



Second Revision No. 1-NFPA 90A-2022 [Global Comment]

Where the term, "Combination Fire–Smoke Dampers" is observed, change to "Combination Fire-Smoke Dampers".

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Tue Aug 30 15:39:40 EDT 2022

Committee Statement

Committee Statement: This change will remove the en dash between "Combination Fire–Smoke Dampers" and replace it with a hyphen, to "Combination Fire-Smoke Dampers", which is considered grammatically correct, which also aligns with the text as provided in the definition of this term in Chapter 3.

Response Message: SR-1-NFPA 90A-2022



Second Revision No. 20-NFPA 90A-2022 [Detail]

2.3.2 ASTM Publications.

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

ASTM E136, *Standard Test Method for Assessing Combustibility of Materials Using a Vertical Tube Furnace at 750°C*, ~~2019a~~ [2022](#).

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 14:48:10 EDT 2022

Committee Statement

Committee Statement: The committee has determined that it is necessary to update ASTM E136 to the 2022 edition, which is expected before the Second Draft Ballot. The update to ASTM E136, 2022, clarifies the way the pass/fail criteria are used and have been used. The present edition (2019a) has been considered to be confusing.

Response Message: SR-20-NFPA 90A-2022



Second Revision No. 22-NFPA 90A-2022 [Detail]

2.3.2 ASTM Publications.

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

ASTM C411, *Standard Test Method for Hot-Surface Performance of High-Temperature Thermal Insulation*, 2019.

ASTM D93, *Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester*, 2020.

ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*, ~~2021a~~ [2022](#) .

ASTM E119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, 2020.

ASTM E2231, *Standard Practice for Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics*, ~~2019~~ [2021](#) .

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

ASTM E2965, *Standard Test Method for Determination of Low Levels of Heat Release Rate for Materials and Products Using an Oxygen Consumption Calorimeter*, ~~2017~~ [2022](#) .

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 15:09:34 EDT 2022

Committee Statement

Committee Statement: ASTM updates, except for ASTM E136

Response Message: SR-22-NFPA 90A-2022



Second Revision No. 24-NFPA 90A-2022 [Detail]

C.1.1.2.3 ASTM Publications.

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

ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*, ~~2021a~~ [2022](#) .

ASTM E2231, *Standard Practice for Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics*, ~~2019~~ [2021](#) .

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

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Fri Sep 09 08:54:18 EDT 2022

Committee Statement

Committee Statement: ASTM updates, except for ASTM E136.

Response Message: SR-24-NFPA 90A-2022



Second Revision No. 25-NFPA 90A-2022 [Detail]

C.1.2.3 ASTM Publications.

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

ASTM E136, *Standard Test Method for Assessing Combustibility of Materials Using a Vertical Tube Furnace at 750°C*, ~~2019a~~ [2022](#).

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Fri Sep 09 08:54:58 EDT 2022

Committee Statement

Committee Statement: The committee has determined that it is necessary to update ASTM E136 to the 2022 edition, which is expected before the Second Draft Ballot. The update to ASTM E136, 2022, clarifies the way the pass/fail criteria are used and have been used. The present edition (2019a) has been considered to be confusing.

Response Message: SR-25-NFPA 90A-2022



Second Revision No. 21-NFPA 90A-2022 [Chapter 2]

Chapter 2 Referenced Publications

2.1 General.

The documents or portions thereof listed in this chapter are referenced within this standard and shall be considered part of the requirements of this document.

2.2 NFPA Publications.

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

NFPA 30, *Flammable and Combustible Liquids Code*, 2024 edition.

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

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

NFPA 70[®], *National Electrical Code*[®], 2023 edition.

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

NFPA 75, *Standard for the Fire Protection of Information Technology Equipment*, 2020 edition.

NFPA 80, *Standard for Fire Doors and Other Opening Protectives*, 2022 edition.

NFPA 101[®], *Life Safety Code*[®], 2024 edition.

NFPA 105, *Standard for Smoke Door Assemblies and Other Opening Protectives*, 2022 edition.

NFPA 259, *Standard Test Method for Potential Heat of Building Materials*, 2023 edition.

NFPA 262, *Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces*, 2023 edition.

NFPA 275, *Standard Method of Fire Tests for the Evaluation of Thermal Barriers*, 2022 edition.

NFPA 286, *Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth*, 2023 edition.

