First Revision No. 5-NFPA 211-2021 [Global Input]

Remove “ANSI” and “Standard for” from UL standards throughout the document.

Submitter Information Verification

Committee:

Submittal Date: Wed Aug 25 15:50:03 EDT 2021

Committee Statement

Committee Statement: UL Standards are largely ANSI approved and having the designation ANSI can confuse the user of the standard into thinking ANSI is the reviser of the standard and not UL.

Response Message: FR-5-NFPA 211-2021

Public Input No. 22-NFPA 211-2021 [Section No. 2.3.3]

Public Input No. 11-NFPA 211-2019 [Global Input]

Public Input No. 23-NFPA 211-2021 [Section No. B.1.2.5]

First Revision No. 7-NFPA 211-2021 [Sections 2.2, 2.3]

2.2 NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 31, *Standard for the Installation of Oil-Burning Equipment,* ~~2016~~ 2020 edition.

NFPA 54, *National Fuel Gas Code,* ~~2018~~ 2024 edition.

NFPA 72®, National Fire Alarm and Signaling Code®, ~~2019~~ 2022 edition.

NFPA 82, *Standard on Incinerators and Waste and Linen Handling Systems and Equipment,* 2019 edition.

NFPA 90B, *Standard for the Installation of Warm Air Heating and Air-Conditioning Systems,* ~~2018~~ 2024 edition.

NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations,* ~~2017~~ 2024 edition.

NFPA 5000®, Building Construction and Safety Code®, ~~2018~~ 2024 edition.

2.3 Other Publications.

2.3.1 ASHRAE Publications.

ASHRAE, ~~1791 Tullie Circle, NE, Atlanta, GA 30329-2305~~ 180 Technology Parkway, Peachtree Corners, GA 30092 .

ASHRAE Handbook: HVAC Systems and Equipment, ~~2012~~ 2020 .

2.3.2 ASTM Publications.

ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.

ASTM C27, *Standard Classification of Fireclay and High-Alumina Refractory Brick*, 1998, reapproved ~~2013~~ 2018 .

ASTM C199, *Standard Test Method for Pier Test for Refractory Mortars*, 1984, reapproved ~~2011~~ 2016 .

ASTM C315, *Standard Specification for Clay Flue Liners and Chimney Pots*, 2007, reapproved ~~2011~~ 2016 .

ASTM C476, *Standard Specification for Grout for Masonry*, ~~2010~~ 2019 .

ASTM C1261, *Standard Specification for Firebox Brick for Residential Fireplaces*, ~~2013~~ 2017e1 .

ASTM E136, *Standard Test Method for ~~Behavior~~ Assessing Combustibility of Materials ~~in~~ Using a Vertical Tube Furnace at 750°C*, ~~2016~~ 2019a .

ASTM E1602, *Standard Guide for Construction of Solid Fuel Burning Masonry Heaters*, 2003~~2010~~ , revised 2017 .

ASTM E2652, *Standard Test Method for Assessing Combustibility of Materials Using a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750°C* , 2018.

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2.3.3 UL Publications.

Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

UL 103, ~~*Standard for*~~ *Factory-Built Chimneys for Residential Type and Building Heating Appliances*, 2010 revised ~~2012~~2016.

~~ANSI/~~UL 127, ~~*Standard for*~~ *Factory-Built Fireplaces*, 2011, revised ~~2015~~2019.

UL 378, ~~*Standard for*~~ *Draft Equipment*, 2006, revised 2013.

UL 959, ~~*Standard for*~~ *Medium Heat Appliance Factory-Built Chimneys*, 2010, revised ~~2014~~2019.

UL 2561, ~~*Standard for*~~ *1400 Degree Fahrenheit Factory-Built Chimneys*, 2016, revised 2018.

2.3.4 Other Publications.

Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003.

Submitter Information Verification

Committee: CHI-AAA
Submittal Date: Thu Aug 26 09:32:15 EDT 2021

Committee Statement

Committee Statement: Referenced standards are being updated to the latest edition years.
Response Message: FR-7-NFPA 211-2021

First Revision No. 8-NFPA 211-2021 [Section No. 2.4]

2.4 References for Extracts in Mandatory Sections.

NFPA 31, *Standard for the Installation of Oil-Burning Equipment,* ~~2016~~ 2020 edition.

NFPA 54, *National Fuel Gas Code,* ~~2018~~ 2021 edition.

