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#### **CHAPTER 8**

### INTERIOR FINISH, DECORATIVE MATERIALS AND FURNISHINGS

#### SECTION 801 GENERAL

801.1 Scope. The provisions of this chapter shall govern interior finish, interior trim, furniture, furnishings, decorative materials and decorative vegetation in buildings. Existing buildings shall comply with Sections 803 through 808. New buildings shall comply with Sections 804 through 808, and Section 803 of the International Building Code.

#### SECTION 802 DEFINITIONS

802.1 Definitions. The following terms are defined in Chapter 2: FLAME SPREAD.

FLAME SPREAD INDEX.
INTERIOR FLOOR-WALL
BASE.
SITE-FABRICATED
STRETCH SYSTEM.
SMOKE-DEVELOPED
INDEX.

# SECTION 803 INTERIOR WALL AND CEILING FINISH AND TRIM IN EXISTING BUILDINGS

803.1 General. The provisions of this section shall limit the allowable fire performance and smoke development of interior wall and ceiling finishes and interior wall and ceiling trim in existing buildings based on location and occupancy classification. Interior wall and ceiling finishes shall be classified in accordance with Section 803 of the International Building Code. Such materials shall be grouped in accordance with ASTM E 84, as

indicated in Section 803.1.1, or in accordance with NFPA 286, as indicated in Section 803.1.2.

#### **Exceptions:**

1. Materials having a thickness less than 0.036 inch (0.9 mm) applied directly to the surface of walls and ceilings.

2. Exposed portions of structural members complying with the requirements of buildings of Type IV construction in accordance with the International Building Code shall not be subject to interior finish requirements. 803.1.1 Classification in accordance with ASTM E 84. Interior finish materials shall be grouped in the following classes in accordance with their flame spread and smoke

developed index where



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tested in accordance with ASTM E 84. Class A: flame spread index 0-25; smokedeveloped index 0-450. Class B: flame spread index 26-75; smokedeveloped index 0-450. Class C: flame spread index 76-200; smokedeveloped index 0-450.

803.1.2 Classification in accordance with NFPA 286.

Interior wall or ceiling finishes shall be allowed to be tested in accordance with NFPA 286. Finishes tested in accordance with NFPA 286 shall comply with Section 803.1.2.1. Interior wall and ceiling finish materials tested in accordance with NFPA 286 and meeting the acceptance criteria of Section 803.1.2.1 shall be allowed to be used where a Class A classification in accordance with ASTM E 84 is required.

803.1.2.1 Acceptance criteria for NFPA 286. The interior finish shall comply with the following:

- 1. During the 40 kW exposure, flames shall not spread to the ceiling.
- 2. The flame shall not spread to the outer extremity of the sample on any wall or ceiling.
- 3. Flashover, as defined in NFPA 286, shall not occur.
- 4. The peak heat release rate throughout the test shall not exceed 800 kW. 5. The total smoke released throughout the test shall not exceed 1,000 m2.

803.2 Stability. Interior finish materials regulated by this chapter shall be applied or otherwise fastened in such a manner that such materials will not readily

become detached where subjected to room temperatures of 200°F (93°C) for not less than 30 minutes.

803.3 Interior finish requirements based on occupancy. Interior wall and ceiling finish shall have a flame spread index not greater than that specified in Table 803.3 for the group and location designated.

803.4 Fire-retardant coatings. The required flame spread or smokedeveloped index of surfaces in existing buildings shall be allowed to be achieved by application of approved fire retardant coatings, paints or solutions to surfaces having a flame spread index exceeding that allowed. Such applications shall comply with NFPA 703 and the required fire-retardant



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#### TABLE 803.3 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY<sup>k</sup>