NFPA 5000[®], *Building Construction and Safety Code*[®], 2024 edition.

2.3 Other Publications.

2.3.1 ASHRAE Publications.

ASHRAE, 180 Technology Parkway, Peachtree Corners, GA 30092.

ASHRAE 15 (packaged with ASHRAE 34), *Safety Standard for Refrigeration Systems and Designation and Safety Classification of Refrigerants* (ANSI Approved), 2019.

ASHRAE Handbook — HVAC Systems and Equipment, 2020.

[Detail SR-20](#)

2.3.2 ASTM Publications.

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

ASTM C411, *Standard Test Method for Hot-Surface Performance of High-Temperature Thermal Insulation*, 2019.

ASTM D93, *Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester*, 2020.

ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*, 2021a 2022.

ASTM E119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, 2020.

ASTM E136, *Standard Test Method for Assessing Combustibility of Materials Using a Vertical Tube Furnace at 750°C*, 2019a 2022.

ASTM E2231, *Standard Practice for Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics*, 2019 2021.

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

ASTM E2965, *Standard Test Method for Determination of Low Levels of Heat Release Rate for Materials and Products Using an Oxygen Consumption Calorimeter*, 2017 2022.

2.3.3 GA Publications.

Gypsum Association, 962 Wayne Avenue, Suite 620, Silver Spring, MD 20910.

GA-600, *Fire Resistance and Sound Control Design Manual*, 2021.

2.3.4 NAIMA Publications.

North American Insulation Manufacturers Association, P.O. Box 1906, Alexandria, VA 22313.

Fibrous Glass Duct Construction Standards, 5th edition, 2002.

2.3.5 SMACNA Publications.

Sheet Metal and Air Conditioning Contractors' National Association, 4201 Lafayette Center Drive, Chantilly, VA 20151-1219.

ANSI/SMACNA 016, *HVAC Air Duct Leakage Test Manual*, 2nd edition, 2012.

Fibrous Glass Duct Construction Standards, 7th 8th edition, 2003 2021.

HVAC Duct Construction Standards — Metal and Flexible, 3rd 4th edition, 2005 2020.

2.3.6 UL Publications.

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

UL 181, *Factory-Made Air Ducts and Air Connectors*, 2013, revised 2017 2021 .

UL 181A, *Closure Systems for Use with Rigid Air Ducts*, 2013, revised 2017 2021 .

UL 181B, *Closure Systems for Use with Flexible Air Ducts and Air Connectors*, 2013, revised 2017 2021 .

UL 263, *Fire Tests of Building Construction and Materials*, 2011, revised 2024 2022 .

UL 555, *Fire Dampers*, 2006, revised 2020.

UL 555C, *Ceiling Dampers*, 2014, revised 2021.

UL 555S, *Smoke Dampers*, 2014, revised 2020.

UL 586, *Safety for High-Efficiency, Particulate, Air Filter Units*, 2009, revised 2017.

UL 723, *Test for Surface Burning Characteristics of Building Materials*, 2018.

UL 867, *Electrostatic Air Cleaners*, 2011, revised 2021.

UL 900, *Air Filter Units*, 2015, revised 2022 .

UL 1598, *Luminaires*, 2021.

UL 1820, *Fire Test of Pneumatic Tubing for Flame and Smoke Characteristics*, 2004, revised 2021.

UL 1887, *Fire Test of Plastic Sprinkler Pipe for Visible Flame and Smoke Characteristics*, 2004, revised 2017 2021 .

UL 1995, *Heating and Cooling Equipment*, 2015, revised 2018 2022 .

UL 2024, *Cable Routing Assemblies and Communications Raceways*, 2014, revised 2015 2021 .

UL 2043, *Fire Test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air-Handling Spaces*, 2013, revised 2018 .

UL 2518, *Air Dispersion Systems*, 2016, revised 2021.

UL 2846, *Fire Test of Plastic Water Distribution Plumbing Pipe for Visible Flame and Smoke Characteristics*, 2014, revised 2021.

UL 60335-2-40, *Household and Similar Electrical Appliances — Safety — Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers*, 2019.

2.3.7 Other Publications.

Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003 2020 .

2.4 References for Extracts in Mandatory Sections.

NFPA 80, *Standard for Fire Doors and Other Opening Protectives*, 2022 edition.

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

NFPA 101[®], *Life Safety Code*[®], 2024 edition.

