**Chapter 10 Interior Finish, Contents, and Furnishings**

10.1 General

10.1.1 Application

The interior finish, contents, and furnishings provisions set forth in this chapter shall apply to new construction and existing buildings.

10.1.2 Automatic Sprinkler Systems

Where another provision of this chapter requires an automatic sprinkler system, the automatic sprinkler system shall be installed in accordance with the subparts of 9.7.1.1 as permitted by the applicable occupancy chapter.

10.1.3 Definitions

10.1.3.1 General

For definitions see Chapter 3 Definitions.

10.1.3.2 Special Definitions

A list of special terms used in this chapter follows:

Contents and Furnishings. See 3.3.50.

Flashover. See 3.3.118.

Interior Finish. See 3.3.95.2.

Interior Ceiling Finish. See 3.3.95.1.

Interior Floor Finish. See 3.3.95.3.

Interior Wall Finish. See 3.3.95.4.

10.2\* Interior Finish

10.2.1\* General

10.2.1.1

Classification of interior finish materials shall be in accordance with tests made under conditions simulating actual installations, provided that the authority having jurisdiction is permitted to establish the classification of any material for which classification by a standard test is not available.

10.2.1.2

Fixed or movable walls and partitions, paneling, wall pads, and crash pads applied structurally or for decoration, acoustical correction, surface insulation, or other purposes shall be considered interior finish and shall not be considered decorations or furnishings.

10.2.1.3

Lockers shall be considered interior finish.

10.2.1.4

Washroom water closet partitions shall be considered interior finish.

10.2.1.5

Fire-retardant coatings shall be in accordance with 10.2.6.

10.2.2\* Use of Interior Finishes

10.2.2.1

Requirements for interior wall and ceiling finish shall apply as follows:

Where specified elsewhere in this Code for specific occupancies (see Chapter 7 and Chapters 11 through 43)

As specified in 10.2.3 through 10.2.6.

10.2.2.2\*

Interior floor finish shall comply with 10.2.7 under any of the following conditions:

Where floor finish requirements are specified elsewhere in the Code

Where the fire performance of the floor finish cannot be demonstrated to be equivalent to floor finishes with a critical radiant flux of at least 0.1 W/cm2

10.2.3\* Interior Wall or Ceiling Finish Testing and Classification

Where interior wall or ceiling finish is required elsewhere in this Code to be classified for fire performance and smoke development, it shall be classified in accordance with 10.2.3.1 or 10.2.3.3, except as indicated in 10.2.4.

10.2.3.1 Interior Wall and Ceiling Finish Materials Tested in Accordance With NFPA 286

10.2.3.1.1

Interior wall and ceiling finish materials shall be classified in accordance with NFPA 286 and comply with 10.2.3.2.

10.2.3.1.2\*

Materials tested in accordance with 10.2.3.1.1 and complying with 10.2.3.2 shall also be considered to comply with the requirements of a Class A in accordance with 10.2.3.3.

10.2.3.2 Acceptance Criteria for NFPA 286

The interior finish shall comply with the following:

During the 40 kW exposure, flames shall not spread to the ceiling.

The flame shall not spread to the outer extremity of the sample on any wall or ceiling.

Flashover, as described in NFPA 286, shall not occur.

The peak heat release rate throughout the test shall not exceed 800 kW.

For new installations, the total smoke released throughout the test shall not exceed 1000 m2.

10.2.3.3\* Interior Wall and Ceiling Finish Materials Tested in Accordance With ASTM E84 or UL 723

Interior wall and ceiling finish materials shall be classified 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, except as indicated in 10.2.3.4 and 10.2.3.5, and shall be grouped in the following classes in accordance with their flame spread and smoke developed indexes.

Class A: Flame spread index 0—25; smoke developed index 0—450.

Class B: Flame spread index 26—75; smoke developed index 0—450.

Class C: Flame spread index 76—200; smoke developed index 0—450.

10.2.3.3.1

Existing interior finish shall be exempt from the smoke developed index criteria of 10.2.3.3.

