connector into the hole. The connector often projects into the interior of the other connector creating an obstruction as well as the joint gap will introduce extra air which may impact overall vent performance. |
| 12.13.2.2 | – | Special design draft hood | DELETED | Section 12.13.2 applies to listed appliances. A use of a draft hood that is not listed with the appliance will invalidate the listing of that appliance. |

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|-------------------|---------------------------------|---|--|--|
| 2018 | 2021 | | | |
| – | 12.14.2 12.14.3 A.12.14.2 | Balancing baffles | NEW – Requires balancing baffles to be mechanically locked in position prior to the appliance being placed in service. The baffle must be listed to UL 378. Add Annex A guidance on the purpose of a baffle. | The code does not currently acknowledge the common use of baffles which are commonly utilized in mechanical draft systems. These baffles are manually adjusted at the time of installation and then mechanically fixed into position after determination of the proper position of each baffle for a multiple appliance system. The code specifically addresses “Manually Operated Dampers” in the prohibition cited in Section 12.14. “Fixed baffles” are also addressed as allowable in that section. The problem arises in that it has been interpreted that a baffle used as a balancing baffle should be viewed as “manually adjustable” and hence is prohibited. |
| A.12.9 | – | Exit terminal figure | DELETED | A revised figure is added into the code as Figure 12.9.1. |
| D.1 | D.1 | Suggested emergency procedure for gas leaks | REVISED – Notification of a gas leak is to be made by calling 911. The call to the gas supplier is deleted. | Emergency responders contacted through 911 will contact the appropriate agencies, following their protocols. |
| G.4.4 | G.4.4 | Flooded appliance replacement | REVISED – Delete the guidance allowing controls and components to be replaced and add a recommendation that the entire appliance be replaced. | AHRI recommends replacement of appliances, regardless of the damage state or assessment. Under current (4), a servicing technician is going to have to decide, which may not correspond to what AHRI and the manufacturers they represent recommend. |
| Annex K | Annex K | Standards List | REVISED – All standards are update to current editions. | Updating references to their most recent editions. |

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