NFPA 211, *Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances*, 2024 edition.

~~NFPA 5000[®], *Building Construction and Safety Code*[®], 2024 edition.~~

Supplemental Information

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
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90A-2021_Chapter_2.docx

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 15:07:42 EDT 2022

Committee Statement

Committee Statement: Reference publication updates. See separate SR's for ASTM updates.

Response Message: SR-21-NFPA 90A-2022



Second Revision No. 14-NFPA 90A-2022 [Section No. 3.3.20]

3.3.20 Foam Plastic Insulation.

A cellular plastic, used for thermal insulating or acoustical applications, having a density of 20 lb/ft³ (320 kg/m³) or less, containing open or closed cells, and formed by a foaming agent. [5000 101, 2024 2024]

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 14:38:04 EDT 2022

Committee Statement

Committee Statement: Extract updates.

Response Message: SR-14-NFPA 90A-2022



Second Revision No. 15-NFPA 90A-2022 [Section No. 3.3.27]

3.3.27* Smoke Barrier.

A continuous membrane, or a membrane with discontinuities created by protected openings, where such membrane is designed and constructed to restrict the movement of smoke.
[~~5000~~ 101, 2024 2024]

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 14:38:56 EDT 2022

Committee Statement

Committee Statement: Extract updates.

Response Message: SR-15-NFPA 90A-2022



Second Revision No. 10-NFPA 90A-2022 [Section No. 4.2.2.2]

4.2.2.2*

Air filters shall comply with UL 900, *Air Filter Units*, or UL 586, *Safety for High-Efficiency, Particulate, Air Filter Units, where applicable* .

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 12:21:12 EDT 2022

Committee Statement

Committee Statement: The committee revised this text to provide "where applicable" when utilizing UL 586, as the scope of that document may not apply to certain occupancies or arrangements.

Response Message: SR-10-NFPA 90A-2022



Second Revision No. 11-NFPA 90A-2022 [Section No. 4.2.2.6]

4.2.2.6

~~High-efficiency particulate air filters shall be listed in accordance with UL 586, *Safety for High-Efficiency, Particulate, Air Filter Units* .~~

4.2.2.6.1

~~High-efficiency particulate air filters shall be installed in accordance with the manufacturer's listing.~~

4.2.2.6

High-efficiency particulate air filters shall be installed in accordance with the manufacturer's listing written instructions .

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 12:47:24 EDT 2022

Committee Statement

Committee Statement: The committee has revised this section to remove 4.2.2.6 and modify 4.2.2.6.1. The changes made in 4.2.2.2 provide reference for UL 586. Further, the committee chose not to have HEPA filters required to be listed, but rather installed per the manufacturer's written instructions.

Response Message: SR-11-NFPA 90A-2022



Second Revision No. 5-NFPA 90A-2022 [Section No. 4.3]

4.3 Materials.

4.3.1* Noncombustible Material.

4.3.1.1

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

- (1) ~~A The~~ 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.
- (2) ~~A The~~ material ~~that~~ is reported as passing ASTM E136, *Standard Test Method for Assessing Combustibility of Materials Using a Vertical Tube Furnace at 750°C*.
- (3) ~~A The~~ material ~~that~~ 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 shaped Airflow Stabilizer, at 750°C*.

[101:4.6.13.1]

4.3.1.2

Where the term *limited-combustible* is used in this standard, it shall also include the term *noncombustible*. [101:4.6.13.2]

4.3.2 Limited-Combustible Material.

A material shall be considered a limited-combustible material where one of the following is met:

- (1) The conditions of 4.3.2.1 and 4.3.2.2, and the conditions of either 4.3.2.3 or 4.3.2.4, shall be met.
- (2) The conditions of 4.3.2.5 shall be met.