10.2.3.3.2

The classification of interior finish specified in 10.2.3.3 shall be that of the basic material used by itself or in combination with other materials.

10.2.3.3.3

Wherever the use of Class C interior wall and ceiling finish is required, Class A or Class B shall be permitted, and where Class B interior wall and ceiling finish is required, Class A shall be permitted.

10.2.3.4

Materials complying with the requirements of 10.2.3.1 shall not be required to be tested in accordance with 10.2.3.3.

10.2.3.5

Materials described in 10.2.4 shall be tested as described in the corresponding sections.

10.2.4\* Interior Wall and Ceiling Finish Materials With Special Requirements

The materials indicated in 10.2.4.1 through 10.2.4.16 shall be tested as indicated in the corresponding sections.

10.2.4.1 Thickness Exemption

The provisions of 10.2.1.1 shall not apply to materials having a total thickness of less than 1/28 in. (0.9 mm) that are applied directly to the surface of walls and ceilings where all of the following conditions are met:

The wall or ceiling surface is a noncombustible or limited combustible material.

The material applied meets the requirements of Class A interior wall or ceiling finish when tested in accordance with 10.2.3.3, using fiber cement board as the substrate material.

The material applied is not one of the following:

A textile wall or ceiling covering

An expanded vinyl wall or ceiling covering

10.2.4.1.1

If a material having a total thickness of less than 1/28 in. (0.9 mm) is applied to a surface that is not noncombustible or not limited-combustible, the provisions of 10.2.3 shall apply.

10.2.4.1.2

Approved existing installations of materials applied directly to the surface of walls and ceilings in a total thickness of less than 1/28 in. (0.9 mm) shall be permitted to remain in use, and the provisions of 10.2.3 shall not apply.

10.2.4.2\* Exposed Portions of Structural Members

In other than new interior exit stairways, new interior exit ramps, and new exit passageways, exposed portions of structural members complying with the requirements for Type IV (2HH) construction in accordance with NFPA 220 or with the building code shall be exempt from testing and classification in accordance with 10.2.3.

10.2.4.3 Cellular or Foamed Plastic

10.2.4.3.1

Cellular or foamed plastic materials shall not be used as interior wall and ceiling finish unless specifically permitted by 10.2.4.3.2 through 10.2.4.3.4.

10.2.4.3.2

The requirements of 10.2.4.3 shall apply both to exposed foamed plastics and to foamed plastics used in conjunction with a textile or vinyl facing or cover.

10.2.4.3.3\*

Cellular or foamed plastic materials shall be permitted where subjected to large-scale fire tests that substantiate their combustibility and smoke release characteristics for the use intended under actual fire conditions.

10.2.4.3.3.1

One of the following fire tests shall be used for assessing the combustibility of cellular or foamed plastic materials as interior finish:

NFPA 286 with the acceptance criteria of 10.2.3.2

UL 1715, Fire Test of Interior Finish Material [including smoke measurements, with total smoke release not to exceed 10,764 ft2 (1000 m2)]

UL 1040, Fire Test of Insulated Wall Construction

ANSI/FM 4880, American National Standard for Evaluating the Fire Performance of Insulated Building Panel Assemblies and Interior Finish Materials

10.2.4.3.3.2\*

The tests shall be performed on a finished foamed plastic assembly related to the actual end-use configuration, including any cover or facing, and at the maximum thickness intended for use.

10.2.4.3.3.3

Cellular or foamed plastic materials tested in accordance with UL 1040, Fire Test of Insulated Wall Construction, or ANSI/FM 4880, American National Standard for Evaluating the Fire Performance of Insulated Building Panel Assemblies and Interior Finish Materials, shall also be tested for smoke release using NFPA 286 with the acceptance criteria of 10.2.3.2.

10.2.4.3.4

Cellular or foamed plastic shall be permitted for trim not in excess of 10 percent of the specific wall or ceiling area to which it is applied, provided that it is not less than 20 lb/ft3 (320 kg/m3) in density, is limited to 1/2 in. (13 mm) in thickness and 4 in. (100 mm) in width, and complies with the requirements for Class A or Class B interior wall and ceiling finish as described in 10.2.3.3; however, the smoke developed index shall not be limited.

