

U.S. Fire Administration / National Fire Academy

*Coffee Break Training***Topic: Decorative Materials other than Vegetation**

Learning objective: The student shall be able to explain the fire-retardant test requirements for decorative materials other than vegetation in business and mercantile occupancies.

Fabric swags, like these cloth hangings in a mercantile setting, often are used for sound attenuation as well as to soften the impact of the visual environment.

Like many other decorative items, these hangings must be addressed for fire safety. Left untreated, these hangings may add fuel to a room-and-contents fire, create excess smoke that obscures visibility, or even fall so they compromise the means of egress.

In business and mercantile occupancies, fabric partitions that are hung from the ceiling and not supported by the floor must be made of noncombustible materials, or meet the flame propagation performance criteria of NFPA 701, *Standard Methods of Fire Tests for Flame Propagation of Textiles and Films*. The test criteria listed in this Standard pertain specifically to hanging fabrics and films; products applied to walls, ceilings, or other permanent elements should be tested in accordance with flame spread and smoke development value criteria.

NFPA 701 provides details on two types of test methods and apparatus. In the first method, a sample consisting of one or more layers of textile is suspended vertically in a test chamber and a gas flame is applied to the center of the lower edge of the specimen for 45 seconds. Fragments or residues of specimens that fall to the floor of the test chamber may not continue to burn for more than an average of 2 seconds.

In Test Method 2, a 47.25-inch (1200-mm) specimen is exposed to a 11.0 ± 0.5 -inch ($280 \text{ mm} \pm 12\text{-mm}$) flame inside a four-sided test cabinet. When any specimen continues flaming for more than 2 seconds after the test flame is removed from contact with the specimen, it is considered to have failed the test.



The code official is authorized to require independent testing and standardized documentation by an approved agency to verify the materials meet the NFPA 701 test requirements.

For additional information, refer to NFPA 1, *Uniform Fire Code*[®], Chapter 12; *International Fire Code*[®], Chapter 8; *International Building Code*[®], Chapter 8; NFPA 101, *Life Safety Code*[®], Chapter 10; or NFPA 701.