

CHAPTER 8

INTERIOR FINISH, DECORATIVE MATERIALS AND FURNISHINGS

User note:

About this chapter: Chapter 8 provides requirements for interior finishes, decorative materials and furnishings in new and existing buildings so that they do not significantly add to or create fire hazards in buildings. The provisions tend to focus on occupancies with specific risk characteristics, such as vulnerability of occupants, density of occupants, lack of familiarity with the building and societal expectations of importance. This chapter is consistent with Chapter 8 of the International Building Code®, which regulates the interior finishes and decorative materials of new buildings.

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 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 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 classified in accordance with NFPA 286, as indicated in Section 803.1.1, or in accordance with ASTM E84 or UL 723, as indicated in Section 803.1.2.

Materials tested in accordance with Section 803.1.1 shall not be required to be tested in accordance with Section 803.1.2.

803.1.1 Interior wall and ceiling finish materials tested in accordance with NFPA 286. Interior wall and ceiling finish materials shall be classified in accordance with NFPA 286 and tested in accordance with Section 803.1.1.1. Materials complying with Section 803.1.1.1 shall be considered to comply with the requirements of Class A specified in Section 803.1.2.

803.1.1.1 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.

803.1.2 Interior wall and ceiling finish materials tested in accordance with ASTM E84 or UL 723. Interior wall and ceiling finishes shall be classified in accordance with ASTM E84 or UL 723. Such interior finish materials shall be grouped in the following classes in accordance with their flame spread and smoke-developed indices.

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.

Exception: Materials tested in accordance with Section 803.1.1 and as indicated in Sections 803.1.3 through 803.15.

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803.1.3 Interior wall and ceiling finish materials with specific requirements. The materials indicated in Sections 803.4 through 803.15 shall be tested as indicated in the corresponding sections.

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. Interior wall and ceiling finish materials tested in accordance with NFPA 286, and meeting the acceptance criteria of Section 803.1.1.1, shall be used where a Class A classification in accordance with ASTM E84 or UL 723 is required.

**TABLE 803.3
INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY^k**

GROUP	SPRINKLERED ^l			NONSPRINKLERED		
	Interior exit stairways and ramps and exit passageways ^{a, b}	Corridors and enclosure for exit access stairways and ramps	Rooms and enclosed spaces ^c	Interior exit stairways and ramps and exit passageways ^{a, b}	Corridors and enclosure for exit access stairways and ramps	Rooms and enclosed spaces ^c
A-1 and A-2	B	B	C	A	A ^d	B ^e
A-3 ^f , A-4, A-5	B	B	C	A	A ^d	C
B, E, M, R-1, R-4	B	C ^m	C	A	B ^m	C
F	C	C	C	B	C	C
H	B	B	C ^g	A	A	B
I-1	B	C	C	A	B	B
I-2	B	B	B ^{h, i}	A	A	B
I-3	A	A ^l	C	A	A	B
I-4	B	B	B ^{h, i}	A	A	B
R-2	C	C	C	B	B	C
R-3	C	C	C	C	C	C
S	C	C	C	B	B	C
U	No Restrictions			No Restrictions		

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m².

- 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*.
- 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.
- Requirements for rooms and enclosed spaces shall be based on 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.
- Lobby areas in Group A-1, A-2 and A-3 occupancies shall be not less than Class B materials.
- Class C interior finish materials shall be allowed in Group A occupancies with an occupant load of 300 persons or less.
- In places of religious worship, wood used for ornamental purposes, trusses, paneling or chancel furnishing shall be allowed.
- Class B material is required where the building exceeds two stories.
- Class C interior finish materials shall be allowed in administrative spaces.
- Class C interior finish materials shall be allowed in rooms with a capacity of four persons or less.
- Class B materials shall be allowed as wainscoting extending not more than 48 inches above the finished floor in corridors.
- Finish materials as provided for in other sections of this code.
- Applies where 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.
- Corridors in ambulatory care facilities shall have a Class B or better interior finish material.

803.4 Fire-retardant coatings. The required flame spread or smoke-developed 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 properties shall be maintained or renewed in accordance with the manufacturer's instructions. The fire-retardant paint, coating or solution shall have been assessed by testing over the same substrate to be used in the application.

803.5 Textile wall coverings. Where used as interior wall finish materials, textile wall coverings, including materials having a woven, nonwoven, napped, tufted, looped or similar surface, shall be tested in the manner intended for use, using the product mounting system, including adhesive, and shall comply with the requirements of Section 803.1.1, 803.5.1 or 803.5.2.