10.2.4.4\* Textile Wall Coverings

Where used as interior wall finish materials, textile materials shall be tested in the manner intended for use, using the product mounting system, including adhesive, and shall comply with the requirements of 10.2.3.1, 10.2.4.4.1, or 10.2.4.4.3.

10.2.4.4.1\*

Products tested in accordance with NFPA 265 shall comply with the criteria of 10.2.4.4.2.

10.2.4.4.2\*

The interior finish shall comply with all of the following when tested using method B of the test protocol of NFPA 265:

During the 40 kW exposure, flames shall not spread to the ceiling.

The flame shall not spread to the outer extremities of the samples on the 8 ft × 12 ft (2440 mm × 3660 mm) walls.

Flashover, as described in NFPA 265, shall not occur.

For new installations, the total smoke released throughout the test shall not exceed 1000 m2.

10.2.4.4.3

Textile materials meeting the requirements of Class A 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, using the specimen preparation and mounting method of ASTM E2404, Standard Practice for Specimen Preparation and Mounting of Textile, Paper or Polymeric (Including Vinyl) and Wood Wall or Ceiling Coverings, Facings and Veneers, to Assess Surface Burning Characteristics, shall be permitted as follows:

On the walls of rooms or areas protected by an approved automatic sprinkler system.

On partitions that do not exceed three-quarters of the floor-to-ceiling height or do not exceed 8 ft (2440 mm) in height, whichever is less.

On the lower 48 in. (1220 mm) above the finished floor on ceiling-height walls and ceiling-height partitions.

Previously approved existing installations of textile material meeting the requirements of Class A when tested in accordance with ASTM E84, Standard Test Method for Surface Burning Characteristics of Building Materials or ANSI/UL 723, Test for Surface Burning Characteristics of Building Materials, shall be permitted to be continued to be used.

10.2.4.5\* Expanded Vinyl Wall Coverings

Where used as interior wall finish materials, expanded vinyl wall coverings shall be tested in the manner intended for use, using the product mounting system, including adhesive, and shall comply with the requirements of either 10.2.3.1, 10.2.4.4.1, or 10.2.4.4.3.

10.2.4.6 Textile Ceiling Coverings

Where used as interior ceiling finish materials, textile materials shall be tested in the manner intended for use, using the product mounting system, including adhesive, and shall meet one of the following:

Comply with the requirements of 10.2.3.1

Meet the requirements of Class A 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 using the specimen preparation and mounting method of ASTM E2404, Standard Practice for Specimen Preparation and Mounting of Textile, Paper or Polymeric (Including Vinyl) and Wood Wall or Ceiling Coverings, Facings and Veneers, to Assess Surface Burning Characteristics, and used on the ceilings of rooms or areas protected by an approved automatic sprinkler system

10.2.4.7 Expanded Vinyl Ceiling Coverings

Where used as interior ceiling finish materials, expanded vinyl materials shall be tested in the manner intended for use, using the product mounting system, including adhesive, and shall meet one of the following:

Comply with the requirements of 10.2.3.1

Meet the requirements of Class A 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, using the specimen preparation and mounting method of ASTM E2404, Standard Practice for Specimen Preparation and Mounting of Textile, Paper or Polymeric (Including Vinyl) and Wood Wall or Ceiling Coverings, Facings and Veneers, to Assess Surface Burning Characteristics, and used on the ceilings of rooms or areas protected by an approved automatic sprinkler system

10.2.4.8 Lockers

10.2.4.8.1 Combustible Lockers

Where lockers constructed of combustible materials other than wood are used, the lockers shall be considered interior finish and shall comply with 10.2.3, except as permitted by 10.2.4.8.2.

10.2.4.8.2 Wood Lockers

Lockers constructed entirely of wood and of noncombustible materials shall be permitted to be used in any location where interior finish materials are required to meet a Class C classification in accordance with 10.2.3.

