Public Input No. 14-NFPA 211-2024 [Section No. 2.3.3]

2.3.3 UL Publications.

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

UL 103, *Factory-Built Chimneys for Residential Type and Building Heating Appliances*, 2010, revised 2021.

UL 127, *Factory-Built Fireplaces*, 2011, revised 2020.

UL 378, *Draft Equipment*, 2006, revised ~~2013~~ 2016 .

UL 959, *Medium Heat Appliance Factory-Built Chimneys*, 2010, revised ~~2019~~ 2024 .

UL 2561, *1400 Degree Fahrenheit Factory-Built Chimneys*, 2016, revised ~~2018~~ 2022 .

Statement of Problem and Substantiation for Public Input

Update references to most current editions.

Submitter Information Verification

Submitter Full Name: Kelly Nicolello
Organization: UL Solutions
Street Address:
City:
State:
Zip:

Submittal Date: Sat Jun 01 15:12:30 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: FR-1-NFPA 211-2024
Statement: Reference standards are being updated to the latest edition.

Public Input No. 2-NFPA 211-2024 [Section No. 2.3.3]

2.3.3 UL Publications.

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

UL 103, *Factory-Built Chimneys for Residential Type and Building Heating Appliances*, 2010, revised 2021.

UL 127, *Factory-Built Fireplaces*, 2011, revised 2020.

UL 378, *Draft Equipment*, 2006, revised 2013.

UL 959, *Medium Heat Appliance Factory-Built Chimneys*, 2010, revised 2019.

UL 1390, *Fireplace Inserts and Hearth-Mounted Stoves for Installation info Masonry Fireplaces*

UL 1482, *Solid-Fuel Type Room Heaters*

UL 1777, *Chimney Liners*

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

Statement of Problem and Substantiation for Public Input

UL1391, UL1482, and UL1777 are not included in the list though they are testing standards associated with fuel-burning appliances and chimney liners. These should be referenced in the NFPA211 similar to the IRC as following and I will be submitting changes to bring the NFPA211 and the IRC more in line with each other or at least start discussion on which requirements are accurate:

UL1777 is mentioned in the 2021 IRC in

R1003.11.1 Residential-type appliances (general). Flue lining systems shall comply with one of the following:
1. Clay flue lining complying with the requirements of ASTM C315.
2. Listed and labeled chimney lining systems complying with UL 1777.

R1003.18 Chimney clearances. Any portion of a masonry chimney located in the interior of the building or within the exterior wall of the building shall have a minimum airspace clearance to combustibles of 2 inches (51 mm). Chimneys located entirely outside the exterior walls of the building, including chimneys that pass through the soffit or cornice, shall have a minimum airspace clearance of 1 inch (25 mm). The airspace shall not be filled, except to provide fire blocking in accordance with Section R1003.19.
Exceptions:
1. Masonry chimneys equipped with a chimney lining system listed and labeled for use in chimneys in contact with combustibles in accordance with UL 1777 and installed in accordance with the manufacturer's instructions are permitted to have combustible material in contact with their exterior surfaces.

M1801.3.4 Clearances. Chimneys and vents shall have airspace clearance to combustibles in accordance with this code and the chimney or vent manufacturer's installation instructions.
Exception: Masonry chimneys equipped with a chimney lining system tested and listed for installation in chimneys in contact with combustibles in accordance with UL 1777, and installed in accordance with the manufacturer's instructions, shall not be

G2425.12 (501.12) Residential and low-heat appliances flue lining systems. Flue lining systems for use with residential-type and low-heat appliances shall be limited to the following:

1. Clay flue lining complying with the requirements of ASTM C315 or equivalent. Clay flue lining shall be installed in accordance with Chapter 10.
2. Listed chimney lining systems complying with UL 1777.

G2425.15.4 (501.15.4) Clearances. Chimneys and vents shall have airspace clearance to combustibles in accordance with Chapter 10 and the chimney or vent manufacturer's installation instructions.
Exception: Masonry chimneys without the required airspace clearances shall be permitted to be used if lined or relined with a chimney lining system listed for use in chimneys with reduced clearances in accordance with UL 1777. The chimney clearance shall be not less than permitted by the terms of the chimney liner listing and the manufacturer's instructions.

G2427.5.2 (503.5.3) Masonry chimneys. Masonry chimneys shall be built and installed in accordance with NFPA 211 and shall be lined with an approved clay flue lining, a chimney lining system listed and labeled in accordance with UL 1777 or other approved material that will resist corrosion, erosion, softening or cracking from vent gases at temperatures up to 1,800°F (982°C).
Exception: Masonry chimney flues serving listed gas appliances with draft hoods, Category I appliances and other gas appliances listed for use with Type B vents shall be permitted to be lined with a chimney lining system specifically listed for use only with such appliances. The liner shall be installed in accordance with the liner manufacturer's instructions. A permanent identifying label shall be attached at the point where the connection is to be made to the liner. The label shall read: "This chimney liner is for appliances that burn gas only. Do not connect to solid or liquid fuel-burning appliances or incinerators."

UL1482 is mentioned in the 2021 IRC in

M1410.1 General. Vented room heaters shall be tested in accordance with ASTM E1509 for pellet-fuel burning, UL 896 for oil-fired or UL 1482 for solid fuel-fired and installed in accordance with their listing , the manufacturer's installation instructions and the requirements of this code.

R1002.2 Installation. Masonry heaters shall be installed in accordance with this section and comply with one of the following:
1. Masonry heaters shall comply with the requirements of ASTM E1602.
2. Masonry heaters shall be listed and labeled in accordance with UL 1482 or CEN 15250 and installed in accordance with the manufacturer's instructions.

R1002.5 Masonry heater clearance. Combustible materials shall not be placed within 36 inches (914 mm) of the outside surface of a masonry heater in accordance with NFPA 211 Section 8-7 (clearances for solid-fuel-burning appliances), and the required space between the heater and combustible material shall be fully vented to permit the free flow of air around all heater surfaces.
Exceptions:
1. Where the masonry heater wall is not less than 8 inches (203 mm) thick of solid masonry and the wall of the heat exchange channels is not less than 5 inches (127 mm) thick of solid masonry, combustible materials shall not be placed within 4 inches (102 mm) of the outside surface of a masonry heater. A clearance of not less than 8 inches (203 mm) shall be provided between the gas-tight capping slab of the heater and a combustible ceiling.
2. Masonry heaters listed and labeled in accordance with UL 1482 or CEN 15250 shall be installed in accordance with the listing specifications and the manufacturer's written instructions.

UL1391 and inserts are not mentioned in the IRC but comments will be heading into the IRC at the next code cycle and mention will be added elsewhere in the 211.

Submitter Information Verification

Submitter Full Name: Daniel Freeman
Organization: Freeman Fire Inspectors
Street Address:

City:
State:
Zip:
Submittal Date: Fri Mar 29 14:15:08 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: FR-1-NFPA 211-2024
Statement: Reference standards are being updated to the latest edition.

Public Input No. 16-NFPA 211-2024 [Section No. 3.3.39]

3.3.39 Clothes Dryer.

A device used to dry wet laundry by means of heat derived from the combustion of fuel or from ~~electric heating elements~~ electrical sources .

3.3.39.1 Type 1 Clothes Dryer.

A factory-built, mass-produced dryer, primarily used in a family living environment. It might or might not be coin-operated for public use and usually is the smallest unit both physically and in function.

3.3.39.2 Type 2 Clothes Dryer.

A factory-built, mass-produced dryer used in a commercial business. It might or might not be operated by the public or a hired attendant. It might or might not be coin-operated and is not designed for use in an individual family living environment. It can be small, medium, or large in size.