NFPA 85, *Boiler and Combustion Systems Hazards Code,* 2019 edition.

NFPA 5000®, Building Construction and Safety Code®, ~~2018~~ 2021 edition.

Submitter Information Verification

Committee: CHI-AAA

Submittal Date: Thu Aug 26 11:51:41 EDT 2021

Committee Statement

Committee Statement: Extracts are being updated to the latest revision year.

Response Message: FR-8-NFPA 211-2021

First Revision No. 14-NFPA 211-2021 [Section No. 3.3.1]

3.3.1* Accessible (for Inspections).

Capable of being exposed for inspection, maintenance, or repair without damage to the chimney or building structure or finish, but which ~~may~~ might require the removal of doors, panels, or coverings using commonly available tools.

A.3.3.1 Accessible (for Inspections).

Access can be described as the capability of being reached for the purpose of inspection, maintenance, or repair. Access could first require the movement or removal of a panel, door, or other covering, the use of ladders, or the use of a common tool, such as a screwdriver or wrench. Access does not require any destructive actions to the building or property. Access does not require the inspector to enter areas that, in the professional judgment of the inspector, likely will be hazardous to the inspector, other persons, or the property.

3.3.1.1* Readily Accessible (for Inspections).

Exposed, or capable of being exposed, for operation, inspection, maintenance, or repair without the use of tools to open or remove doors, panels, or coverings.

Submitter Information Verification

Committee: CHI-AAA

Submittal Date: Thu Aug 26 15:30:43 EDT 2021

Committee Statement

Committee Statement: There are many areas that could be considered Accessible but that could also be unsafe to enter. An attic with low clearance, no flooring or walkway, excessive heat, etc. could all be dangerous to the property or inspector. A crawl space with standing water or wild animals could be considered Accessible but unsafe to enter. This proposal will provide the inspector some flexibility in deciding if an area is safe to enter.

Response Message: FR-14-NFPA 211-2021

Public Input No. 3-NFPA 211-2019 [Section No. 3.3.1 [Excluding any Sub-Sections]]

First Revision No. 18-NFPA 211-2021 [New Section after 3.3.47]

3.3.48* Concealed (Inaccessible).

Not capable of being exposed for inspection, maintenance, or repair without damage to the chimney, building structure, or finished surfaces; without removal of permanently attached parts of the building; or without special tools.

A.3.3.48 Concealed (Inaccessible).

The following generally are considered inaccessible:

(1) Areas of the chimney that can be viewed only by damaging finished surfaces of the home or removing permanently attached components of the home

(2) Attics that provide less than 48 in. (1.22 m) of vertical clearance or 24 in. (0.61 m) of horizontal clearance

(3) Attics without walkways and having insulation that conceals the ceiling joists

(4) Attics with a temperature exceeding 115°F (46°C)

(5) Crawl spaces that provide less than 24 in. (0.61 m) of vertical clearance

Safety hazards that generally will render an attic or crawlspace inaccessible include, but are not limited to, the following:

(1) Standing water

(2) Sewage or animal waste

(3) Broken glass

(4) Exposed or unsupported electrical wires

(5) Dangerous animals or insects

Submitter Information Verification

Committee: CHI-AAA

Submittal Date: Wed Sep 08 13:54:46 EDT 2021

Committee Statement

Committee Statement: This area of accessibility into attics and crawl spaces has raised many questions that were unaddressed by the inspection standard. The 115 degree restriction was chosen because OSHA considers temperature above 115 to be an Extreme Hazard. The 48” attic height and 24” crawl space height are “borrowed” from a termite inspector guideline.

Response Message: FR-18-NFPA 211-2021

Public Input No. 4-NFPA 211-2019 [New Section after 3.3.47]

First Revision No. 6-NFPA 211-2021 [Section No. 3.3.100]

3.3.101 Material.

3.3.101.1* Combustible (Material) .

~~Material made of or surfaced with wood, compressed paper, plant fibers, plastics, or other material that can ignite and burn, whether flameproofed or not, or whether plastered or unplastered.~~ A material that, in the form in which it is used and under the conditions anticipated, will ignite and burn; a material that does not meet the definition of noncombustible or limited-combustible. [**5000,** 2021]

A.3.3.101.1 Combustible (Material).

Examples of combustible materials include materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or other materials that can ignite ~~and~~ or burn, whether ~~flameproofed~~ flame retardant or not, or whether plastered or unplastered.