803.5.1 Room corner test for textile wall coverings and expanded vinyl wall coverings. Textile wall coverings and expanded vinyl wall coverings shall meet the criteria of Section 803.5.1.1 when tested in the manner intended for use in accordance with the Method B protocol of NFPA 265 using the product mounting system, including adhesive. Test specimen preparation and mounting shall be in accordance with ASTM E2404.

803.5.1.1 Acceptance criteria for NFPA 265 Method B test protocol. Where testing to NFPA 265, 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 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 coverings, the total smoke released throughout the test shall not exceed 1,000 m².

803.5.2 Acceptance criteria for wall and ceiling coverings. Textile wall and ceiling coverings shall have a Class A flame spread index in accordance with ASTM E84 or UL 723, and be protected by an automatic sprinkler system 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 E2404.

803.6 Textile ceiling coverings. Where used as interior ceiling finish materials, textile ceiling coverings, including materials having a woven, nonwoven, napped, tufted, looped or similar surface and carpet or similar 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 Section 803.1.1 or 803.5.2.

803.7 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 Section 803.1.1, 803.5.1 or 803.5.2.

803.8 Expanded vinyl ceiling coverings. Where used as interior ceiling finish materials, expanded vinyl ceiling coverings shall be tested in the manner intended for use, using the product mounting system, including adhesive, and shall comply with the requirements of Section 803.1.1 or 803.5.2.

[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 803.1.1.

[BF] 803.10 Site-fabricated stretch systems. Where used as newly installed interior wall or interior ceiling finish materials, site-fabricated 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 E84 or UL 723, specimen preparation and mounting shall be in accordance with ASTM E2573.

803.11 Foam plastic materials. Foam plastic materials shall not be used as interior wall and ceiling finish unless specifically allowed by Section 803.11.1 or 803.11.2. Foam plastic materials shall not be used as interior trim unless specifically allowed by Section 804.2.

803.11.1 Foam plastic 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.

803.11.2 Thermal barrier for foam plastics. 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*.

803.12 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 meet the criteria of Section 803.1.1 when tested in accordance with NFPA 286 using the product mounting system, including adhesive, described in Section 5.8.9 of NFPA 286.
2. 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 E84 or UL 723. Test specimen preparation and mounting shall be in accordance with ASTM E2404.

803.13 Laminated products factory produced with an attached wood substrate. Laminated products factory produced with an attached wood substrate shall comply with one of the following:

1. The laminated product shall meet the criteria of Section 803.1.1 when tested in accordance with NFPA 286 using the product mounting system, including adhesive, of actual use.
2. The laminated product 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 E84 or UL 723. Test specimen preparation and mounting shall be in accordance with ASTM E2579.

803.14 Thickness exemption. Materials having a thickness less than 0.036 inch (0.9 mm) applied directly to the surface of walls or ceilings shall not be required to be tested.

803.15 Heavy timber exemption. Exposed portions of building elements complying with the requirements of Type IV construction in accordance with the *International Building Code* shall not be subject to interior finish requirements.

SECTION 804

INTERIOR WALL AND CEILING TRIM AND INTERIOR FLOOR FINISH IN NEW AND EXISTING BUILDINGS

804.1 Interior trim. Combustible trim in new and existing buildings, excluding handrails and guards, shall not exceed 10 percent of the specific wall or ceiling areas to which it is attached. Other than foam plastic, material used as interior trim shall comply with Section 804.1.1 or 804.1.2. Foam plastic used as interior trim shall comply with Section 804.2.

804.1.1 Testing in accordance with NFPA 286. Interior trim material shall be tested in accordance with NFPA 286 and comply with the acceptance criteria in Section 803.1.1.1. Where the interior trim material has been tested as an interior finish in accordance with NFPA 286 and complies with the acceptance criteria in Section 803.1.1.1, it shall not be required to be tested for flame spread index and smoke-developed index in accordance with ASTM E84 or UL 723.

804.1.2 Testing in accordance with ASTM E84 or UL 723. Material, other than foam plastic, used as interior trim shall have minimum Class C flame spread and smoke-developed indices, when tested in accordance with ASTM E84 or UL 723, as described in Section 803.1.2.