10.2.4.9 Solid Thermoplastics

10.2.4.9.1

Solid thermoplastics including, but not limited to, polypropylene, high-density polyethylene (HDPE), solid polycarbonate, solid polystyrene, and solid acrylic materials that melt and drip when exposed to flame shall not be permitted as interior wall or ceiling finish unless the material complies with the requirements of 10.2.3.1.

10.2.4.9.2

The tests shall be performed on a finished assembly and on the maximum thickness intended for use.

10.2.4.10 Site-Fabricated Stretch Systems

10.2.4.10.1

For new installations, site-fabricated stretch systems containing all three components described in the definition in Chapter 3 shall be tested in the manner intended for use and shall comply with the requirements of 10.2.3.1 or with the requirements of Class A in accordance with 10.2.3.3.

10.2.4.10.2

If the materials are 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, specimen preparation and mounting shall be in accordance with ASTM E2573, Standard Practice for Specimen Preparation and Mounting of Site-Fabricated Stretch Systems to Assess Surface Burning Characteristics.

10.2.4.11 Reflective Insulation Materials

10.2.4.11.1

Reflective insulation materials shall be tested in the manner intended for use and shall comply with the requirements of 10.2.3 or 10.2.3.3.

10.2.4.11.2

If the materials are 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, specimen preparation and mounting shall be in accordance with ASTM E2599, Standard Practice for Specimen Preparation and Mounting of Reflective Insulation, Radiant Barrier and Vinyl Stretch Ceiling Materials for Building Applications to Assess Surface Burning Characteristics.

10.2.4.12 Metal Ceiling and Wall Panels

10.2.4.12.1

Listed factory finished metal ceiling and wall panels meeting the requirements of Class A in accordance with 10.2.3, shall be permitted to be finished with one additional application of paint.

10.2.4.12.2

Such painted panels shall be permitted for use in areas where Class A interior finishes are required. The total paint thickness shall not exceed 1/28 in. (0.9 mm).

10.2.4.13 Laminated Products Factory Produced With a Wood Substrate

10.2.4.13.1

Laminated products factory produced with a wood substrate shall be tested in the manner intended for use and shall comply with the requirements of 10.2.3.1 or 10.2.3.3.

10.2.4.13.2

If the materials are 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, specimen preparation and mounting shall be in accordance with ASTM E2579, Standard Practice for Specimen Preparation and Mounting of Wood Products to Assess Surface Burning Characteristics, using the product-mounting system, including adhesive, of actual use.

10.2.4.14 Facings or Wood Veneers Intended to Be Applied on Site Over a Wood Substrate

10.2.4.14.1

Facings or veneers intended to be applied on site over a wood substrate shall be tested in the manner intended for use and shall comply with the requirements of 10.2.3.1 or 10.2.3.3.

10.2.4.14.2

If the materials are tested in accordance with NFPA 286 they shall use the product-mounting system, including adhesive, described in Section 5.8.9 of NFPA 286.

10.2.4.14.3

If the materials are 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, specimen preparation and mounting shall be in accordance with ASTM E2404, Standard Practice for Specimen Preparation and Mounting of Textile, Paper or Polymeric (Including Vinyl) and Wood Wall or Ceiling Coverings, Facings and Veneers, to Assess Surface Burning Characteristics.

10.2.4.15\* Light-Transmitting Plastics

10.2.4.15.1

Light-transmitting plastics used as interior wall and ceiling finish shall be permitted based on large-scale fire tests per 10.2.4.3.3.1, which substantiate the combustibility characteristics of the plastics for the use intended under actual fire conditions.

10.2.4.15.2

The tests shall be performed on a light-transmitting plastic assembly related to the actual end-use configuration and on the maximum thickness intended for use.

10.2.4.16 Decorations and Furnishings

Decorations and furnishings that do not meet the definition of interior finish, as defined in 3.3.95.2, shall be regulated by the provisions of Section 10.3.