3.3.101.2 Noncombustible Material.

~~A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat; materials that are reported as passing ASTM E136, *Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C* , shall be considered noncombustible materials.~~ See Section 4.7 .

Submitter Information Verification

Committee: CHI-AAA

Submittal Date: Wed Aug 25 15:54:30 EDT 2021

Committee Statement

Committee Statement: The definition of combustible material is not generic enough and is simply a list of examples that would be better as an annex note. The definition of noncombustible material is not appropriate for the section on definitions and it is being moved to the body of the standard. The wording for combustible material is extracted from NFPA 5000, section 3.3.408.1 for conformity across the NFPA Standards.

Response Message: FR-6-NFPA 211-2021

Public Input No. 12-NFPA 211-2020 [Section No. 3.3.100]

First Revision No. 4-NFPA 211-2021 [New Section after 4.1.1.2]

4.1.1.3

The chimney or vent system shall be sized for the total Btu input.

Submitter Information Verification

Committee: CHI-AAA

Submittal Date: Wed Aug 25 15:45:51 EDT 2021

Committee Statement

Committee Statement: Many systems are currently being sized for partial load instead of the total btu. The theory is the appliances are sized for redundancy, so

the vent or chimney system should be sized for the required btu instead of the total btu. In practice, building operations change over time

and may require more btu's than the original design and as such should be sized for the total btu load.

Response Message: FR-4-NFPA 211-2021

Public Input No. 24-NFPA 211-2021 [Global Input]

First Revision No. 3-NFPA 211-2021 [Section No. 4.2.2]

4.2.2

Natural draft chimneys and vents shall not terminate at an elevation less than 5 ft (1.53 m) above the flue collar or the highest connected draft hood outlet.

~~*Exception:* *As provided in Section 10.7* .~~

4.2.2.1

Natural draft chimneys and vents shall terminate vertically above the roof or parapet.

4.2.2.2

Natural draft chimneys and vents shall be permitted to terminate in accordance with Section 10.7 .

Submitter Information Verification

Committee: CHI-AAA

Submittal Date: Wed Aug 25 15:13:40 EDT 2021

Committee Statement

Committee Statement: Many venting and chimney systems requiring natural draft have been terminated through a sidewall either with side wall termination or with a slight turnup. These systems do not provide enough natural draft for the appliance and are prohibited by the code. The exception is being rewritten as a requirement to meet the NFPA Manual of Style.

Response Message: FR-3-NFPA 211-2021

Public Input No. 25-NFPA 211-2021 [Section No. 4.2.2]

First Revision No. 2-NFPA 211-2021 [New Section after 4.6.4.2]

4.7 Noncombustible Material.

A material that complies with any one of the following shall be considered a noncombustible material:

(1)* The material, in the form in which it is used, and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat.

A.4.7(1) _

Examples of such materials include steel, concrete, masonry, and glass.
[**5000:** A.7.1.4.1.1(1)]

(2) The material is reported as passing ASTM E136, *Standard Test Method for Assessing Combustibility of Materials Using a Vertical Tube Furnace at 750°C* .

(3) The material is reported as complying with the pass/fail criteria of ASTM E136 when tested in accordance with the test method and procedure in ASTM E2652, *Standard Test Method for Assessing Combustibility of Materials Using a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750°C* .

[**5000:** 7.1.4.1.1]

Submitter Information Verification

Committee: CHI-AAA

Submittal Date: Wed Aug 25 14:44:22 EDT 2021

Committee Statement

Committee Statement: The noncombustible material is being added to chapter 4 to provide requirements and test standards for noncombustible materials.

Response Message: FR-2-NFPA 211-2021

Public Input No. 14-NFPA 211-2020 [Section No. 2.3.2]

Public Input No. 13-NFPA 211-2020 [New Section after 4.1]

First Revision No. 21-NFPA 211-2021 [Section No. 10.1]

10.1 Types and Uses.

~~See~~ Vent types and uses shall be in accordance with 5.2.3.2.

10.1.1

Type B gas vents shall be used to vent only listed gas appliances with draft hoods and other Category I gas appliances listed for use with Type B gas vents.

10.1.2

Type B gas vents shall not be used for venting the following:

(1) Vented wall furnaces listed for use with Type BW gas vents only

(2) Incinerators

(3) Appliances that can be converted readily to the use of solid or liquid fuels

(4) Combination gas/oil-burning appliances

(5) Appliances listed for use with chimneys only

(6) Listed Categories II, III, and IV gas appliances

10.1.3

Type BW vents shall be used only with listed vented gas wall furnaces having a capacity not greater than that of the listed Type BW gas vent.