804.2 Foam plastic interior trim. Foam plastic used as interior trim shall comply with Sections 804.2.1 through 804.2.4.

804.2.1 Density. The minimum density of the interior trim shall be 20 pounds per cubic foot (320 kg/m³).

804.2.2 Thickness. The maximum thickness of the interior trim shall be 1/2 inch (12.7 mm) and the maximum width shall be 8 inches (203 mm).

804.2.3 Area limitation. The interior trim shall not constitute more than 10 percent of the specific wall or ceiling area to which it is attached.

804.2.4 Flame spread. The flame spread index shall not exceed 75 where tested in accordance with ASTM E84 or UL 723. The smoke-developed index shall not be limited.

Exception: Where the interior trim material has been tested as an interior finish in accordance with NFPA 286 and complies with the acceptance criteria in Section 803.1.1.1, it is not required to be tested for flame spread index in accordance with ASTM E84 or UL 723.

804.3 New interior floor finish. New interior floor finish and floor covering materials in new and existing buildings shall comply with Sections 804.3.1 through 804.3.3.2.

Exception: Floor finishes and coverings of a traditional type, such as wood, vinyl, linoleum or terrazzo, and resilient floor covering materials that are not composed of fibers.

804.3.1 Classification. Interior floor finish and floor covering materials required by Section 804.3.3.2 to be of Class I or II materials shall be classified in accordance with ASTM E648 or NFPA 253. The classification referred to herein corresponds to the classifications determined by ASTM E648 or NFPA 253 as follows: Class I, 0.45 watts/cm² or greater; Class II, 0.22 watts/cm² or greater.

804.3.2 Testing and identification. Interior floor finish and floor covering materials shall be tested by an *approved* agency in accordance with ASTM E648 or NFPA 253 and identified by a hang tag or other suitable method so as to identify the manufacturer or supplier and style, and shall indicate the interior floor finish or floor covering classification in accordance with Section 804.3.1. Carpet-type floor coverings shall be tested as proposed for use, including underlayment. Test reports confirming the information provided in the manufacturer's product identification shall be furnished to the *fire code official* upon request.

804.3.3 Interior floor finish requirements. New interior floor coverings materials shall comply with Sections 804.3.3.1 and 804.3.3.2, and interior floor finish materials shall comply with Section 804.3.1.

804.3.3.1 Pill test. In all occupancies, new floor covering materials shall comply with the requirements of the DOC FF-1 "pill test" (CPSC 16 CFR Part 1630) or of ASTM D2859.

804.3.3.2 Minimum critical radiant flux. In all occupancies, new interior floor finish and floor covering materials in enclosures for *stairways* and *ramps*, *exit passageways*, *corridors* and rooms or spaces not separated from *corridors* by full-height partitions extending from the floor to the underside of the ceiling shall withstand a minimum critical radiant flux. The minimum critical radiant flux shall be not less than Class I in Groups I-1, I-2 and I-3 and not less than Class II in Groups A, B, E, H, I-4, M, R-1, R-2 and S.

Exception: Where a building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2, Class II materials shall be permitted in any area where Class I materials are required and materials complying with DOC FF-1 "pill test" (CPSC 16 CFR Part 1630) or with ASTM D2859 shall be permitted in any area where Class II materials are required.

804.4 Interior floor-wall base. Interior floor-wall base that is 6 inches (152 mm) or less in height shall be tested in accordance with ASTM E648 or NFPA 253 and shall be not less than Class II. Where a Class I floor finish is required, the floor-wall base shall be Class I. The classification referred to herein corresponds to the classifications determined by ASTM E648 or NFPA 253 as follows: Class I, 0.45 watt/cm² or greater; Class II, 0.22 watts/cm² or greater.

Exception: Interior trim materials that comply with Section 804.1.

SECTION 805 UPHOLSTERED FURNITURE AND MATTRESSES IN NEW AND EXISTING BUILDINGS

805.1 Group I-1, Condition 2. The requirements in Sections 805.1.1 through 805.1.2 shall apply to facilities in Group I-1, Condition 2.

805.1.1 Upholstered furniture. Newly introduced upholstered furniture shall meet the requirements of Sections 805.1.1.1 through 805.1.1.3.

805.1.1.1 Ignition by cigarettes. Newly introduced upholstered furniture shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with one of the following:

1. Mocked-up composites of the upholstered furniture shall have a char length not exceeding 1.5 inches (38 mm) when tested in accordance with NFPA 261.
2. The components of the upholstered furniture shall meet the requirements for Class I when tested in accordance with NFPA 260.