10.2.5 Trim and Incidental Finish

10.2.5.1 General

Interior wall and ceiling trim and incidental finish, other than wall base in accordance with 10.2.5.2 and bulletin boards, posters, and paper in accordance with 10.2.5.3, not in excess of 10 percent of the specific wall and ceiling areas of any room or space to which it is applied shall be permitted to be Class C materials in occupancies where interior wall and ceiling finish of Class A or Class B is required.

10.2.5.2 Wall Base

Interior floor trim material used at the junction of the wall and the floor to provide a functional or decorative border, and not exceeding 6 in. (150 mm) in height, shall meet the requirements for interior wall finish for its location or the requirements for Class II interior floor finish as described in 10.2.7.4 using the test described in 10.2.7.3.

10.2.5.2.1

If a Class I floor finish is required, the interior floor trim shall be Class I.

10.2.5.3 Bulletin Boards, Posters, and Paper

10.2.5.3.1

Bulletin boards, posters, and paper attached directly to the wall shall not exceed 20 percent of the aggregate wall area to which they are applied.

10.2.5.3.2

The provision of 10.2.5.3.1 shall not apply to artwork and teaching materials in sprinklered educational or day-care occupancies in accordance with 14.7.4.3(2), 15.7.4.3(2), 16.7.4.3(2), or 17.7.4.3(2).

10.2.6\* Fire-Retardant Coatings

10.2.6.1\*

The required flame spread index or smoke developed index of existing surfaces of walls, partitions, columns, and ceilings shall be permitted to be secured by applying approved fire-retardant coatings to surfaces having higher flame spread index values than permitted.

10.2.6.1.1

Such treatments shall be tested, or shall be listed and labeled for application to the material to which they are applied, and shall comply with the requirements of NFPA 703.

10.2.6.2\*

Surfaces of walls, partitions, columns, and ceilings shall be permitted to be finished with factory-applied fire-retardant-coated products that have been listed and labeled to demonstrate compliance with the requirements of ASTM E2768, Standard Test Method for Extended Duration Surface Burning Characteristics of Building Materials, on the coated surface.

10.2.6.3

Fire-retardant coatings or factory-applied fire-retardant-coated products shall possess the desired degree of permanency and shall be maintained so as to retain the effectiveness of the treatment under the service conditions encountered in actual use.

10.2.7\* Interior Floor Finish Testing and Classification

10.2.7.1\*

Carpet and carpet-like interior floor finishes shall comply with ASTM D2859, Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials.

10.2.7.2\*

Floor coverings, other than carpet for which 10.2.2.2 establishes requirements for fire performance, shall have a minimum critical radiant flux of 0.1 W/cm2.

10.2.7.3\*

Interior floor finishes shall be classified in accordance with 10.2.7.4, based on test results from NFPA 253 or ASTM E648, Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source.

10.2.7.4

Interior floor finishes shall be grouped in the classes specified in 10.2.7.4.1 and 10.2.7.4.2 in accordance with the critical radiant flux requirements.

10.2.7.4.1 Class I Interior Floor Finish

Class I interior floor finish shall have a critical radiant flux of not less than 0.45 W/cm2, as determined by the test described in 10.2.7.3.

10.2.7.4.2 Class II Interior Floor Finish

Class II interior floor finish shall have a critical radiant flux of not less than 0.22 W/cm2, but less than 0.45 W/cm2, as determined by the test described in 10.2.7.3.

10.2.7.5

Wherever the use of Class II interior floor finish is required, Class I interior floor finish shall be permitted.

10.2.8 Automatic Sprinklers

10.2.8.1

Other than as required in 10.2.4, where an approved automatic sprinkler system is installed in accordance with Section 9.7, Class C interior wall and ceiling finish materials shall be permitted in any location where Class B is required, and Class B interior wall and ceiling finish materials shall be permitted in any location where Class A is required.

10.2.8.2

Where an approved automatic sprinkler system is installed in accordance with Section 9.7, throughout the fire compartment or smoke compartment containing the interior floor finish, Class II interior floor finish shall be permitted in any location where Class I interior floor finish is required, and where Class II is required, the provisions of 10.2.7.2 shall apply.