Statement of Problem and Substantiation for Public Input

This Public Input recognizes the new technology of heat pump and condenser-type clothes dryers, both of which are in scope of UL 2158 and have numerous listings. While energized by an electrical source, these clothes dryer types may not directly use heating elements as implied by the existing definition. These dryers need to be connected to a drain line to dispose of the water, but do not require exhausts to the outside. This Public Input is consistent with mechanical code requirements.

Submitter Information Verification

Submitter Full Name: Kelly Nicolello
Organization: UL Solutions
Street Address:
City:
State:
Zip:

Submittal Date: Sat Jun 01 15:22:57 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: FR-8-NFPA 211-2024
Statement: The means of providing heat are not relevant to the description of what clothes dryer is.

Public Input No. 3-NFPA 211-2024 [Section No. 3.3.70]

3.3.70 Fireplace Insert.

~~A factory-built, field-installed product consisting of a firebox assembly designed to be installed within~~

Any solid-fuel fired heat-producing appliance intended for installation within, or partially within the

~~fire chamber~~

fuel burning space of a fireplace

~~that uses the fireplace flue to vent the products of combustion.~~

and which substantially closes off the solid-fuel fireplace opening and is vented through the throat or damper area of the fireplace.

Statement of Problem and Substantiation for Public Input

This is the definition as included currently in UL1390 with a minor modification to include "solid-fuel" in front of fireplace instead of "masonry".

Submitter Information Verification

Submitter Full Name: Daniel Freeman
Organization: Freeman Fire Inspectors
Street Address:
City:
State:
Zip:
Submittal Date: Fri Mar 29 14:42:26 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: There are multiple types of inserts into fireplaces and it is not necessary to call out a specific fuel.

Public Input No. 11-NFPA 211-2024 [New Section after 4.1]

Applicability

Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall apply. Where, in any specific case, where conflicts within this standard or between this standard and other codes specify different materials, methods of construction or other requirements, the most restrictive shall apply.

Statement of Problem and Substantiation for Public Input

I submit a new 4.1 to bump the others down and help limit conflicts and provide a way forward for installers and technicians when they do occur with the standard.

The proposed addition to the NFPA 211, concerning the resolution of conflicts between general and specific requirements as well as between conflicting standards, presents a crucial enhancement to the clarity and applicability of the code.

1. Enhancing Clarity and Consistency
The proposed clause serves to eliminate ambiguity when practitioners encounter conflicting directives within the NFPA 211 or between this standard and other codes. By prioritizing specific requirements over general ones and adopting the more restrictive provisions in cases of discrepancy, the addition fosters a uniform approach to compliance that already exists in the codes. This clarity is imperative in ensuring that all stakeholders—designers, builders, inspectors, and maintenance professionals—have a clear understanding of the obligations required of them, thus enhancing the overall safety and efficiency of construction and maintenance practices.

2. Promoting Best Practices and Safety
Safety is paramount in fire prevention and chimney operation. By mandating adherence to the most specific and restrictive requirements, the amendment ensures that practices which afford the highest level of safety are prioritized. This approach inherently supports the adoption of best practices in the design, construction, maintenance, and inspection of fireplaces and chimneys, significantly mitigating the risk of fire hazards and structural failures. The explicit focus on restrictive requirements underscores a commitment to safeguarding lives and property.

3. Legal Defensibility and Liability Mitigation
In the event of fire-related incidents or structural issues, the clear directives established by this amendment can provide a robust defense in legal scrutiny. By adhering to the most specific and restrictive standards, professionals can demonstrate due diligence and compliance with the highest safety norms, thereby mitigating liability risks.

4. Facilitating Code Harmonization
The proposed addition acknowledges the reality of overlapping and sometimes conflicting requirements across different standards and codes. By providing a clear mechanism for resolving such conflicts, it facilitates greater harmonization between NFPA 211 and other relevant codes, such as the International Residential Code (IRC). This synergy is essential for creating a cohesive regulatory framework that enhances the integrity and safety of fireplaces, chimneys, and other related structures.

Conclusion
The inclusion of the proposed clause in the NFPA 211 represents a significant step forward in enhancing the precision, safety, and legal defensibility of the code. By providing clear guidance on navigating conflicts between general and specific requirements, as well as between different standards, this change ensures that the most rigorous safety measures are applied, thereby promoting the welfare of all stakeholders and the integrity of structures subject to these standards. This proposal not only embodies the meticulous balance between complex technical accuracy and practical,

actionable advice but also reinforces the commitment to upholding the highest standards of safety and professional practice.

Submitter Information Verification

Submitter Full Name: Daniel Freeman
Organization: Freeman Fire Inspectors
Street Address:
City:
State:
Zip:
Submittal Date: Fri Mar 29 17:33:22 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: FR-5-NFPA 211-2024
Statement: A conflict section has been added to clarify which requirement takes precedent when there are multiple requirements covering a topic.

Public Input No. 17-NFPA 211-2024 [Section No. 10.7.3.3]

10.7.3.3

All clothes dryers, other than heat pump and condenser-type dryers, shall be exhausted to the outside air.

Statement of Problem and Substantiation for Public Input

This Public Input recognizes the new technology of heat pump and condenser-type clothes dryers, both of which are in scope of UL 2158 and have numerous listings. While energized by an electrical source, these clothes dryer types may not directly use heating elements as implied by the existing definition. These dryers need to be connected to a drain line to dispose of the water, but do not require exhausts to the outside. This Public Input is consistent with mechanical code requirements.

Submitter Information Verification

Submitter Full Name: Kelly Nicolello
Organization: UL Solutions
Street Address:
City:
State:
Zip:

Submittal Date: Sat Jun 01 15:25:52 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: FR-6-NFPA 211-2024
Statement: There are new types of dryer technology such as heat pump and condenser-type clothes dryers whose listing does not require them to be exhausted to outdoor air and their installation would be covered in the manufacturer's installation instructions.

Public Input No. 18-NFPA 211-2024 [Section No. 11.1]

11.1 Factory-Built Fireplaces.

11.1.1

Factory-built fireplaces shall be listed and installed in accordance with the terms of the listing.

Proposal:

Create new 11.1. 1.1 as follows:

11.1 Factory-Built Fireplaces.

11.1.1

Factory-built fireplaces shall be listed and installed in accordance with the terms of the listing.

11.1.1.1

Fireplace inserts installed in factory-built fireplaces shall be listed in accordance with the requirements of UL 1391 and installed in accordance with the manufacturer's instructions.

11.1. 2

Hearth extensions shall be provided in accordance with the manufacturers' instructions or be of masonry on noncombustible construction in accordance with Section 11.3.

11.1.3

Factory-built fireplaces shall be secured to the floor or structural framing of the building in order to prevent shifting.

11.1.4

Decorative shrouds at the termination of a factory-built fireplace chimney shall be permitted only where listed for use with the chimney system, or in accordance with the fireplace manufacturer's instructions.

Add to 2.3.3 :

UL 1391 , *Solid-Fuel Space Heaters for Installation into Factory-Built Fireplaces* , 2024

Statement of Problem and Substantiation for Public Input

New consensus standards for fireplace inserts have been developed in response to incidents resulting from insufficient standards requirements. These documents are currently in consensus draft status with anticipated publication in 2024. This Public Input recommends directly referencing these standards in the body of the code to eliminate confusion with the inappropriate application of existing standards that do not specifically address the hazards related to these fireplace inserts. Note that fireplace inserts are defined in 3.3.70 but have no specific requirements other than connections.