INTERIOR WALL AND CELEBRAT INISH REGOINEMENTS BY OCCUPANT						
GROUP	SPRINKLERED <sup>1</sup>			NONSPRINKLERED		
	Interior exit stairways and interior exit ramps and exit passageways <sup>a, b</sup>	Corridors and enclosure for exit access stairways and exit access ramps	Rooms and enclosed spaces <sup>e</sup>	Interior exit stairways and interior exit ramps and exit passageways <sup>a, b</sup>	Corridors and enclosure for exit access stairways and exit access ramps	Rooms and enclosed spaces <sup>e</sup>
A-1 & A-2	В	В	С	A	A <sup>d</sup>	Be
A-3 <sup>f</sup> , A-4, A-5	В	В	С	A	A <sup>d</sup>	С
B, E, M, R-1, R-4	В	С	C	A	В	С
F	С	С	С	В	С	С
Н	В	В	C <sub>8</sub>	A	A	В
I-1	В	С	С	A	В	В
I-2	В	В	B <sup>h, i</sup>	A	A	В
I-3	A	A <sup>j</sup>	С	A	A	В
I-4	В	В	Bh, i	A	A	В
R-2	С	С	С	В	В	С
R-3	С	С	С	С	C	С
S	С	С	C	В	В	С
U	No Restrictions			No Restrictions		

For SI: 1 inch = 25.4 mm, 1 square foot =  $0.0929 \text{ m}^2$ .

- a. Class C interior finish materials shall be allowed for wainscoting or paneling of not more than 1,000 square feet of applied surface area in the grade lobby where applied directly to a noncombustible base or over furring strips applied to a noncombustible base and fireblocked as required by Section 803.11 of the International Building Code.
- b. In exit enclosures of buildings less than three stories in height of other than Group I-3, Class B interior finish for nonsprinklered buildings and Class C for sprinklered buildings shall be permitted.
- c. Requirements for rooms and enclosed spaces shall be based upon spaces enclosed by partitions. Where a fire-resistance rating is required for structural elements, the enclosing partitions shall extend from the floor to the ceiling. Partitions that do not comply with this shall be considered as enclosing spaces and the rooms or spaces on both sides shall be considered as one. In determining the applicable requirements for rooms and enclosed spaces, the specific occupancy thereof shall be the governing factor regardless of the group classification of the building or structure.
- d. Lobby areas in Group A-1, A-2 and A-3 occupancies shall not be less than Class B materials.
- e. Class C interior finish materials shall be allowed in Group A occupancies with an occupant load of 300 persons or less.
- f. In places of religious worship, wood used for ornamental purposes, trusses, paneling or chancel furnishing shall be allowed
- g. Class B material is required where the building exceeds two stories.
- $\label{eq:h.class} \textbf{C} \ \text{interior finish materials shall be allowed in administrative spaces}.$
- i. Class C interior finish materials shall be allowed in rooms with a capacity of four persons or less.
- j. Class B materials shall be allowed as wainscoting extending not more than 48 inches above the finished floor in corridors.
- k. Finish materials as provided for in other sections of this code.
- Applies when the vertical exits, exit passageways, corridors or rooms and spaces are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

properties shall be maintained or renewed in accordance with the manufacturer's instructions.

803.5 Textiles. Where used as interior wall or ceiling finish materials, textiles, including materials having woven or nonwoven, napped,

tufted, looped or similar surface, shall comply with the requirements of this section.



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803.5.1 Textile wall or ceiling coverings. Textile wall or ceiling coverings shall comply with one of the following:

- 1. The wall or ceiling covering shall have a Class A flame spread index in accordance with ASTM E 84 or UL 723, and be protected by automatic sprinklers installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- 2. The wall covering shall meet the criteria of Section 803.5.1.1 when tested in the manner intended for use in accordance with NFPA 265 using the product mounting system, including adhesive, of actual use.
- 3. The wall or ceiling covering shall meet the criteria of Section 803.1.2.1 when tested in

accordance with NFPA 286 using the product-mounting system, including adhesive, of actual use.