10.3 Contents and Furnishings

10.3.1\* Draperies, Curtains, and Other Hanging or Suspended Furnishings and Decorations

Where required by the applicable provisions of this Code, draperies, curtains, and other hanging or suspended furnishings and decorations shall meet the flame propagation performance criteria contained in Test Method 1 or Test Method 2, as appropriate, of NFPA 701.

10.3.2 Upholstered Furniture

10.3.2.1\* Smoldering Ignition of Upholstered Furniture

Newly introduced upholstered furniture, except as otherwise permitted by Chapters 11 through 43, shall be resistant to a cigarette ignition (i.e., smoldering) in accordance with one of the following:

The components of the upholstered furniture shall meet the requirements for Class I when tested in accordance with NFPA 260.

Mocked-up composites of the upholstered furniture shall have a char length not exceeding 11/2 in. (38 mm) when tested in accordance with NFPA 261.

10.3.2.2\* Rate of Heat Release Testing of Upholstered Furniture

10.3.2.2.1

Where required by the applicable provisions of this Code, upholstered furniture and other seating furniture, unless the furniture is located in a building protected throughout by an approved automatic sprinkler system, shall have limited rates of heat release when tested in accordance with ASTM E1537, Standard Test Method for Fire Testing of Upholstered Furniture, as follows:

The peak rate of heat release for the single furniture item shall not exceed 80 kW.

The total heat released by the single furniture item during the first 10 minutes of the test shall not exceed 25 MJ.

10.3.2.2.2

When tests are conducted in accordance with 10.3.2.2, the formation of flaming droplets during the test shall be reported.

10.3.3 Mattresses

10.3.3.1\* Smoldering Ignition of Mattresses

Newly introduced mattresses, except as otherwise permitted by Chapters 11 through 43, shall have a char length not exceeding 2 in. (51 mm) when tested in accordance with 16 CFR 1632, "Standard for the Flammability of Mattresses and Mattress Pads" (FF 4—72).

10.3.3.2\* Rate of Heat Release and Mass Loss Testing of Mattresses

Where required by the applicable provisions of this Code, mattresses shall comply with 10.3.3.2.1 or 10.3.3.2.2, unless the mattress is located in a building protected throughout by an approved automatic sprinkler system.

10.3.3.2.1

The mattress shall have limited rates of heat release when tested in accordance with ASTM E1590, Standard Test Method for Fire Testing of Mattresses, as follows:

The peak rate of heat release for the single mattress shall not exceed 100 kW.

The total heat released by the mattress during the first 10 minutes of the test shall not exceed 25 MJ.

10.3.3.2.2

The mattress shall have a mass loss not exceeding 15 percent when tested in accordance with the fire test in Appendix A3 of ASTM F1085, Standard Specification for Mattress and Box Springs for Use in Berths in Marine Vessels.

10.3.3.2.3

When tests are conducted in accordance with 10.3.3.2, the formation of flaming droplets during the test shall be reported.

10.3.4\* Explosive or Highly Flammable Furnishings or Decorations

Furnishings or decorations of an explosive or highly flammable character shall not be used.

10.3.5 Fire-Retardant Coatings

Fire-retardant coatings shall be maintained to retain the effectiveness of the treatment under service conditions encountered in actual use.

10.3.6\* Foamed Plastics

Where required by the applicable provisions of this Code, furnishings and contents made with foamed plastic materials that are unprotected from ignition shall have a heat release rate not exceeding 100 kW when tested in accordance with UL 1975, Fire Tests for Foamed Plastics Used for Decorative Purposes, or when tested in accordance with NFPA 289 using the 20 kW ignition source.

10.3.7 Lockers

Lockers shall be considered interior finish and shall comply with the requirements of 10.2.4.8.

10.3.8 Containers for Waste or Linen

10.3.8.1

Where required by Chapters 11 through 43, newly introduced containers for waste or linen, with a capacity of 20 gal (75.7 L) or more, shall meet both of the following:

Such containers shall be provided with lids.