Submitter Information Verification

Submitter Full Name: Kelly Nicolello
Organization: UL Solutions
Street Address:
City:
State:

Zip:

Submittal Date: Sat Jun 01 15:28:08 EDT 2024

Committee: CHI-AAA

Committee Statement

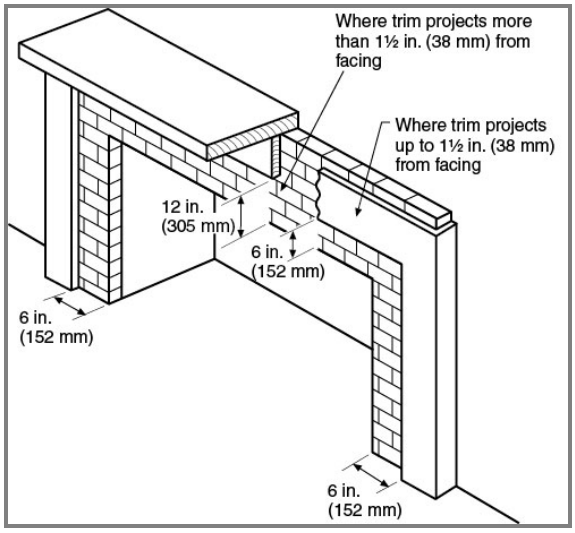
Resolution: UL 1391 is still in draft development and cannot be referenced in NFPA 211 as it is not readily available.

Public Input No. 23-NFPA 211-2024 [Section No. 11.2.5.4]

11.2.5.4

Combustible ~~material above and projecting~~ material projecting more than 1½ in. (38 mm) ~~from~~ off the facing of a fireplace ~~opening~~ shall not be placed less than 12 in. (305 mm) from the top or sides of the fireplace opening. *(See Figure 11.2.5.4.)*

Figure 11.2.5.4 Fireplace Clearance to Combustible Material.



Additional Proposed Changes

File Name	Description	Approved
211_PC_13_Held.pdf	211_PC13	

Statement of Problem and Substantiation for Public Input

NOTE: This Public Input appeared as “Reject but Hold” in Public Comment No. 13 of the (A2023) Second Draft Report for NFPA and per the Regs. At 4.4.8.3.1 and needs to be reconsidered by the TC for the next edition of the document.

By adding this requirement for the sides of a fireplace opening, it will be more consistent with the International Residential Code/Building Code. The Standard 211 currently does not have language that prevents a 10" projection 7" from the sides of a fireplace opening. This addition would place a 10" projection or even a perpendicular combustible wall 12" from the sides of the opening.

Submitter Information Verification

Submitter Full Name:	NFPA Holds
Organization:	Technical Committee on Chimneys, Fireplaces, and Venting Systems for Heat-Producing Appliances
Street Address:	
City:	
State:	

Zip:

Submittal Date: Thu Jun 06 16:48:56 EDT 2024

Committee: CHI-AAA

Committee Statement

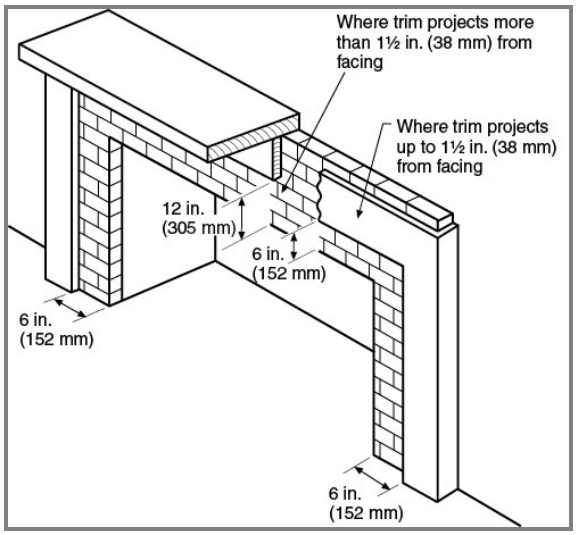
Resolution: The current text requires the combustible material to be above and projecting and there is no technical reason provided to include it on the sides as well.

Public Comment No. 13-NFPA 211-2022 [Section No. 11.2.5.4]

11.2.5.4

Combustible ~~material above and projecting~~ material projecting more than 1½ in. (38 mm) ~~from a fireplace opening shall~~ off the facing of a fireplace shall not be placed less than 12 in. (305 mm) from the top or sides of the fireplace opening. *(See Figure 11.2.5.4.)*

Figure 11.2.5.4 Fireplace Clearance to Combustible Material.



Statement of Problem and Substantiation for Public Comment

By adding this requirement for the sides of a fireplace opening, it will be more consistent with the International Residential Code/Building Code. The Standard 211 currently does not have language that prevents a 10" projection 7" from the sides of a fireplace opening. This addition would place a 10" projection or even a perpendicular combustible wall 12" from the sides of the opening.

Related Item

• FR

Submitter Information Verification

Submitter Full Name: Michael Segerstrom
Organization: Bridgewater Chimney Sweeps Llc
Street Address:
City:
State:
Zip:
Submittal Date: Sat May 21 23:13:53 EDT 2022
Committee: CHI-AAA

Committee Statement

Committee Rejected but held

Action:	
Resolution:	The proposed changes are new material for this code cycle and is being rejected but held for the next cycle.

Public Input No. 19-NFPA 211-2024 [Section No. 11.2.10]

Create new 11.2.10 as follows (and renumber subsequent section):

11.2 Masonry Fireplaces.

11.2.10 (New) Masonry Fireplace Inserts

Fireplace inserts installed in masonry fireplaces shall be listed in accordance with the requirements of UL 1390. and shall be installed in accordance with the manufacturer's instructions.

11.2.11 * Masonry Fireplace Accessories.

Fireplace accessories shall be one of the following:

(1) Installed by a qualified agency

(2) Listed and installed in accordance with the terms of their listing

(3) Installed in accordance with the accessory manufacturer's installation instructions

Add to 2.3.3 :

UL 1390 *Solid Fuel Fireplace Inserts and Hearth-Mounted Stoves for Installation into Masonry Fireplaces,* 2024

Statement of Problem and Substantiation for Public Input

New consensus standards for fireplace inserts have been developed in response to incidents resulting from insufficient standards requirements. These documents are currently in consensus draft status with anticipated publication in 2024. This Public Input recommends directly referencing these standards in the body of the code to eliminate confusion with the inappropriate application of existing standards that do not specifically address the hazards related to these fireplace inserts. Note that fireplace inserts are defined in 3.3.70 but have no specific requirements other than connections.

Submitter Information Verification

Submitter Full Name: Kelly Nicolello
Organization: UL Solutions
Street Address:
City:
State:
Zip:

Submittal Date: Sat Jun 01 15:32:28 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: UL 1390 is still in draft development and cannot be referenced in NFPA 211 as it is not readily available.

Public Input No. 22-NFPA 211-2024 [Section No. 11.2.10]

11.2.10* Masonry Fireplace Accessories.

Fireplace accessories shall be ~~one~~ all of the following:

(1) Installed by a qualified agency

(2) Listed and installed in accordance with the terms and conditions of their listing

(3) Installed in accordance with the accessory manufacturer's installation instructions

Additional Proposed Changes

File Name	Description	Approved
211_PC_1_Held.pdf	211_PC1	

Statement of Problem and Substantiation for Public Input

NOTE: This Public Input appeared as “Reject but Hold” in Public Comment No. 1 of the (A2023) Second Draft Report for NFPA and per the Regs. At 4.4.8.3.1 and needs to be reconsidered by the TC for the next edition of the document.