[101:4.6.14]

4.3.2.1

The material shall not comply with the requirements for noncombustible material in accordance with 4.3.1. [101:4.6.14.1]

4.3.2.2

The material, in the form in which it is used, shall exhibit a potential heat value not exceeding 3500 Btu/lb (8141 kJ/kg (3500 Btu/lb) where tested in accordance with NFPA 259. [101:4.6.14.2]

4.3.2.3

The material shall have ~~the a~~ structural base of a noncombustible material with a surfacing not exceeding a thickness of ~~1/8 in. 3.2 mm (3.2 mm 1/8 in.)~~ where the surfacing exhibits a flame spread index not greater than 50 when tested in accordance with ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*, or UL 723, *Test for Surface Burning Characteristics of Building Materials*. [101:4.6.14.3]

4.3.2.4

The material shall be composed of materials that, in the form and thickness used, neither exhibit a flame spread index greater than 25 nor exhibit evidence of continued progressive combustion when tested in accordance with ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*, or UL 723, *Test for Surface Burning Characteristics of Building Materials*, and shall be are of such composition that all surfaces that would be exposed by cutting through the material on any plane would neither exhibit a flame spread index greater than 25 nor exhibit evidence of continued progressive combustion when tested in accordance with ASTM E84 or UL 723. [101:4.6.14.4]

4.3.2.5

Materials shall be considered limited-combustible materials where tested in accordance with ASTM E2965, *Standard Test Method for Determination of Low Levels of Heat Release Rate for Materials and Products Using an Oxygen Consumption Calorimeter*, at an incident heat flux of 75 kW/m² for a 20-minute exposure and both of the following conditions are met:

- (1) The peak heat release rate shall not exceed 150 kW/m² for longer than 10 seconds.
- (2) The total heat released shall not exceed 8 MJ/m².

[101:4.6.14.5]

4.3.2.6

Where the term *limited-combustible* is used in this standard, it shall also include the term *noncombustible*. [101:4.6.14.6]

Supplemental Information

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
NFPA_90A_Noncombustible_material_clean_text.docx		

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 11:34:23 EDT 2022

Committee Statement

Committee Statement: From CI-48. This SR provides that the extracted text from NFPA 101 regarding noncombustible material is aligned.

Response Message: SR-5-NFPA 90A-2022



Second Revision No. 12-NFPA 90A-2022 [Section No. 5.7]

5.7 Applicable Ultraviolet (UV-C) Germicidal Lamp Systems.

Ultraviolet (UV-C) Where applicable, ultraviolet (UV-C) germicidal lamp systems used within plenums shall be listed in accordance with UL 60335-2-40, *Household and Similar Electrical Appliances — Safety — Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers.*

5.7.1

UV-C germicidal lamp systems shall be installed in accordance with the manufacturer's listing.

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 13:00:18 EDT 2022

Committee Statement

Committee Statement: The committee revised this text to provide "where applicable" to provide flexibility for various arrangements. Further, a title has been added to 5.7 to comply with the NFPA MOS.

Response Message: SR-12-NFPA 90A-2022



Second Revision No. 2-NFPA 90A-2022 [Section No. 5.9.1]

5.9.1*

Wiring shall not be installed in air ducts, except as permitted in 5.9.2 and 5.9.3 or in Chapter 10.

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 11:06:00 EDT 2022

Committee Statement

Committee Statement: The committee agreed with the submitter. In view of the reorganization that placed all electrical issues in a new chapter 10, a reference to that chapter is appropriate in this section. Additionally, the reference to 5.9.3 has been removed as it relates to pneumatic tubing.

Response Message: SR-2-NFPA 90A-2022

[Public Comment No. 3-NFPA 90A-2022 \[Section No. 5.9.1\]](#)



Second Revision No. 3-NFPA 90A-2022 [Section No. 6.2.1]

6.2.1

Mechanical, electrical, and plumbing controls shall not be installed in air duct systems unless the controls are directly associated with the air distribution system and comply with [10.3.4.4](#), [3.4.2](#) and [4.3.4.4](#).

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 11:09:56 EDT 2022

Committee Statement

Committee Statement: The committee agreed with the submitter. The reference to sections 4.3.4.2 and 4.3.4.4 was based on the section numbers in the earlier edition and resulted from accepting the PI as is. After the reorganization, the correct section reference should be 10.3.4.

Response Message: SR-3-NFPA 90A-2022

[Public Comment No. 1-NFPA 90A-2022 \[Section No. 6.2.1\]](#)



Second Revision No. 4-NFPA 90A-2022 [Section No. 6.4.1]

6.4.1*

Pipe and duct insulation and coverings, duct linings, vapor retarder facings, adhesives, fasteners, tapes, and supplementary materials added to air ducts, plenums, panels, and duct silencers used in duct systems, unless otherwise provided for in 6.4.1.2 or 6.4.1.3, shall have, in the form in which they are used, a maximum flame spread index of 25 without evidence of continued progressive combustion and a maximum smoke developed index of 50 when tested in accordance with ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*, or with UL 723, *Test for Surface Burning Characteristics of Building Materials*. Pipe and duct insulation and coverings, duct linings and their adhesives, and tapes shall use the specimen preparation and mounting procedures of ASTM E2231, *Standard Practice for Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics*.