805.1.1.2 Heat release rate. Newly introduced upholstered furniture shall have limited rates of heat release when tested in accordance with ASTM E1537 or California Technical Bulletin 133, as follows:

1. The peak rate of heat release for the single upholstered furniture item shall not exceed 80 kW.
Exception: Upholstered furniture in rooms or spaces protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.
2. The total heat released by the single upholstered furniture item during the first 10 minutes of the test shall not exceed 25 megajoules (MJ).

Exception: Upholstered furniture in rooms or spaces protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.

805.1.1.3 Identification. Upholstered furniture shall bear the label of an *approved* agency, confirming compliance with the requirements of Sections 805.1.1.1 and 805.1.1.2.

805.1.2 Mattresses. Newly introduced mattresses shall meet the requirements of Sections 805.1.2.1 through 805.1.2.3.

805.1.2.1 Ignition by cigarettes. Newly introduced mattresses shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with DOC 16 CFR Part 1632 and shall have a char length not exceeding 2 inches (51 mm).

805.1.2.2 Heat release rate. Newly introduced mattresses shall have limited rates of heat release when tested in accordance with ASTM E1590 or California Technical Bulletin 129, as follows:

1. The peak rate of heat release for the single mattress shall not exceed 100 kW.
Exception: Mattresses in rooms or spaces protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.
2. The total heat released by the single mattress during the first 10 minutes of the test shall not exceed 25 MJ.

Exception: Mattresses in rooms or spaces protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.

805.1.2.3 Identification. Mattresses shall bear the label of an *approved* agency, confirming compliance with the requirements of Sections 805.2.2.1 and 805.2.2.2.

805.2 Group I-2 and Group B ambulatory care facilities. The requirements in Sections 805.2.1 through 805.2.2 shall apply to Group I-2 occupancies and Group B ambulatory care facilities.

805.2.1 Upholstered furniture. Newly introduced upholstered furniture shall meet the requirements of Sections 805.2.1.1 through 805.2.1.3.

805.2.1.1 Ignition by cigarettes. Newly introduced upholstered furniture shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with one of the following: (a) mocked-up composites of the upholstered furniture shall have a char length not exceeding 1.5 inches (38 mm) when tested in accordance with NFPA 261 or (b) the components of the upholstered furniture shall meet the requirements for Class I when tested in accordance with NFPA 260.

Exception: Upholstered furniture belonging to the patients in sleeping rooms of Group I-2, Condition 1 occupancies provided that a smoke detector is installed in such rooms. Battery-powered, single-station smoke alarms shall be allowed.

805.2.1.2 Heat release rate. Newly introduced upholstered furniture shall have limited rates of heat release when tested in accordance with ASTM E1537 or California Technical Bulletin 133, as follows:

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

Exception: Upholstered furniture in rooms or spaces protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.

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

Exception: Upholstered furniture in rooms or spaces protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.

805.2.1.3 Identification. Upholstered furniture shall bear the label of an *approved* agency, confirming compliance with the requirements of Sections 805.2.1.1 and 805.2.1.2.

805.2.2 Mattresses. Newly introduced mattresses shall meet the requirements of Sections 805.2.2.1 through 805.2.2.3.

805.2.2.1 Ignition by cigarettes. Newly introduced mattresses shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with DOC 16 CFR Part 1632 and shall have a char length not exceeding 2 inches (51 mm).

805.2.2.2 Heat release rate. Newly introduced mattresses shall have limited rates of heat release when tested in accordance with ASTM E1590 or California Technical Bulletin 129, as follows:

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

Exception: Mattresses in rooms or spaces protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.

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

Exception: Mattresses in rooms or spaces protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.

805.2.2.3 Identification. Mattresses shall bear the label of an *approved* agency, confirming compliance with the requirements of Sections 805.2.2.1 and 805.2.2.2.

805.3 Group I-3, detention and correction facilities. The requirements in Sections 805.3.1 through 805.3.2 shall apply to detention and correction facilities classified in Group I-3.

805.3.1 Upholstered furniture. Newly introduced upholstered furniture shall meet the requirements of Sections 805.3.1.1 through 805.3.1.3

805.3.1.1 Ignition by cigarettes. Newly introduced upholstered furniture shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with one of the following:

1. Mocked-up composites of the upholstered furniture shall have a char length not exceeding 1.5 inches (38 mm) when tested in accordance with NFPA 261.
2. The components of the upholstered furniture shall meet the requirements for Class I when tested in accordance with NFPA 260.