Currently there is disconnect between the IRC and the NFPA211. This would include inserts and many other accessories. Currently IRC requires that we install products in accordance with the terms and conditions of their listings and in accordance with the manufacturer installation instructions. As qualified agencies and professionals in the industry we should be meeting both of these requirements as the IRC is code in nearly all jurisdictions to varying degrees in all 50 states. The NFPA211 is a guide and is at this time less restrictive than code. Professionally and ethically per the agreements we sign in becoming certified we agree to uphold the codes and standards of the industry and follow industry best practices. When requirements conflict industry best practice says we go with the more restrictive of the two. In this case the IRC and the terms and conditions of listing would be more restrictive than some of the manufacturers instructions. As an industry we should be setting a standard that gives us a solid baseline requirement backed by all the facts. If people would like to choose to do otherwise they may do so at their own risk and the risk of their clients. If we do not draw our own firm lines in the sand then litigation and regulation will do so for us down the road.

Submitter Information Verification

Submitter Full Name:	NFPA Holds
Organization:	Technical Committee on Chimneys, Fireplaces, and Venting Systems for Heat-Producing Appliances
Street Address:	
City:	
State:	
Zip:	
Submittal Date:	Thu Jun 06 16:45:02 EDT 2024
Committee:	CHI-AAA

Committee Statement

Resolution: The proposed change would require listing of many accessories that are not currently listed or have a listing and it would be an undue burden on the industry to have these items listed and installed by a qualified agency.

Public Comment No. 1-NFPA 211-2022 [Section No. 11.2.10]

11.2.10* Masonry Fireplace Accessories.

Fireplace accessories shall be ~~one~~ all of the following:

(1) Installed by a qualified agency

(2) Listed and installed in accordance with the terms and conditions of their listing

(3) Installed in accordance with the accessory manufacturer's installation instructions

Statement of Problem and Substantiation for Public Comment

Currently there is disconnect between the IRC and the NFPA211. This would include inserts and many other accessories. Currently IRC requires that we install products in accordance with the terms and conditions of their listings and in accordance with the manufacturer installation instructions. As qualified agencies and professionals in the industry we should be meeting both of these requirements as the IRC is code in nearly all jurisdictions to varying degrees in all 50 states. The NFPA211 is a guide and is at this time less restrictive than code. Professionally and ethically per the agreements we sign in becoming certified we agree to uphold the codes and standards of the industry and follow industry best practices. When requirements conflict industry best practice says we go with the more restrictive of the two. In this case the IRC and the terms and conditions of listing would be more restrictive than some of the manufacturers instructions. As an industry we should be setting a standard that gives us a solid baseline requirement backed by all the facts. If people would like to choose to do otherwise they may do so at their own risk and the risk of their clients. If we do not draw our own firm lines in the sand then litigation and regulation will do so for us down the road.

Related Item

• 11.2.10* Masonry Fireplace Accessories

Submitter Information Verification

Submitter Full Name: Daniel Freeman
Organization: Freeman Fire Inspectors Ltd / The Chimney Doctor Ltd
Street Address:
City:
State:
Zip:
Submittal Date: Wed Mar 02 15:31:58 EST 2022
Committee: CHI-AAA

Committee Statement

Committee Action: Rejected but held

Resolution: The proposed changes are new material for this code cycle and is being rejected but held for the next cycle.

Public Input No. 12-NFPA 211-2024 [Section No. 13.6.2.3]

13.6.2.3

Unless the appliance is specifically listed for lesser clearance, the clearance after reduction shall be not less than the following:

(1) 12 in. (305 mm) to combustible walls

(2) 18 in. (457 mm) to combustible ceilings

QUESTION: The Figure 13.6.2.1(f), Ceiling Protection Using Materials in Table 13.6.2.1, shows a minimum reduced clearance of 12 in. (305 mm). This is 6 in. less than the 18 in. (457 mm) minimum clearance listed in paragraph 13.6.2.3. for clearance after reduction. Please clarify. Thank you. Sincerely, Andrew Strand

Statement of Problem and Substantiation for Public Input

QUESTION: The Figure 13.6.2.1(f), Ceiling Protection Using Materials in Table 13.6.2.1, shows a minimum reduced clearance of 12 in. (305 mm). This is 6 in. less than the 18 in. (457 mm) minimum clearance listed in paragraph 13.6.2.3. for clearance after reduction. Please clarify. Thank you. Sincerely, Andrew Strand

Submitter Information Verification

Submitter Full Name: Andrew Strand
Organization: homeowner
Affiliation: n/a
Street Address:
City:
State:
Zip:

Submittal Date: Wed May 15 15:22:53 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: FR-7-NFPA 211-2024

Statement: The figures are confusing and do not provide any additional clarity to the information provided in Table 13.6.2.1 and subsequent requirements and are being deleted.

Public Input No. 13-NFPA 211-2024 [New Section after 15.1]

Chimney Integrity Testing or Chimney Air-Tightness Testing

When tested in accordance with the appropriate standardized test the leakage rate in litres/seconds per square meters of flue surface area of chimneys or of the flue liners or connecting flue pipes with joints before and after exposure to heat, shall not exceed the values given in table 15.001.

This shall be an optional and additional method of testing chimneys.

Additional Proposed Changes

File Name	Description	Approved
Suggested_USA_-European_adopted_chimney_pressure_and_leakage_rates_Table_15.001.png	Suggested USA - European adopted chimney pressure and leakage rates Table 15.001	

Statement of Problem and Substantiation for Public Input

There is no way to objectively guarantee a masonry or factory-built chimney to be free of faults. In contrast, it is the core function of a chimney sweep to try and determine the fitness of continued service of a chimney. Chimney sweeps need all the tools they can get to try and do their core function. The consequences of a poor inspection are clear as evidenced by the annual monoxide poisonings, death count and structure fires caused by chimneys and fireplaces. Bad things happen when chimneys leaks exhaust gasses where they should not leak.

The chimney sweep in the USA has traditionally has 3 tools to do this job:

1) Smoke test (subjective results, relies upon visual leakage of smoke, compressed gaps don't leak, inconclusive results). However, a smoke test can show us proper draft if flue is pre-heated, and it can show us leakage if done under pressure (Type 1 smoke test

2) Camera inspection (subjective results, open to human error of missing an issue visually, and technical lighting issues). Benefits are visual recognition and immediate first hand knowledge of a gap or crack in a masonry system, or disconnection in a factory-built system.

3) Visual inspection (subjective results, open to visual human error, restricted access and viewability). Benefits are visual recognition and immediate first hand knowledge of a gap or crack.

There is another test that could help chimney sweeps in the USA determine if a chimney is leaking exhaust gasses or not, it is called a Chimney Integrity Test.

Will the NFPA 211 technical council please consider approving the leakage rates submitted herein, based on the 20 year time-tested European standard so that this method may be used in the USA?