Such containers and their lids shall be constructed of noncombustible materials or of materials that meet a peak rate of heat release not exceeding 300 kW/m2 when tested at an incident heat flux of 50 kW/m2 in the horizontal orientation and at a thickness as used in the container but not less than 1/4 in. (6.3 mm), in accordance with ASTM E1354, Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter.

10.3.8.2

Where required by Chapters 11 through 43, newly introduced metal wastebaskets and other metal waste, or linen containers with a capacity of 20 gal (75.7 L) or more shall be listed in accordance with UL 1315, Metal Waste Paper Containers, and shall be provided with a noncombustible lid.

10.3.9 Combustible Decorative Vegetation

10.3.9.1 Flammability of Combustible Artificial Decorative Vegetation

Combustible artificial decorative vegetation shall meet one of the following:

The flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701

A maximum heat release rate of 100 kW when tested to NFPA 289, using the 20 kW ignition source

10.3.9.2 Fire-Retardant Treatments for Natural Cut Christmas Trees

Where fire-retardant treatments are applied to natural cut Christmas trees, the fire-retardant treatment shall comply with both Test Method 1 and Test Method 2 of ASTM E3082, Standard Test Methods for Determining the Effectiveness of Fire Retardant Treatments for Natural Christmas Trees.

10.3.9.3 Electrical Equipment

10.3.9.3.1

Electrical wiring and listed luminaires used on combustible artificial decorative vegetation shall be listed for that application.

10.3.9.3.2

The use of electrical wiring and of luminaires constructed entirely of metal shall not be permitted on combustible artificial decorative vegetation.

10.3.9.4 Open Flames

Candles and open flames shall not be used on or near combustible artificial decorative vegetation.

10.4 Outdoor Furniture

10.4.1\* General

Outdoor furniture placed under a combustible exterior projection shall comply with Section 10.4.

10.4.2 Distance From Buildings

Furniture placed outdoors within 2 ft (610 mm) of any building shall be located in an area protected by an approved automatic sprinkler system or shall comply with 10.4.3.

10.4.3 Materials

Furniture placed outdoors within 2 ft (610 mm) of any building shall comply with one of the following:

Traditional materials: The furniture shall be constructed entirely of wood, noncombustible materials complying with 4.6.13, or both.

Plastic composites: The furniture shall be constructed entirely of plastic composite materials that meet the requirements of a Class C material in accordance with Section 10.2, except that the smoke developed index shall not be limited.

Heat release: The furniture shall be constructed entirely of materials that exhibit a peak rate of heat release not exceeding 300 kW/m2 when tested in accordance with ASTM E1354, Standard Test Method for Heat and Visible Smoke Release Rate for Materials and Products Using an Oxygen Consumption Calorimeter, at an incident heat flux of 50 kW/m2 in the horizontal orientation.

Full-scale testing: The furniture shall be constructed entirely of materials such that the entire item of furniture shall exhibit a maximum rate of heat release not exceeding 100 kW when tested in accordance with NFPA 289 using the 20 kW ignition source.

10.5 Combustible Artificial Decorative Vegetation on Roofs and Near Buildings

10.5.1\* General

Combustible artificial decorative vegetation placed outdoors, within 5 ft (61 mm) of a building, on a roof of a building, or under an overhang shall comply with .

10.5.2 Flammability

Combustible artificial decorative vegetation shall be labeled as having complied with one of the following:

The vegetation item shall meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701.

The vegetation item shall be tested in accordance with NFPA 289, using the 20 kW ignition source, and shall have a maximum heat release rate of 100 kW.

10.5.3 Open Flames

Candles and open flames shall be prohibited on artificial vegetation.

10.5.4 Electrical

Electrical wiring and lighting used on artificial vegetation shall be listed for the application.

10.5.5 Metallic Vegetation

No electrical wiring or lighting shall be permitted on artificial decorative vegetation constructed entirely of metal.