6.4.1.1

Pipe and duct insulation shall be listed and labeled.

6.4.1.2

The flame spread index and smoke developed index requirements of 6.4.1 shall not apply to air duct weatherproof coverings where they are located entirely outside a building, do not penetrate a wall or roof, and do not create an exposure hazard.

6.4.1.3

Smoke detectors required by 11.4.4 shall not be required to meet flame spread index or smoke developed index requirements.

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 11:13:44 EDT 2022

Committee Statement

Committee Statement: The committee agreed with the submitter to add the revised text to remain consistent with other items regarding plenums and other codes. It is essential that the pipe and duct insulation be listed and labeled.

Response Message: SR-4-NFPA 90A-2022

Public Comment No. 2-NFPA 90A-2022 [Section No. 6.4.1]



Second Revision No. 16-NFPA 90A-2022 [Section No. 10.4.6]

10.4.6 Electrical or Optical Fiber Wire and Cable Systems.

Electrical or optical fiber wire and cable systems approved for use in other spaces used for environmental air (i.e., plenums) shall be constructed of noncombustible material, constructed of limited-combustible material in accordance with 4.3.2, or listed in accordance with either of the following:

- (1) Having a maximum flame spread index of 25 and a maximum smoke developed index of 50 when tested in accordance with ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*, or UL 723, *Test for Surface Burning Characteristics of Building Material*
- (2)* Having a maximum peak optical density of 0.50 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.5 m (5 ft) when tested in accordance with NFPA 262

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 14:39:46 EDT 2022

Committee Statement

Committee Statement: Added a title to 10.4.6 to comply with the NFPA MOS.

Response Message: SR-16-NFPA 90A-2022



Second Revision No. 17-NFPA 90A-2022 [Sections 12.2.1, 12.2.2]

12.2.1 Access.

Dampers equipped with fusible links, internal operators, or both shall be provided with an access door that is not less than 305 mm (12 in.) square or that is provided with a removable duct section.

12.2.1.1

Dampers equipped with fusible links, internal operators, or both shall be provided with an access door that is not less than 305 mm (12 in.) square or that is provided with a removable duct section.

12.2.1.2

Access shall not be obstructed.

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 14:40:46 EDT 2022

Committee Statement

Committee Statement: Numbering updates to comply with the NFPA MOS.

Response Message: SR-17-NFPA 90A-2022



Second Revision No. 18-NFPA 90A-2022 [Section No. 12.2.3]

12.2.2 Testing.

[Global SR-1](#)

12.2.2.1

All fire dampers, smoke dampers, ~~combination fire-smoke dampers~~ combination fire-smoke dampers, corridor dampers, and ceiling radiation dampers shall be tested to determine their proper functioning in accordance with the requirements of this standard prior to the occupancy of the building.

12.2.2.2

The operational test shall verify that there is full and unobstructed access to the damper and all listed components. [~~80: 19.3.2.4~~] in accordance with NFPA 80.

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 14:41:45 EDT 2022

Committee Statement

Committee Statement: Numbering updates to comply with the NFPA MOS and change of extract for 12.2.2 to more accurately reflect the intent of the section to apply to all types of dampers.

Response Message: SR-18-NFPA 90A-2022



Second Revision No. 6-NFPA 90A-2022 [Section No. A.3.3.10]

A.3.3.10 Air Outlet.

For further discussion of various types of air outlet devices, see [Chapter 20, "Space Air Diffusion,"](#) of *ASHRAE Handbook — Fundamentals*, ~~,"Space Air Diffusion."~~

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 12:03:13 EDT 2022

Committee Statement

Committee Statement: The committee revised this annex note to match the note as found in A.3.3.9.

Response Message: SR-6-NFPA 90A-2022



Second Revision No. 7-NFPA 90A-2022 [Section No. A.4.3.1]

A.4.3.1

The provisions of 4.3.1 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials. [101 :A.4.6.13]

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 12:04:56 EDT 2022

Committee Statement

Committee Statement: Added extract tag to reference the correct section in NFPA 101.