Background:

The European standard EN1443 and the UK Document J has addressed the issue of human error on chimney camera inspections by recognizing an additional method of inspecting flues: chimney integrity testing. This is the only objective machine-based method of testing the air-tightness of a passageway. Chimney sweeps in Switzerland, Germany Austria, and the UK all have this additional tool for inspecting their chimneys. There are two German made devices to choose from, the Wohler DP600 or the Ress DP5, each made by a different company and sold at different prices, but which are pre-programmed with the European Standard. These devices function as follows: the sweep installs a foam plug in the top of the chimney, and a foam block in the bottom of the chimney, and connects the device to a probe which is inserted through one of the foam blocks. The device is powered on, and it

applies a light pressure (P for positive pressure test) or pulls a slight vacuum (N for negative pressure test). After it establishes equilibrium at that pressure, it then begins an automated 10 second test measuring the leakage rate. The machine powers down and prompts the technician to enter the cubic feet of the cavity tested. The device then displays PASS or FAIL on the screen. Optionally the technician may use a provided hand-held printer to print the receipt with the customers address and the sweep company's name on it, along with the pass/fail chimney inspection results.
Here is a simple homemade video I have produced for your further benefit to understand the value of this additional tool in the hands of American chimney sweeps.
https://vimeo.com/manage/videos/909142763

Thank you for your consideration,
your brother in soot,
Byron Schramm
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Submittal Date: Fri May 31 14:44:03 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: This inspection method could allow chimneys that currently fail inspection methods to pass. Additionally there is no clear technical delineation between a chimney in perfect condition and a chimney in failing condition. If the exhaust path and flue liner are intact the test could pass even if there is significant structural damage to the chimney. Additionally if the outer structure is intact and the flue liner is damaged the chimney may still pass this inspection method. This testing has mostly been conducted in Europe and it is unclear if these test methods would translate to systems in the USA. This test method also does not account for variations in temperature and material expansion. Additionally most American systems are not built pressure tight and would not be suitable for this test method. It is unclear what level of pressurization chimneys must withstand in order to pass or fail the inspection. For natural draft chimneys, the listings do not require the chimney to be constructed to pass positive pressure testing.

Public Input No. 9-NFPA 211-2024 [Section No. 15.2.1]

15.2.1

The type of inspection shall be determined in accordance with Table 15.2.1.

Table 15.2.1 Selection of Inspection Type

-	Inspection Types		
Criteria	**Level I**	**Level II**	**Level III**
Scope	Readily accessible areas of chimney, structure, and flue; lack of obstruction or combustible deposits in flue; basic appliance installation and connection	All subjects of a Level I inspection; proper construction and condition of accessible portions of the chimney structure and all enclosed flues; proper clearances from combustibles in accessible locations; size and suitability of flues for connected appliances	All subjects of Level I and Level II inspections; proper construction and condition of concealed portions of chimney structure and enclosed flues; proper clearances from combustibles
Degree of access required	Readily accessible portions of chimney exterior and interior; accessible portions of appliance and chimney connection	All accessible portions of the chimney exterior and interior, including areas within accessible attics, crawl spaces, and basements, and accessible portions of the appliance and chimney connection; includes inspection by video scanning or other means	External and internal portions of chimney structure, including concealed areas of the building or chimney; includes removal of components of building or chimney where necessary, but only as necessary to gain access to areas that are the subject of the inspection
Circumstances	Annual inspection as required by Section 14.2 as limited to existing or repeat customers ; during routine cleaning of chimney flue; upon direct replacement of connected appliance with one of similar type, input rating, and efficiency	~~Upon~~ Initial inspection for all new clients or systems; upon addition or removal of one or more connected appliances or replacement of appliance with one of dissimilar type, input rating, or efficiency; prior to relining or replacement of flue lining; upon sale or transfer of the property; after operating malfunction or external event likely to have caused damage to the chimney	Where necessary for the investigation of an incident that has caused damage to the chimney or building; where a hazard detected or suspected as the result of a Level I or II inspection cannot be fully evaluated without access to concealed areas
Indications	For verification of suitability of the chimney for continued service, under the same conditions and with the same appliance or appliances	For verification of suitability of the chimney for new or changed conditions of service; Level I inspection not sufficient to determine serviceability of the chimney	When construction of all or part of chimney is deemed critical to its renewed or continued use; required only for those areas that cannot be properly evaluated by a Level I or Level II inspection

Note: The inspection is not required when the last connected appliance is removed and chimney use is discontinued.

Statement of Problem and Substantiation for Public Input

See comment for 15.3.1
See comment for 15.4.1

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 7-NFPA 211-2024 [Section No. 15.3.1]	
Public Input No. 10-NFPA 211-2024 [Section No. 15.4.1]	
Public Input No. 7-NFPA 211-2024 [Section No. 15.3.1]	
Public Input No. 10-NFPA 211-2024 [Section No. 15.4.1]	

Submitter Information Verification

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Submittal Date: Fri Mar 29 17:16:07 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: Often times there are a large number of conditions that would require a Level II inspection that would not be triggered for only new clients or systems. There is also difficulty on defining what a new or existing client is. A level I inspection is the recommended level when conditions of use are not changing and the circumstances that would trigger a level II inspection cover when use conditions are changing.

Public Input No. 1-NFPA 211-2024 [Section No. 15.2.6]

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~~ Recommend the next higher level of inspection ~~completed~~

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

Statement of Problem and Substantiation for Public Input

According to the definitions and scope in 15.4.2 and Table 15.2.1, a Level II inspection requires inspection of readily accessible and accessible areas. If an area is concealed or inaccessible per A.3.3.48, it is, by definition, not subject to a Level II inspection.

The requirement of 15.2.6 to "indicate the level of inspection completed" is misleading and definitionally faulty.

Imagine a Level 2 inspection is requested and all areas of/around the chimney and fireplace system are inspected except the crawl space. The crawl space was not inspected because it is 20" high, flooded with sewage, and home to a brood of poisonous snakes - all factors making it inaccessible based on A.3.3.48. Although the crawl space was not inspected, because the crawl space was inaccessible by definition, a Level II inspection ("all accessible portions") was still completed. Ipso facto, the requirement of 15.2.6 to indicate that a Level I inspection was completed is, by definition, wrong.

Submitter Information Verification

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Submittal Date: Thu Mar 28 16:07:40 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: This section already covers what to do when the recommended level of inspection cannot be completed. This section is specifying what needs to be documented when circumstances prevent the completion of that level. The concern of this requirement is to document what was completed absolutely and not what is recommended next.

Public Input No. 7-NFPA 211-2024 [Section No. 15.3.1]

15.3.1 Circumstances.

A Level I inspection shall be conducted under the following circumstances and shall be limited to existing or repeat clients :

(1) During annual inspections in accordance with Section 14.2

(2) During routine cleaning of a flue or flues within the chimney

(3) At the time of replacement of one or more connected appliances with an equal number of appliances of similar type, input rating, and efficiency, in accordance with Section 14.4

(4) At other times as indicated in Section 15.3

Statement of Problem and Substantiation for Public Input

From the Copperfield Level II Docket we find the following: "Chapter 15 of the NFPA211 details specific circumstances requiring a Level II inspection. In addition to these circumstances, chapter 15 also states that a Level II inspection is indicated when a Level I inspection is not sufficient to determine the serviceability of the chimney. As a Level I inspection is not able to adequately determine the serviceability of a new client's chimney system a Level II inspection is necessary."

Adjusting this section to limit Level I inspections to existing or repeat clients will help enhancing safety of clients while ensuring accurate information is conveyed during the initial chimney inspection for a new client. This adjustment acknowledges that Level I inspections, which are relatively basic visual assessments, might not capture the complete status or potential hidden issues within a chimney system, especially for new clients whose chimney condition and maintenance history are unknown.

For new clients, a Level II inspection becomes necessary because it provides a more detailed examination, including the evaluation of accessible internal and external components of the chimney and its connections. This level of inspection is critical in identifying any deficiencies or hazards that could pose a risk, which a Level I inspection might miss due to its limited scope.

