

## FESHM 6040.1: FIRE CONSTRUCTION REQUIREMENTS

(Fire Retardant Coatings for Combustible Construction Materials)

### Revision History

<b>Author</b>	<b>Description of Change</b>	<b>Revision Date</b>
Jim Niehoff	<ul style="list-style-type: none"><li>• Defined acronyms for Underwriters; Laboratories (UL) and National Fire Protection Association (NFPA)</li><li>• Updated version of NFPA 703 to 2015 Edition</li></ul>	April 2016
Bill James	Added FESHM Chapter formatting template and more complete guidance on Chapter content.	July 2011

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## 1.0 INTRODUCTION

In order to limit possible fire consequences and restrict combustible loadings within structures, fire resistive or noncombustible materials should be used for:

- (a) New building construction and building modifications;
- (b) Materials of construction, such as scaffolds, temporary construction walls, and work platforms, and;
- (c) Building accessories, such as steps and stairs, walkways, and temporary walls.

Where this is not practical, wood and similar combustible materials should be treated or coated with fire retardant material. The use of fire retardant coatings is described in this Chapter.

## 2.0 REFERENCES

- National Fire Protection Association (NFPA) 255, Standard Method of Test of Surface Burning Characteristics of Building Materials, 2006 Edition.
- NFPA 703, Standard for Fire-Retardant Treated Wood and Fire-Retardant Coatings for Building Materials, 2015 Edition.
- Fermilab Environment, Safety and Health Manual (FESHM) 6010, Fire Protection Program
- FESHM 6040.2, Fire Construction Requirements – Interior Finish Materials

## 3.0 RESPONSIBILITIES

### 3.1 Authority Having Jurisdiction (AHJ)

Individuals/groups given limited authority and responsibility to perform Authority Having Jurisdiction (AHJ) duties for fire protection at the laboratory.

### 3.2 Facilities Engineering Services Section (FESS)

The Facilities Engineering Services Section, Engineering Department provides design and consulting services, and oversees the installation and construction, and modifications to existing facilities.

## 4.0 PROGRAM DESCRIPTION

### 4.1 Listing Agency

Underwriters Laboratories\* approved coatings, applicable for intended use, i.e., interior or exterior, should be used. Such coatings will be marked as follows:

Exterior Use: Underwriters Laboratories, Inc. R  
Classified  
General Purpose Coating  
Fire Hazard Classification

Interior Use: Underwriters Laboratories, Inc. R  
Classified  
Fire Retardant Coatings

An acceptable interior flat white latex paint for non-combustible walls is available from the Site 38 Stockroom (Stock No. 1825-391000).

An acceptable interior flat white fire retardant paint for combustible walls is available from the Site 38 Stockroom (Stock No. 1825-392000).

*\*Note: Approved coatings, applicable for intended use, i.e., interior, or exterior, may be used if approved by Factory Mutual, ETL Intertek Laboratories, or other equivalent testing laboratories, or if the coating meet with the appropriate American Society for Testing and Materials /International Organization for Standardization similar fire ratings.*

## 4.2 Fire Retardant Application

The fire hazard classification is applicable only when the coating is applied at the rates of coverage and to the type or kind of surfaces indicated when the coating is applied in accordance with the directions supplied with the container, and when the coating is maintained.