10.1.4*

A Special Gas Vent shall be listed and used in accordance with the terms of its listing and the appliance and vent manufacturers' instructions.

10.1.5

Type L vents shall be used only with appliances listed as suitable for such use and with gas appliances listed as suitable for use with Type B gas vents.

10.1.6

Single-wall metal pipe other than Special Gas Vents used to vent Categories II, III, and IV gas appliances shall conform to the requirements of 10.1.6.1 through 10.1.6.4.

10.1.6.1

Single-wall metal pipe shall not be used to vent incinerators.

10.1.6.2

The pipe shall be of sheet copper with a thickness not less than 24 B & S gauge [0.0201 in. (0.51 mm)] or of galvanized steel with a thickness not less than 20 gauge [0.036 in. (0.914 mm)].

10.1.6.3

Single-wall metal pipe shall be used only for runs directly from the space in which the appliance is located, through the roof or exterior wall to the outer air.

10.1.6.4

Single-wall metal pipe shall not originate in any unoccupied attic or concealed space and shall not pass through any attic, inside wall, concealed space, floor, or ceiling.

Submitter Information Verification

Committee: CHI-AAA

Submittal Date: Tue Oct 19 15:46:30 EDT 2021

Committee Statement

Committee Statement: This revision was developed by NFPA staff for editorial purposes, in accordance with 4.3.9.3.2 and 4.3.9.3.3 of the Regulations Governing the Development of NFPA Standards (www.nfpa.org/regs).

The requirement is being reworded to add mandatory language to comply with the NFPA Manual of Style.

Response Message: FR-21-NFPA 211-2021

First Revision No. 11-NFPA 211-2021 [New Section after 15.2.5]

15.2.6

Where inspections are indicated or requested at a specific level of inspection but circumstances prevent the completion of that level, the inspector shall do the following:

(1) Indicate the level of inspection completed

(2) Document the reasons the higher level inspection was not completed

Submitter Information Verification

Committee: CHI-AAA

Submittal Date: Thu Aug 26 14:20:56 EDT 2021

Committee Statement

Committee Statement: This section is proposed to clarify how to handle situations where a higher level of inspection is indicated but cannot be completed. For example, a Level 2 inspection is indicated but the roof or attic is not accessible.

Response Message: FR-11-NFPA 211-2021

Public Input No. 6-NFPA 211-2019 [New Section after 15.2.5]

First Revision No. 12-NFPA 211-2021 [Section No. 15.4.2.3]

15.4.2.3

The inspection shall include examination of accessible areas of all chimney flues and the internal surfaces of all flue liners incorporated within the chimney with ~~video~~ image scanning equipment or ~~other means~~ more advanced technological viewing systems used as necessary to observe those areas.

Submitter Information Verification

Committee: CHI-AAA

Submittal Date: Thu Aug 26 14:47:19 EDT 2021

Committee Statement

Committee Statement: The purpose of this recommended change is to insure the internal flue is inspected by image scanning or other means equal or better than image scanning. When the standard was originally drafted the “other means” was put there to allow future innovation. However, the words “other means” have sometimes been interpreted to be a flashlight or mirror and this was never the intent of the original standard.

Response Message: FR-12-NFPA 211-2021

Public Input No. 8-NFPA 211-2019 [Section No. 15.4.2.3]

First Revision No. 17-NFPA 211-2021 [New Section after 15.4.2.4]

15.4.2.4

The requirement to inspect all chimney flues and all flue liners in 15.4.2.3 shall be limited to the chimney flues and flue liners requested to be inspected.

15.4.2.5

Where multiple factory built fireplaces or chimneys are installed in a common structure or chase, the inspector shall not be required to inspect more than the system(s) requested to be inspected by the inspector's client.

Submitter Information Verification

Committee: CHI-AAA

Submittal Date: Wed Sep 08 13:46:35 EDT 2021

Committee Statement

Committee Statement: This requirements clarifies that inspections are limited to the systems requested by the client. In older areas there are many homes built with "common wall (masonry) chimneys" that contain flues serving different occupancies and it is impractical to require inspection of those other systems. This also clarifies that where multiple factory-built systems exist within a common chase there is no requirement to inspect all systems in the chase. This is a common problem in apartments and condos.