By mandating more comprehensive Level II inspections for new clients, the NFPA ensures that any serviceability issues are accurately identified and addressed right from the initial interaction. This approach significantly reduces the risk of overlooking potential problems, thereby increasing safety and preventing property damage or health hazards related to poorly maintained or malfunctioning chimney systems. For existing or repeat clients, where there is already a detailed understanding and history of the chimney system's condition, Level I inspections remain appropriate for routine checks and maintenance scenarios.

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 9-NFPA 211-2024 [Section No. 15.2.1]	
Public Input No. 10-NFPA 211-2024 [Section No. 15.4.1]	
Public Input No. 9-NFPA 211-2024 [Section No. 15.2.1]	
Public Input No. 10-NFPA 211-2024 [Section No. 15.4.1]	

Submitter Information Verification

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Submittal Date:	Fri Mar 29 16:45:23 EDT 2024
Committee:	CHI-AAA

Committee Statement

Resolution: Often times there are a large number of conditions that would require a Level II inspection that would not be triggered for only new clients or systems. There is also difficulty on defining what a new or existing client is. A level I inspection is the recommended level when conditions of use are not changing and the circumstances that would trigger a level II inspection cover when use conditions are changing.

Public Input No. 10-NFPA 211-2024 [Section No. 15.4.1]

15.4.1 Circumstances.

A Level II inspection shall be conducted under the following circumstances:

(1) Initial inspection for all new clients or systems

(2) * Upon addition or removal of one or more connected appliances or upon replacement of an appliance with one or more of dissimilar type, input rating, or efficiency, unless the last connected appliance is removed and chimney use will be discontinued

(3) Prior to relining of a flue or replacement of flue lining, in accordance with 7.1.10

(4) Upon sale or transfer of the property

(5) After a building or chimney fire, weather or seismic event, or other incident likely to have caused damage to the chimney

(6) At other times as indicated in Section 15.3

Statement of Problem and Substantiation for Public Input

See comment for 15.3.1

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 9-NFPA 211-2024 [Section No. 15.2.1]	
Public Input No. 7-NFPA 211-2024 [Section No. 15.3.1]	
Public Input No. 7-NFPA 211-2024 [Section No. 15.3.1]	
Public Input No. 9-NFPA 211-2024 [Section No. 15.2.1]	

Submitter Information Verification

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Submittal Date: Fri Mar 29 17:19:52 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: Often times there are a large number of conditions that would require a Level II inspection that would not be triggered for only new clients or systems. There is also difficulty on defining what a new or existing client is. A level I inspection is the recommended level when conditions of use are not changing and the circumstances that would trigger a level II inspection cover when use conditions are changing.

Public Input No. 5-NFPA 211-2024 [Section No. 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.~~ accessible at the time of inspection or as may restricted by the occupancy and access available to the client.

Statement of Problem and Substantiation for Public Input

The proposed amendment to the NFPA 211, section 15.4.2.4, introduces a shift from a client limited inspection criterion to one grounded in the practicality of accessibility and the constraints imposed by occupancy and access. This alteration has profound implications for chimney inspections, aligning more closely with the principles of safety and thoroughness.

Alignment with Safety Principles
The revision underscores a commitment to comprehensive safety inspections, prioritizing the inspection of all accessible flues and liners. This approach ensures that inspections are not unduly limited by client request where limited education, knowledge, or budget may play a role but are instead directed by the objective accessibility and ownership of the chimney systems. It aligns with the core mission of ensuring the operational integrity and safety of chimney and flue systems, potentially identifying and mitigating risks that the client might not have expressly identified.

Consideration of Practical Accessibility
By focusing on "chimney flues and flue liners accessible at the time of inspection," the amendment acknowledges the physical and logistical limitations that inspectors often face. This realistic approach permits a more flexible and adaptive inspection process, where the scope is determined by what is feasibly inspectable, thereby optimizing the use of inspector expertise and time while still maintaining a thoroughness that is crucial for safety.

Legal and Professional Implications
This change also has significant legal and professional implications. By defining the scope of inspections around accessibility and existing conditions rather than client requests, it potentially broadens the inspector's responsibility to identify and report issues. This could enhance the legal defensibility of inspections and the professional standing of inspectors by demonstrating a commitment to thoroughness and safety.

Operational Impact
For organizations like Freeman Fire Inspectors and The Chimney Doctor, this amendment could necessitate adjustments in operational practices. Inspectors may require additional training to effectively assess accessibility and make judgments about the scope of inspections in line with this new criterion. It may also influence client communications, with a need to clearly explain the basis for the scope of inspections and the importance of comprehensive safety assessments.

Conclusion
The proposed amendment to NFPA 211, section 15.4.2.4, represents a pivotal adjustment in the approach to chimney and flue inspections. It prioritizes safety and the practicalities of inspection over client-specified limitations. This change necessitates a thoughtful consideration of its implementation, including training, operational adjustments, and client communication strategies, to ensure it enhances safety outcomes and aligns with the highest professional standards. This recommendation is presented with the understanding that such adjustments are crucial for maintaining the integrity and safety of chimney systems and accurately determining their suitability for continued use.

What is the impact on safety of allowing the client to determining or limiting the chimney flues or flue liners to be inspected?

Allowing clients to determine which chimney flues or flue liners are inspected can have a considerable impact on the overall safety and effectiveness of the inspection process. While client involvement is crucial in any service industry, the specialized nature of chimney inspections requires a balanced approach that considers both client input and professional expertise. Below are key aspects concerning the impact on safety when client preferences primarily dictate the scope of chimney inspections:

Reduced Scope of Safety Inspections
When clients specify which parts of the chimney system to inspect, there's a risk that not all safety hazards or maintenance issues will be identified. Clients may not have the expertise to recognize which components of their chimney system are most at risk or in need of inspection. This could lead to overlooked defects in unselected flues or liners, potentially resulting in dangerous conditions like blockages, cracks, or leaks that could allow harmful gases to enter the living space or lead to chimney fires. The issues present in another flue could impact the safety of the system that was requested to be inspected or allowed access into otherwise concealed areas surrounding that system.

Incomplete Hazard Identification
Chimney inspections are designed to identify a range of issues, including structural problems, creosote buildup, and other conditions that could lead to chimney fires or carbon monoxide intrusion. If the inspection is limited to client-selected areas, critical hazards in other parts of the chimney system might not be detected until they cause significant problems or, worse, lead to dangerous incidents.

Implications for Legal and Insurance Standards
There may also be legal and insurance implications to consider. Inspections that do not adhere to comprehensive standards, like those set forth by NFPA 211, could potentially leave inspectors or chimney service companies liable for missed issues that result in property damage or personal injury. Furthermore, insurance policies may require inspections to meet specific standards, and limiting the scope based on client preference could affect coverage in the event of a chimney-related incident.

Professional Responsibility and Ethics
From a professional standpoint, the integrity of the inspection process is paramount. Inspectors have a responsibility to ensure the safety of the structures they inspect, guided by their expertise and industry standards. By allowing client preferences to unduly limit the inspection scope, inspectors may not fulfill their ethical obligation to identify and mitigate risks, potentially compromising the safety of the occupants.

Communication and Education
This situation underscores the importance of effective communication and education by inspection professionals. Educating clients about the importance of comprehensive inspections, the potential risks associated with incomplete inspections, and the safety benefits of adhering to professional recommendations can help align client expectations with safety requirements.