- 803.5.1.1 Method B test protocol. During the Method B protocol, the textile wall covering or expanded vinyl wall covering shall comply with the following:
- 1. During the 40-kW exposure, flames shall not spread to the ceiling.
- 2. The flame shall not spread to the outer extremities of the samples on the 8-foot by 12-foot (203 by 305 mm) walls.
- 3. Flashover, as defined in NFPA 265, shall not occur.
- 4. For newly introduced wall and ceiling coverings, the total smoke released

throughout the test shall not exceed 1,000 m2.

803.5.2 Newly introduced textile wall and ceiling coverings.

Newly introduced textile wall and ceiling coverings shall comply with one of the following:

- 1. The wall or ceiling covering shall have a Class A flame spread index in accordance with ASTM E 84 or UL 723, and be protected by automatic sprinklers installed in accordance with Section 903.3.1.1 or 903.3.1.2. Test specimen preparation and mounting shall be in accordance with ASTM E 2404.
- 2. The wall covering shall meet the criteria of Section 803.5.1.1 when tested in the manner intended for use in



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accordance with NFPA 265 using the product mounting system (including adhesive) of actual use.

- 3. The wall or ceiling covering shall meet the criteria of Section 803.1.2.1 when tested in accordance with NFPA 286 using the productmounting system (including adhesive) of actual use.
- 803.6 Expanded vinyl wall or ceiling coverings. Expanded vinyl wall or ceiling coverings shall comply with one of the following:
- 1. The wall or ceiling covering shall have a Class A flame spread index in accordance with ASTM E 84 or UL 723, and be protected by automatic sprinklers installed in accordance

- with Section 903.3.1.1 or 903.3.1.2. Test specimen preparation and mounting shall be in accordance with ASTM E 2404.
- 2. The wall covering shall meet the criteria of Section 803.5.1.1 when tested in the manner intended for use in accordance with NFPA 265 using the product-mounting system (including adhesive) of actual use.
- 3. The wall or ceiling covering shall meet the criteria of Section 803.1.2.1 when tested in accordance with NFPA 286 using the product-mounting system (including adhesive) of actual use.
- 803.7 Facings or wood veneers intended to be applied on site over a wood substrate. Facings

- or veneers intended to be applied on site over a wood substrate shall comply with one of the following:
- 1. The facing or veneer shall have a Class A, B or C flame spread index and smoke-developed index, based on the requirements of Table 803.3, in accordance with ASTM E 84 or UL 723. Test specimen preparation and mounting shall be in accordance with ASTM E 2404.
- 2. The facing or veneer shall meet the criteria of Section 803.1.2.1 when tested in accordance with NFPA 286 using the product-mounting system, including adhesive, described in Section 5.8.9 of NFPA 286.



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803.8 Foam plastic materials. Foam plastic materials shall not be used as interior wall and ceiling finish unless specifically allowed by Section 803.8.1 or 803.8.2. Foam plastic materials shall not be used as interior trim unless specifically allowed by Section 803.8.3.

803.8.1 Combustibility characteristics. Foam plastic materials shall be allowed on the basis of fire tests that substantiate their combustibility characteristics for the use intended under actual fire conditions, as indicated in Section 2603.9 of the International Building Code. This section shall apply both to exposed foam plastics and to foam plastics used in conjunction with a

textile or vinyl facing or cover.

803.8.2 Thermal barrier. Foam plastic material shall be allowed if it is separated from the interior of the building by a thermal barrier in accordance with Section 2603.4 of the International Building Code.

803.8.3 Trim. Foam plastic shall be allowed for trim in accordance with Section 804.2.

[BF] 803.9 High-density polyethylene (HDPE) and polypropylene (PP). Where high-density polyethylene or polypropylene is used as an interior finish it shall comply with Section 803.1.2.

[BF] 803.10 Sitefabricated stretch systems. Where used as newly installed interior wall or interior ceiling finish materials, sitefabricated stretch systems containing all three components described in the definition in Chapter 2 shall be tested in the manner intended for use. and shall comply with the requirements of Section 803.1.1 or 803.1.2. If the materials are tested in accordance with ASTM E 84 or UL 723, specimen preparation and mounting shall be in accordance with ASTM E 2573.

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#### SECTION 804

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