Response Message: FR-17-NFPA 211-2021

Public Input No. 9-NFPA 211-2019 [New Section after 15.4.2.3]

First Revision No. 19-NFPA 211-2021 [Section No. A.4.1.2.5(3)]

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A.4.1.2.5(3)

Documents that provide listing requirements include UL 2034, ~~*Standard for* *Single and Multiple Station Carbon Monoxide Alarms*~~, and CSA ~~6~~6.19, *Residential Carbon Monoxide Alarming Devices*. Additionally, ~~NFPA 720~~*NFPA 72* provides guidance for the installation of carbon monoxide warning equipment.

Submitter Information Verification

Committee: CHI-AAA

Submittal Date: Thu Sep 23 12:02:09 EDT 2021

Committee Statement

Committee Statement: NFPA 720 has been withdrawn and the material incorporated into NFPA 72.

Response Message: FR-19-NFPA 211-2021

First Revision No. 9-NFPA 211-2021 [Section No. B.1]

B.1 Referenced Publications.

The documents or portions thereof listed in this annex are referenced within the informational sections of this standard and are not part of the requirements of this document unless also listed in Chapter 2 for other reasons.

B.1.1 NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 31, *Standard for the Installation of Oil-Burning Equipment*, ~~2016~~ 2020 edition.

NFPA 54, *National Fuel Gas Code*, ~~2018~~ 2021 edition.

NFPA 72® , *National Fire Alarm and Signaling Code*® , 2022 edition.

NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*, ~~2017~~ 2021 edition.

~~NFPA 720 , *Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment* , 2015 edition.~~

B.1.2 Other Publications.

B.1.2.1 ANSI Publications.

American National Standards Institute, Inc., 25 West 43rd Street, 4th Floor, New York, NY 10036.

ANSI Z21.11.2, *Gas-Fired Room Heaters — Volume II, "Unvented Room Heaters,"* ~~2013~~ 2016 .

ANSI Z21.60/CSA 2.26, *Decorative Gas Appliances for Installation in Solid-Fuel Burning Fireplaces,*~~2012~~ 2017 .

ANSI Z21.84, *Manually Lighted, Natural Gas, Decorative Gas Appliances for Installation in Solid-Fuel Burning Fireplaces,*~~2012~~ 2017 .

Z83 American National Standards.

B.1.2.2 ASHRAE Publications.

ASHRAE, Inc., 180 Technology Parkway, Peachtree Corners, Georgia 30092. ~~1791 Tullie Circle, NE, Atlanta, GA 30329-2305~~ .

ASHRAE Handbook: HVAC Systems and Equipment, ~~2012~~ 2020 .

B.1.2.3 ASTM Publications.

ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.

ASTM E2336, *Standard Test Methods for Fire Resistive Grease Duct Enclosure Systems,*~~2016~~ 2020 .

B.1.2.4 CSA America Publications.

CSA Group, 8501 East Pleasant Valley Road, Independence, OH 44131-5516.

CSA 6.19, *Residential Carbon Monoxide Alarming Devices*, ~~2001, reaffirmed 2011~~ 2017 .

B.1.2.5 UL Publications.

Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

UL 103, ~~*Standard for*~~ *Factory-Built Chimneys for Residential Type and Building Heating Appliances*, 2010, revised ~~2012~~ 2016 .

UL 907, *Fireplace Accessories,* 2016, revised 2019 .

UL 1738, ~~*Standard for*~~ *Venting Systems for Gas-Burning Appliances, Categories II, III and IV*, 2010, revised ~~2014~~ 2021 .

UL 2034, ~~*Standard for*~~ *Single and Multiple Station Carbon Monoxide Alarms*, 2008, revised ~~2016~~ 2018 .

Submitter Information Verification

Committee: CHI-AAA

Submittal Date: Thu Aug 26 12:32:19 EDT 2021

Committee Statement

Committee Statement: Referenced standards are being updated to the latest edition year.

Response Message: FR-9-NFPA 211-2021

First Revision No. 20-NFPA 211-2021 [Section No. B.3]

B.3 References for Extracts in Informational Sections ~~(Reserved)~~ .

NFPA 5000 ® , *Building Construction and Safety Code* ® , 2021 edition.

Submitter Information Verification

Committee: CHI-AAA
Submittal Date: Thu Sep 23 12:12:41 EDT 2021

Committee Statement

Committee Statement: Extracted standards are being added to the appropriate reference annex.
Response Message: FR-20-NFPA 211-2021