Conclusion
While client input is valuable for understanding specific concerns and the history of the chimney system, allowing clients to exclusively determine the scope of chimney inspections can undermine safety, overlook critical hazards, and potentially expose inspectors and their companies to increased liability. A balanced approach that incorporates both professional assessment and client concerns, guided by established safety standards and ethical considerations, is essential to ensure the safety and integrity of chimney inspection practices.

Submitter Information Verification

Submitter Full Name: Daniel Freeman
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Submittal Date: Fri Mar 29 16:26:38 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: This requirement is intended to limit the scope of the inspection to the chimney flues and flue liners requested. This does not prohibit the inspector from noting problems on other chimney flues or flue liners in the system, but it does not require them to note or inspect for those problems. The client is the party requesting the inspection on the system and the one permitting the inspector on the premises and as such would be the one to request which systems are inspected.

Public Input No. 20-NFPA 211-2024 [Chapter A [Excluding any Sub-Sections]]

Annex A is not a part of the requirements of this NFPA document but is included for informational purposes only. This annex contains explanatory material, numbered to correspond with the applicable text paragraphs.

This informative annex provides a list of product safety standards used for product listing where that listing is required by this standard. It is recognized that this list is current at the time of publication but that new standards or modifications to existing standards can occur at any time while this edition of the *Code* is in effect.

This informative annex does not form a mandatory part of the requirements of this standard but is intended to identify for users the standards upon which the requirements have been based.

Table A.1 Product Safety Standards for Appliances and Equipment That Have an Associated Listing Requirements

Chapter	Standard Number	Standard Title
4.1.2.5	UL 2034	*Single and Multiple Station Carbon Monoxide Alarms*
4.1.2.5	UL 2075	*Gas and Vapor Detectors and Sensors*
7.2.2.3	UL 1777	*Chimney Liners*
9.2.2	UL 441	*Gas Vents*
9.2.2	UL 641	*Type L Low-Temperature Venting Systems*
9.2.2	UL 1738	*Venting Systems for Gas-Burning Appliances, Categories II, III a*
9.5.4	UL 1618	*Wall Protectors, Floor Protectors, and Hearth Extensions*
10.1	UL 441	*Gas Vents*
10.1	UL 641	*Type L Low-Temperature Venting Systems*
10.1	UL 1738	*Venting Systems for Gas-Burning Appliances, Categories II, III a*
10.7.3.10	UL 2158A	*Clothes Dryer Transition Ducts*
11.1.1	UL 127	*Factory-Built Fireplaces*
11.1.2	UL 1618	*Wall Protectors, Floor Protectors, and Hearth Extensions*
11.2.1.14	UL 103A	*Outline of Investigation for Masonry Fireplace Adapters for Res Type and Building Heating Appliance Chimneys*
11.2.4.2	UL 2506	*Outline of Investigation for Refractory Panels for Masonry Firep*
13.1	UL 391	*Solid-Fuel and Combination-Fuel Central and Supplementary Fu*
13.1	UL 737	*Fireplace Stoves*
13.1	UL 1482	*Solid-Fuel Type Room Heaters*

13.1	UL 2162	*Commercial Wood-Fired Baking Ovens - Refractory Type*
13.1	UL 2523	*Solid Fuel-Fired Hydronic Heating Appliances, Water Heaters, A Boilers*
13.7.1	UL 1482	*Solid-Fuel Type Room Heaters*
13.7.1	UL 1618	*Wall Protectors, Floor Protectors, and Hearth Extensions*

Statement of Problem and Substantiation for Public Input

NFPA 211 relies heavily on product listings, but in the majority of cases does not directly reference the product listing standards in the body of the standard or an annex. Providing a table of relevant standards in the annex provides value to users of this standard to understand the product requirements on which it is based. This approach of using a single table, along with some of the language and formatting, was borrowed from NFPA 70. Note that the initial standard entries in this table are not comprehensive at this time but are good starting point to build on for future code cycles. Some existing annex entries may eventually be absorbed into the chart format.

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 21-NFPA 211-2024 [Section No. B.1.2.5]	

Submitter Information Verification

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Submittal Date: Sat Jun 01 15:45:37 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: The proposed list of product listings is incomplete (e.g. ISO standards, CSA standards, ANSI standards) and would require more work to get a more comprehensive list of relevant listing standards not limited to one listing organization. Where products are required to be listed that is called out in the relevant requirement. It is the responsibility of the professional to determine what listings might be appropriate for the application.

Public Input No. 4-NFPA 211-2024 [Section No. A.3.3.48]

A.3.3.48 Concealed (Inaccessible).

The following ~~generally are~~ may be considered inaccessible:

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

(2) ~~Attics~~ Attic spaces that provide less than ~~48 in~~ 30 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) unobstructed headroom at some point above the access as measured between the top of the ceiling framing members to the underside of the roof framing members

(6) Crawl spaces that provide less than ~~24 in~~

(7) 18 in . (0.61 m) of ~~vertical clearance~~

~~Safety hazards that generally will render~~

(1) unobstructed headroom at the point of entry as measured between the bottom of the floor framing members to grade

***NOTE: Any limitation on the scope of inspection due to any accessibility limitations should be thoroughly documented and communicated to the client.

Safety hazards that may render all or portions of 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

(6) Excessive attic or crawlspace temperatures

**NOTE: Any limitation on the scope of inspection due to any safety hazards should be thoroughly documented and communicated to the client.

Statement of Problem and Substantiation for Public Input

ATTIC TEMPERATURE
I think we remove the temperature limitation and let technicians document what they think is a hazard... for some this will be higher or lower than others. Neither OSHA nor NIOSH set specific temperature limits for confined areas as they allow for methods and training to allow adaptation and for work to be completed in these environment as necessary where mitigation is possible.

Things that can be done to mitigate temperature in attics or confined spaces. I think instead of limiting this with such a low temperature it should allow for variation and not give an instant out to the process of inspection. Care should be taken but in general we are not up in attic spaces for hours. Usually less

than 15 minutes in and out. With a breather and well hydrated in attics where the minimum required 30" of head space is present a tech should be able to get down to the other end of an attic and back with some pictures of the chimney. Maybe they can't get near the chimney as its at the eave... but enough is usually visible to allow for clearances to be noted, or other issues like lack of insulation shield, thermal decomposition of framing around the system, to be noted.
*https://www.mrsl.co.uk/news/understanding-impact-temperature-confined-space-work-mitigating-risks-and-ensuring-safety

Also attic temperatures should be added to list of 'safety hazards' below and not left in the accessibility section at the top. Above should only be physical access limitations. Below should be 'possible' safety hazards that 'may' affect the accessibility of all or portions of the attic or crawlspace.

Occupational Safety and Health Administration (OSHA) Guidelines: OSHA does not set specific temperature standards but emphasizes the employer's responsibility to provide a safe working environment. It suggests employers implement administrative controls and practices such as acclimatization, hydration, and frequent rest breaks for employees working in extreme heat. OSHA's Heat Stress Guide provides a comprehensive overview of precautions and recommendations.

To ensure the safety of employees working in attics, consider the following best practices:
-Temperature Monitoring: Use thermometers or more sophisticated devices to monitor the temperature within the attic space, keeping an eye on the heat index or WBGT values.
-Hydration and Rest: Ensure employees have access to plenty of cool water and enforce regular rest breaks in a cooler environment.
-Training and Acclimatization: Educate employees on the signs of heat-related illnesses and ensure a period of acclimatization for those not used to working in high temperatures.
-Ventilation and Cooling: Whenever possible, improve ventilation within the attic or use portable cooling units to reduce temperature extremes.
-Personal Protective Equipment (PPE): Provide appropriate PPE, such as breathable, light-colored clothing and cooling vests.