Response Message: SR-7-NFPA 90A-2022



Second Revision No. 26-NFPA 90A-2022 [Section No. A.8.2.6.1]

A.8.2.6.1

~~Electrical wires and cables and optical fiber cables listed to UL 2424, *Outline of Investigation for Cable Marked 'Limited Combustible'*, are considered to be suitable for use wherever cables tested in accordance with NFPA 262 are required.~~

Submitter Information Verification

Committee: AIC-AAA

Submission Date: Fri Sep 09 09:03:49 EDT 2022

Committee Statement

Committee Statement: The committee agrees to remove references to UL Outline 2424, Outline of Investigation for Cable Marked 'Limited Combustible' since this Outline has been withdrawn and is no longer active.

Response Message: SR-26-NFPA 90A-2022



Second Revision No. 27-NFPA 90A-2022 [Section No. A.8.4.6]

A.8.4.6

Electrical wires and cables and optical fiber cables installed in metal raceways without an overall nonmetallic covering, metal sheathed cable without an overall nonmetallic covering, or totally enclosed nonventilated busway without an overall nonmetallic covering are not considered to be exposed to the airflow and need not meet the requirements of 8.4.6. ~~Electrical wires and cables and optical fiber cables listed to UL 2424, *Outline of Investigation for Cable Marked 'Limited Combustible,'* are considered to be suitable for use wherever cables tested in accordance with NFPA 262 are required.~~

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Fri Sep 09 09:04:22 EDT 2022

Committee Statement

Committee Statement: The committee agrees to remove references to UL Outline 2424, Outline of Investigation for Cable Marked 'Limited Combustible' since this Outline has been withdrawn and is no longer active.

Response Message: SR-27-NFPA 90A-2022



Second Revision No. 28-NFPA 90A-2022 [Section No. A.8.5.5.1]

A.8.5.5.1

~~Electrical wires and cables and optical fiber cables listed to UL 2424, *Outline of Investigation for Cable Marked 'Limited Combustible,'* are considered to be suitable for use wherever cables tested in accordance with NFPA 262 are required.~~

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Fri Sep 09 09:04:52 EDT 2022

Committee Statement

Committee Statement: The committee agrees to remove references to UL Outline 2424, Outline of Investigation for Cable Marked 'Limited Combustible' since this Outline has been withdrawn and is no longer active.

Response Message: SR-28-NFPA 90A-2022



Second Revision No. 29-NFPA 90A-2022 [Section No. A.10.4.6(2)]

A.10.4.6(2)

Electrical wires and cables and optical fiber cables installed in metal raceways or metal sheathed cable are not considered to be exposed to the airflow and need not meet the requirements of 10.4.6(2). ~~Electrical wires and cables and optical fiber cables listed to UL 2424, *Outline of Investigation for Cable Marked 'Limited Combustible'*, are suitable for use wherever cables tested in accordance with NFPA 262 are required.~~

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Fri Sep 09 09:05:20 EDT 2022

Committee Statement

Committee Statement: The committee agrees to remove references to UL Outline 2424, Outline of Investigation for Cable Marked 'Limited Combustible' since this Outline has been withdrawn and is no longer active.

Response Message: SR-29-NFPA 90A-2022



Second Revision No. 8-NFPA 90A-2022 [Section No. B.5.3]

B.5.3

Cleaning should be undertaken whenever an inspection indicates the need, especially in common plenums serving more than one fan or system. ~~Where plenum~~ Plenum chambers ~~could be~~ should be kept locked if there is a potential for them to be used for storage, ~~arrangements, such as keeping the doors locked, should be made to prevent such usage .~~
(See ~~Section 9.3~~ 8.1.1 .)

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 12:11:42 EDT 2022

Committee Statement

Committee Statement: The committee revised this section to clarify that plenums should not be used for storage, as well as provide the correct section reference to 8.1.1.

Response Message: SR-8-NFPA 90A-2022



Second Revision No. 9-NFPA 90A-2022 [Section No. B.7.2]

B.7.2

Where accumulations of combustible material are noted, they should be removed immediately and arrangements made to avoid such accumulations. Inspections thereafter should be made more frequently. If newly erected exposures are noticed, consideration should be given to the protection at the intake to ensure that it is adequate. (See *Section Chapter 7.2 7.*)

Submitter Information Verification

Committee: AIC-AAA

Submittal Date: Thu Sep 08 12:16:53 EDT 2022

Committee Statement

Committee Statement: The committee updated the section reference.