805.3.1.2 Heat release rate. Newly introduced upholstered furniture shall have limited rates of heat release when tested in accordance with ASTM E1537, as follows:

1. The peak rate of heat release for the single upholstered furniture item shall not exceed 80 kW.
2. The total heat released by the single upholstered furniture item during the first 10 minutes of the test shall not exceed 25 MJ.

805.3.1.3 Identification. Upholstered furniture shall bear the label of an *approved* agency, confirming compliance with the requirements of Sections 805.3.1.1 and 805.3.1.2.

805.3.2 Mattresses. Newly introduced mattresses shall meet the requirements of Sections 805.3.2.1 through 805.3.2.3.

805.3.2.1 Ignition by cigarettes. Newly introduced mattresses shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with DOC 16 CFR Part 1632 and shall have a char length not exceeding 2 inches (51 mm).

805.3.2.2 Fire performance tests. Newly introduced mattresses shall be tested in accordance with Section 805.3.2.2.1 or 805.3.2.2.2.

805.3.2.2.1 Heat release rate. Newly introduced mattresses shall have limited rates of heat release when tested in accordance with ASTM E1590 or California Technical Bulletin 129, as follows:

1. The peak rate of heat release for the single mattress shall not exceed 100 kW.
2. The total heat released by the single mattress during the first 10 minutes of the test shall not exceed 25 MJ.

805.3.2.2.2 Mass loss test. Newly introduced mattresses shall have a mass loss not exceeding 15 percent of the initial mass of the mattress where tested in accordance with the test in Annex A3 of ASTM F1085.

805.3.2.3 Identification. Mattresses shall bear the label of an *approved* agency, confirming compliance with the requirements of Sections 805.3.2.1 and 805.3.2.2.

805.4 Group R-2 college and university dormitories. The requirements of Sections 805.4.1 through 805.4.2.3 shall apply to college and university dormitories classified in Group R-2, including decks, porches and balconies.

805.4.1 Upholstered furniture. Newly introduced upholstered furniture shall meet the requirements of Sections 805.4.1.1 through 805.4.1.3

805.4.1.1 Ignition by cigarettes. Newly introduced upholstered furniture shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with one of the following:

1. Mocked-up composites of the upholstered furniture shall have a char length not exceeding 1-1/2 inches (38 mm) when tested in accordance with NFPA 261.
2. The components of the upholstered furniture shall meet the requirements for Class I when tested in accordance with NFPA 260.

805.4.1.2 Heat release rate. Newly introduced upholstered furniture shall have limited rates of heat release when tested in accordance with ASTM E1537 or California Technical Bulletin 133, as follows:

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

Exception: Upholstered furniture in rooms or spaces protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.

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

Exception: Upholstered furniture in rooms or spaces protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.

805.4.1.3 Identification. Upholstered furniture shall bear the label of an *approved* agency, confirming compliance with the requirements of Sections 805.4.1.1 and 805.4.1.2.

805.4.2 Mattresses. Newly introduced mattresses shall meet the requirements of Sections 805.4.2.1 through 805.4.2.3.

805.4.2.1 Ignition by cigarettes. Newly introduced mattresses shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with DOC 16 CFR Part 1632 and shall have a char length not exceeding 2 inches (51 mm).

805.4.2.2 Heat release rate. Newly introduced mattresses shall have limited rates of heat release when tested in accordance with ASTM E1590 or California Technical Bulletin 129, as follows:

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

Exception: Mattresses in rooms or spaces protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.

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

Exception: Mattresses in rooms or spaces protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.

805.4.2.3 Identification. Mattresses shall bear the label of an *approved* agency, confirming compliance with the requirements of Sections 805.4.2.1 and 805.4.2.2.

SECTION 806

NATURAL DECORATIVE VEGETATION IN NEW AND EXISTING BUILDINGS

806.1 Natural cut trees. Natural cut trees, where allowed by this section, shall have the trunk bottoms cut off not less than 0.5 inch (12.7 mm) above the original cut and shall be placed in a support device complying with Section 806.1.2.

[W][S] 806.1.1 Restricted occupancies. Natural cut trees shall be prohibited (~~within ambulatory care facilities and Group A, E, I-1, I-2, I-3, I-4, M, R-1, R-2 and R-4 occupancies~~) in the following occupancies.