National Institute for Occupational Safety and Health (NIOSH) Recommendations: NIOSH offers research and recommendations on preventing heat stress in workers. This includes guidelines on monitoring worker health, providing adequate water and rest, and engineering controls like improved ventilation.

Attic temperatures over130 degrees Fahrenheit can cause prematurely age the shingles, overwork HVAC systems, and cause high energy bills. https://inspeccpros.com/what-temperature-should-an-attic-be/

Hot air becomes trapped between the attic insulation and the roof without proper ventilation. Ideally, your attic should not exceed 130 degrees Fahrenheit during the summer. Problems related to attics hotter than 130 degrees:
It will make it harder to cool your home in the summer. Your HVAC system has to work harder than needed, which leads to premature equipment failure.
It can degrade certain types of attic insulation. Insulation, such as cellulose, is made from recycled materials that degrade over time, reducing the insulation’s effectiveness.
A hot attic will cause asphalt shingles to degrade faster, shortening the roof’s life. Asphalt shingles already absorb a lot of heat from the sun. Trapped heat in the attic causes roof shingles to lose essential oils that protect the roof shingles.
A hot attic can create an environment for mold to thrive, driving thousands of dollars in remediation costs. https://inspeccpros.com/what-temperature-should-an-attic-be/#:~:text=Hot%20air%20becomes%20trapped%20between,your%20home%20in%20the%20summer.

ATTIC WALKWAYS
An inspector should not consider the absence of walkways an automatic reason that an attic is considered 'inaccessible', especially where more than the minimum 30" of unobstructed head space is present. This should be removed.

ATTIC ACCESS SPACE:

In the IRC attic access is specified under R807. Recommend changing the minimum height to 30"

R807.1 Attic access. Buildings with combustible ceiling or roof construction shall have an attic access opening to attic areas that have a vertical height of 30 inches (762 mm) or greater over an area of not less than 30 square feet (2.8 m2). The vertical height shall be measured from the top of the ceiling framing members to the underside of the roof framing members.

The rough-framed opening shall be not less than 22 inches by 30 inches (559 mm by 762 mm) and shall be located in a hallway or other location with ready access . Where located in a wall, the opening shall be not less than 22 inches wide by 30 inches high (559 mm wide by 762 mm high). Where the access is located in a ceiling, minimum unobstructed headroom in the attic space shall be 30 inches (762 mm) at some point above the access measured vertically from the bottom of ceiling framing members. See Section M1305.1.2 for access requirements where mechanical equipment is located in attics .

CRAWL SPACE ACCESS:
Several of the following sections from the IRC have nothing to do with termite protection with regard to the 18" minimum. Having a requirement higher than 18" will limit the spaces where we should be inspecting as that is the code required minimum. The original distance specified for a pest control technician anticipates them carrying more than a tape measure and a camera to look at clearances to a chimney.

M1408.4 Access. An opening in the foundation not less than 18 inches by 24 inches (457 mm by 610 mm), or a trap door not less than 22 inches by 30 inches (559 mm by 762 mm) shall be provided for access to a floor furnace. The opening and passageway shall be large enough to allow replacement of any part of the equipment .

Figure R403.1(3) to show frost-protected shallow foundations shows an 18" minimum crawlspace height from grade to the bottom of floor joists

AE114.6 Under-floor access openings shall be provided. Such openings shall be not less than 18 inches (457 mm) in any dimension and not less than 3 square feet (0.279 m2) in area, and shall be located so that any water supply and sewer drain connections located under the manufactured home are accessible.

This one applies for insects.
R317.1 (1) In crawl spaces or unexcavated areas located within the periphery of the building foundation, wood joists or the bottom of a wood structural floor where closer than 18 inches (457 mm) to exposed ground, wood girders where closer than 12 inches (305 mm) to exposed ground, and wood columns where closer than 8 inches (204 mm) to exposed ground.

Submitter Information Verification

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Submittal Date: Fri Mar 29 14:56:07 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: Anything above 115 degrees is considered to be extreme temperature according to OSHA and NIOSH App values. 48" is generally preferred as attics without flooring

requires stepping from joist to joist which is difficult under 48". The 24" comes from termite standards where similar crawl space conditions exist. This annex does not preclude the inspector from going in these spaces and the requirements in the standard are to document the reasoning why the inspector did not go into these spaces. The submitter is welcome to bring these changes back on a per item basis to focus the discussion more.

Public Input No. 15-NFPA 211-2024 [Section No. B.1.2.5]

B.1.2.5 UL Publications.

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

UL 103, *Factory-Built Chimneys for Residential Type and Building Heating Appliances*, 2010, revised 2021.

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

UL 1738, *Venting Systems for Gas-Burning Appliances, Categories II, III and IV*, ~~2010, revised 2021~~ 2023 .

UL 2034, *Single and Multiple Station Carbon Monoxide Alarms*, 2017, revised ~~2022~~ 2023 .

Statement of Problem and Substantiation for Public Input

Update references to most current editions.

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 14-NFPA 211-2024 [Section No. 2.3.3]	

Submitter Information Verification

Submitter Full Name: Kelly Nicolello
Organization: UL Solutions
Street Address:
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Submittal Date: Sat Jun 01 15:14:16 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: FR-3-NFPA 211-2024
Statement: Reference standards are being updated to the latest revision year.

Public Input No. 21-NFPA 211-2024 [Section No. B.1.2.5]

B.1.2.5 UL Publications.

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

UL 103, *Factory-Built Chimneys for Residential Type and Building Heating Appliances*, 2010, revised 2021.

UL 103A, *Outline of Investigation for Masonry Fireplace Adapters for Residential Type and Building Heating Appliance Chimneys* , 2005

UL 127, *Factory-Built Fireplaces* , 2011, revised 2020

UL 391, *Solid-Fuel and Combination-Fuel Central and Supplementary* Furnaces, 2010, revised 2019

UL 441, *Gas Vents* , 2016, revised 2024

UL 641, *Type L Low-Temperature Venting Systems* , 2010, revised 2022

UL 737, *Fireplace Stoves* , 2011, revised 2020

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

UL 1482, *Solid-Fuel Type Room Heaters* , 2011, revised 2022

UL 1618, *Wall Protectors, Floor Protectors, and Hearth Extensions* , 2015, revised 2024

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

UL 1777, *Chimney Liners* , 2016, revised 2024

UL 2034, *Single and Multiple Station Carbon Monoxide Alarms*, 2017, revised 2022.

UL 2075, *Standard for Gas and Vapor Detectors and Sensor* , 2013, revised 2023

UL 2158A, *Clothes Dryer Transition Ducts* , 2013, revised 2023

UL 2162, *Commercial Wood-Fired Baking Ovens - Refractory Type* , 2014

UL 2506, *Outline of Investigation for Refractory Panels for Masonry Fireplaces* , 2005

UL 2523, *Solid Fuel-Fired Hydronic Heating Appliances, Water Heaters, and Boilers* 2009, revised 2022

Statement of Problem and Substantiation for Public Input

These standards are referenced in proposed new annex Table A.1

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 20-NFPA 211-2024 [Chapter A [Excluding any Sub-Sections]]	

Submitter Information Verification

Submitter Full Name: Kelly Nicolello
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Submittal Date: Sat Jun 01 15:47:50 EDT 2024
Committee: CHI-AAA

Committee Statement

Resolution: FR-3-NFPA 211-2024
Statement: Reference standards are being updated to the latest revision year.