Response Message: SR-9-NFPA 90A-2022



Second Revision No. 23-NFPA 90A-2022 [Chapter C]

Annex C Informational References

C.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.

C.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*, 2020 edition.

NFPA 33, *Standard for Spray Application Using Flammable or Combustible Materials*, 2021 edition.

NFPA 34, *Standard for Dipping, Coating, and Printing Processes Using Flammable or Combustible Liquids*, 2021 edition.

NFPA 45, *Standard on Fire Protection for Laboratories Using Chemicals*, 2023 edition.

NFPA 70[®], *National Electrical Code*[®], 2023 edition.

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

NFPA 75, *Standard for the Fire Protection of Information Technology Equipment*, 2020 edition.

NFPA 80, *Standard for Fire Doors and Other Opening Protectives*, 2022 edition.

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

NFPA 91, *Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Particulate Solids*, 2020 edition.

NFPA 92, *Standard for Smoke Control Systems*, 2021 edition.

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

NFPA 101[®], *Life Safety Code*[®], 2024 edition.

NFPA 105, *Standard for Smoke Door Assemblies and Other Opening Protectives*, 2022 edition.

NFPA 220, *Standard on Types of Building Construction*, 2024 edition.

NFPA 259, *Standard Test Method for Potential Heat of Building Materials*, 2023 edition.

~~NFPA 262, *Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces*, 2023 edition.~~

C.1.2 Other Publications.

C.1.2.1 ASHRAE Publications.

ASHRAE, 180 Technology Parkway, Peachtree Corners, GA 30092.

ASHRAE 170, *Ventilation of Health Care Facilities* (ANSI/ASHRAE/ASHE Approved), 2021.

ASHRAE Handbook — Fundamentals (I-P), 2021.

C.1.2.2 AMCA Publications.

Air Movement and Control Association International, Inc., 30 West University Drive, Arlington Heights, IL 60004-1893.

Guide for Commissioning and Periodic Performance Testing of Fire, Smoke and Other Life Safety Related Dampers, 2011.

[Detail SR-25](#)

[Detail SR-24](#)

C.1.2.3 ASTM Publications.

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

ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*, ~~2021a~~ 2022.

ASTM E136, *Standard Test Method for Assessing Combustibility of Materials Using a Vertical Tube Furnace at 750°C*, ~~2019a~~ 2022.

ASTM E2231, *Standard Practice for Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics*, ~~2019~~ 2021.

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

C.1.2.4 NAIMA Publications.

North American Insulation Manufacturers Association, P.O. Box 1906, Alexandria, VA 22313.

Fibrous Glass Duct Construction Standards, 5th edition, ~~2003~~ 2002.

Fibrous Glass Duct Liner Standard, 3rd edition, ~~2002~~ 2021.

~~*Fibrous Glass Duct Construction Standards*, 5th edition, 2003.~~

C.1.2.5 SMACNA Publications.

Sheet Metal and Air Conditioning Contractors' National Association, 4201 Lafayette Center Drive, Chantilly, VA 20151-1219.

Fire, Smoke and Radiation Damper Installation Guide for HVAC Systems, 5th edition, 2002.

C.1.2.6 UL Publications.

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

UL 555, *Fire Dampers*, 2006, revised 2020.

UL 555S, *Smoke Dampers*, 2014, revised 2020.

UL 1565, *Positioning Devices*, 2013, ~~revised 2017~~ 2022.

UL 2043, *Fire Test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air-Handling Spaces*, 2013, ~~revised 2018~~.

~~UL 2424, *Outline of Investigation for Cable Marked 'Limited Combustible'*, 2006.~~

~~UL 62275, *Cable Management Systems — Cable Ties for Electrical Installations*, 2016, revised 2021.~~

UL Online Certifications Directory, Product iQ, www.UL.com/PiQ.

C.2 Informational References. (Reserved)**C.3** References for Extracts in Informational Sections.

NFPA 101[®], *Life Safety Code*[®], 2024 edition.

Supplemental Information

File Name

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Description**Approved****Submitter Information Verification****Committee:** AIC-AAA**Submittal Date:** Fri Sep 09 08:52:03 EDT 2022**Committee Statement****Committee Statement:** Informational reference updates. See separate SR's for ASTM updates.**Response Message:** SR-23-NFPA 90A-2022