1. Group I; and
2. R-2 occupancies providing licensed care to clients in one of the categories listed in the International Building Code, Section 310.1, licensed by Washington State.

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(Exceptions:

1. Trees located in areas protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2 shall not be prohibited in Groups A, E, M, R-1 and R-2.
2. Trees shall be allowed within *dwelling units* in Group R-2 occupancies.)

[W][S] 806.1.2 Support devices. The support device that holds the tree in an upright position shall be of a type that is stable and that meets all of the following criteria:

1. The device shall hold the tree securely and be of adequate size to avoid tipping over of the tree.
2. The device shall be capable of containing a minimum (~~two-day~~) supply of water in accordance with Table 806.1.2.
3. The water level, when full, shall cover the tree stem not less than 2 inches (51 mm). The water level shall be maintained above the fresh cut and checked not less than once daily.

**[W][S] TABLE 806.1.2
SUPPORT STAND WATER CAPACITY**

<u>TREE STEM DIAMETER (inches)</u>	<u>MINIMUM SUPPORT STAND WATER CAPACITY (gallons)</u>	<u>TYPICAL DAILY WATER EVAPORATION AMOUNT (gallons)</u>
<u>Up to 4</u>	<u>1</u>	<u>1/4 to 1</u>
<u>4 to 6</u>	<u>1-1/2</u>	<u>1-1/4 to 1-1/2</u>
<u>7 to 8</u>	<u>2</u>	<u>1-3/4 to 2</u>
<u>9 to 12</u>	<u>3</u>	<u>2-1/4 to 3</u>
<u>13 and over</u>	<u>4</u>	<u>Over 3</u>

806.1.3 Dryness. The tree shall be removed from the building whenever the needles or leaves fall off readily when a tree branch is shaken or if the needles are brittle and break when bent between the thumb and index finger. The tree shall be checked daily for dryness.

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806.2 Obstruction of means of egress. The required width of any portion of a *means of egress* shall not be obstructed by decorative vegetation. Natural cut trees shall not be located within an exit, corridor, or a lobby or vestibule.

806.3 Open flame. Candles and open flames shall not be used on or near decorative vegetation. Natural cut trees shall be kept a distance from heat vents and any open flame or heat-producing devices not less than the height of the tree.

806.4 Electrical fixtures and wiring. The use of unlisted electrical wiring and lighting on natural vegetation, including natural cut trees, shall be prohibited.

**SECTION 807
DECORATIVE MATERIALS AND ARTIFICIAL DECORATIVE VEGETATION
IN NEW AND EXISTING BUILDINGS**

807.1 General. The following requirements shall apply to all occupancies:

1. Furnishings or decorative materials of an explosive or highly flammable character shall not be used.
2. Fire-retardant coatings in existing buildings shall be maintained so as to retain the effectiveness of the treatment under service conditions encountered in actual use.
3. Furnishings or other objects shall not be placed to obstruct exits, access thereto, egress therefrom or visibility thereof.
4. The permissible amount of noncombustible decorative materials shall not be limited.

807.2 Combustible decorative materials. In Groups A, B, E, I, M and R-1 and in dormitories in Group R-2, curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall comply with Section 807.3 and shall not exceed 10 percent of the specific wall or ceiling area to which such materials are attached.

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 to be *interior finish*, shall comply with Section 803 and shall not be considered *decorative materials* or furnishings.

Exceptions:

1. In auditoriums in Group A, the permissible amount of curtains, draperies, fabric hangings and similar combustible decorative material suspended from walls or ceilings shall not exceed 75 percent of the aggregate wall area where the building is equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, and where the material is installed in accordance with Section 803.15 of the *International Building Code*.
2. In Group R-2 dormitories, within sleeping units and dwelling units, the permissible amount of curtains, draperies, fabric hangings and similar decorative materials suspended from walls or ceilings shall not exceed 50 percent of the aggregate

gate wall areas where the building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.

3. In Group B and M occupancies, the amount of combustible fabric partitions suspended from the ceiling and not supported by the floor shall comply with Section 807.3 and shall not be limited.
4. The 10-percent limit shall not apply to curtains, draperies, fabric hangings and similar combustible decorative materials used as window coverings.

[S] 807.3 Acceptance criteria and reports. Where required to exhibit improved fire performance, curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall be tested by an *approved agency* and meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 or other approved standard, or exhibit a maximum rate of heat release of 100 kW when tested in accordance with NFPA 289, using the 20 kW ignition source. Reports of test results shall be prepared in accordance with the test method used and furnished to the *fire code official* upon request.

807.3 Point of Information

Acceptable flame certificates for decorative materials include:

1. Certificates indicating compliance with NFPA 701.
2. Certificates verifying approval through the California State Fire Marshal.
3. Certificates indicating compliance with CPAI-84 (*Canvas Products Association International*).

807.4 Artificial decorative vegetation. Artificial decorative vegetation shall comply with this section and the requirements of Sections 806.2 and 806.3. Natural decorative vegetation shall comply with Section 806.

Exception: Testing of artificial vegetation is not required in Group I-1; Group I-2, Condition 1; Group R-2; Group R-3; or Group R-4 occupancies equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1, where such artificial vegetation complies with the following:

1. Wreaths and other decorative items on doors shall not obstruct the door operation and shall not exceed 50 percent of the surface area of the door.
2. Decorative artificial vegetation shall be limited to not more than 30 percent of the wall area to which it is attached.
3. Decorative artificial vegetation not on doors or walls shall not exceed 3 feet (914 mm) in any dimension.

807.4.1 Flammability. Artificial decorative vegetation shall meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701. Meeting such criteria shall be documented and certified by the manufacturer in an *approved* manner. Alternatively, the artificial decorative vegetation 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.

807.4.2 Electrical fixtures and wiring on artificial vegetation. The use of unlisted electrical wiring and lighting on artificial decorative vegetation shall be prohibited. The use of electrical wiring and lighting on artificial trees constructed entirely of metal shall be prohibited.

807.5 Occupancy-based requirements. Occupancies shall comply with Sections 807.5.1 through 807.5.6.

807.5.1 Group A. In Group A occupancies, the requirements in Sections 807.5.1.1 through 807.5.1.4 shall apply.

807.5.1.1 Foam plastics. Exposed foam plastic materials and unprotected materials containing foam plastic used for decorative purposes or stage scenery or exhibit booths shall have a maximum heat release rate of 100 kW when tested in accordance with UL 1975, or when tested in accordance with NFPA 289 using the 20 kW ignition source.

Exceptions:

1. Individual foam plastic items or items containing foam plastic where the foam plastic does not exceed 1 pound (0.45 kg) in weight.
2. Cellular or foam plastic shall be allowed for trim in accordance with Section 804.2.

807.5.1.2 Motion picture screens. The screens on which motion pictures are projected in new and existing buildings of Group A shall either meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 or shall comply with the requirements for a Class B interior finish in accordance with Section 803 of the *International Building Code*.

807.5.1.3 Wood use in places of religious worship. In places of religious worship, wood used for ornamental purposes, trusses, paneling or chancel furnishing shall not be limited.

807.5.1.4 Pyroxylin plastic. Imitation leather or other material consisting of or coated with a pyroxylin or similarly hazardous base shall not be used.

807.5.2 Group E. Group E occupancies shall comply with Sections 807.5.2.1 through 807.5.2.3.

807.5.2.1 Storage in corridors and lobbies. Clothing and personal effects shall not be stored in *corridors* and lobbies.

Exceptions:

1. *Corridors* protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.
2. *Corridors* protected by an *approved fire alarm system* installed in accordance with Section 907.
3. Storage in metal lockers, provided the minimum required egress width is maintained.

807.5.2.2 Artwork in corridors. Artwork and teaching materials shall be limited on the walls of *corridors* to not more than 20 percent of the wall area.

807.5.2.3 Artwork in classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached.

807.5.3 Groups I-1 and I-2. In Group I-1 and I-2 occupancies, combustible *decorative materials* shall comply with Sections 807.5.3.1 through 807.5.3.4.

807.5.3.1 Group I-1 and I-2 Condition 1 within units. In Group I-1 and Group I-2 Condition 1 occupancies, equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1, within sleeping units and dwelling units, combustible decorative materials placed on walls shall be limited to not more than 50 percent of the wall area to which they are attached.

807.5.3.2 In Group I-1 and I-2, Condition 1 for areas other than within units. In Group I-1 and Group I-2, Condition 1 occupancies, equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1, combustible decorative materials placed on walls in areas other than within dwelling and sleeping units shall be limited to not more than 30 percent of the wall area to which they are attached.

807.5.3.3 In Group I-2, Condition 2. In Group I-2, Condition 2 occupancies, equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1, combustible decorative materials placed on walls shall be limited to not more than 30 percent of the wall area to which they are attached.

807.5.3.4 Other areas in Groups I-1 and I-2. In Group I-1 and I-2 occupancies, in areas not equipped throughout with an *approved automatic sprinkler system*, combustible decorative materials shall be of such limited quantities that a hazard of fire development or spread is not present.

807.5.4 Group I-3. In Group I-3, combustible *decorative materials* are prohibited.

807.5.5 Group I-4. Group I-4 occupancies shall comply with the requirements in Sections 807.5.5.1 through 807.5.5.3.

807.5.5.1 Storage in corridors and lobbies. Clothing and personal effects shall not be stored in *corridors* and lobbies.

Exceptions:

1. *Corridors* protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.
2. *Corridors* protected by an *approved fire alarm system* installed in accordance with Section 907.
3. Storage in metal lockers, provided the minimum required egress width is maintained.

807.5.5.2 Artwork in corridors. Artwork and teaching materials shall be limited on walls of corridors to not more than 20 percent of the wall area.

807.5.5.3 Artwork in classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached.

807.5.6 Dormitories in Group R-2. In Group R-2 dormitories, within sleeping units and dwelling units, the combustible decorative materials shall be of limited quantities such that a hazard of fire development or spread is not present.

SECTION 808

**FURNISHINGS OTHER THAN UPHOLSTERED FURNITURE AND MATTRESSES
OR DECORATIVE MATERIALS IN NEW AND EXISTING BUILDINGS**

808.1 Wastebaskets and linen containers in Group I-1, I-2 and I-3 occupancies and Group B ambulatory care facilities. Wastebaskets, linen containers and other waste containers, including their lids, located in Group I-1, I-2 and I-3 occupancies and Group B ambulatory care facilities shall be constructed of noncombustible materials or of materials that meet a peak rate of heat release not exceeding 300 kW/m² when tested in accordance with ASTM E1354 at an incident heat flux of 50 kW/m² in the horizontal orientation. Metal wastebaskets and other metal waste containers with a capacity of 20 gallons (75.7 L) or more shall be *listed* in accordance with UL 1315 and shall be provided with a noncombustible lid. Portable containers exceeding 32 gallons (121 L) shall be stored in an area classified as a waste and linen collection room and constructed in accordance with Table 509 of the *International Building Code*.

Exception: Recycling containers complying with Section 808.1.2 are not required to be stored in waste and linen collection rooms.

808.1.1 Capacity density. The average capacity density of containers located in an individual room or space, other than waste and linen collection rooms, shall not be greater than 0.5 gal/ft² (20.4 L/m²).

808.1.2 Recycling clean waste containers. Recycling clean waste containers, including their lids, shall not exceed an individual capacity of 96 gallons (363 L).

808.2 Waste containers with a capacity of 20 gallons or more in Group R-2 college and university dormitories. Waste containers, including their lids, located in Group R-2 college and university dormitories, and with a capacity of 20 gallons (75.7 L) or more, shall be constructed of noncombustible materials or of materials that meet a peak rate of heat release not exceeding 300 kW/m² when tested in accordance with ASTM E1354 at an incident heat flux of 50 kW/m² in the horizontal orientation. Metal wastebaskets and other metal waste containers with a capacity of 20 gallons (75.7 L) or more shall be *listed* in accordance with UL 1315 and shall be provided with a noncombustible lid. Portable containers exceeding 32 gallons (121 L) shall be stored in an area classified as a waste and linen collection room constructed in accordance with Table 509 of the *International Building Code*.

808.3 Signs. Foam plastic signs that are not affixed to interior building surfaces shall have a maximum heat release rate of 150 kW when tested in accordance with UL 1975, or when tested in accordance with NFPA 289 using the 20-kW ignition source.

Exception: Where the aggregate area of foam plastic signs is less than 10 percent of the floor area or wall area of the room or space in which the signs are located, whichever is less, subject to the approval of the *fire code official*.

808.4 Combustible lockers. Where lockers constructed of combustible materials are used, the lockers shall be considered to be interior finish and shall comply with Section 803.

Exception: Lockers constructed entirely of wood and noncombustible materials shall be permitted to be used wherever interior finish materials are required to meet a Class C classification in accordance with Section 803.1.2.

