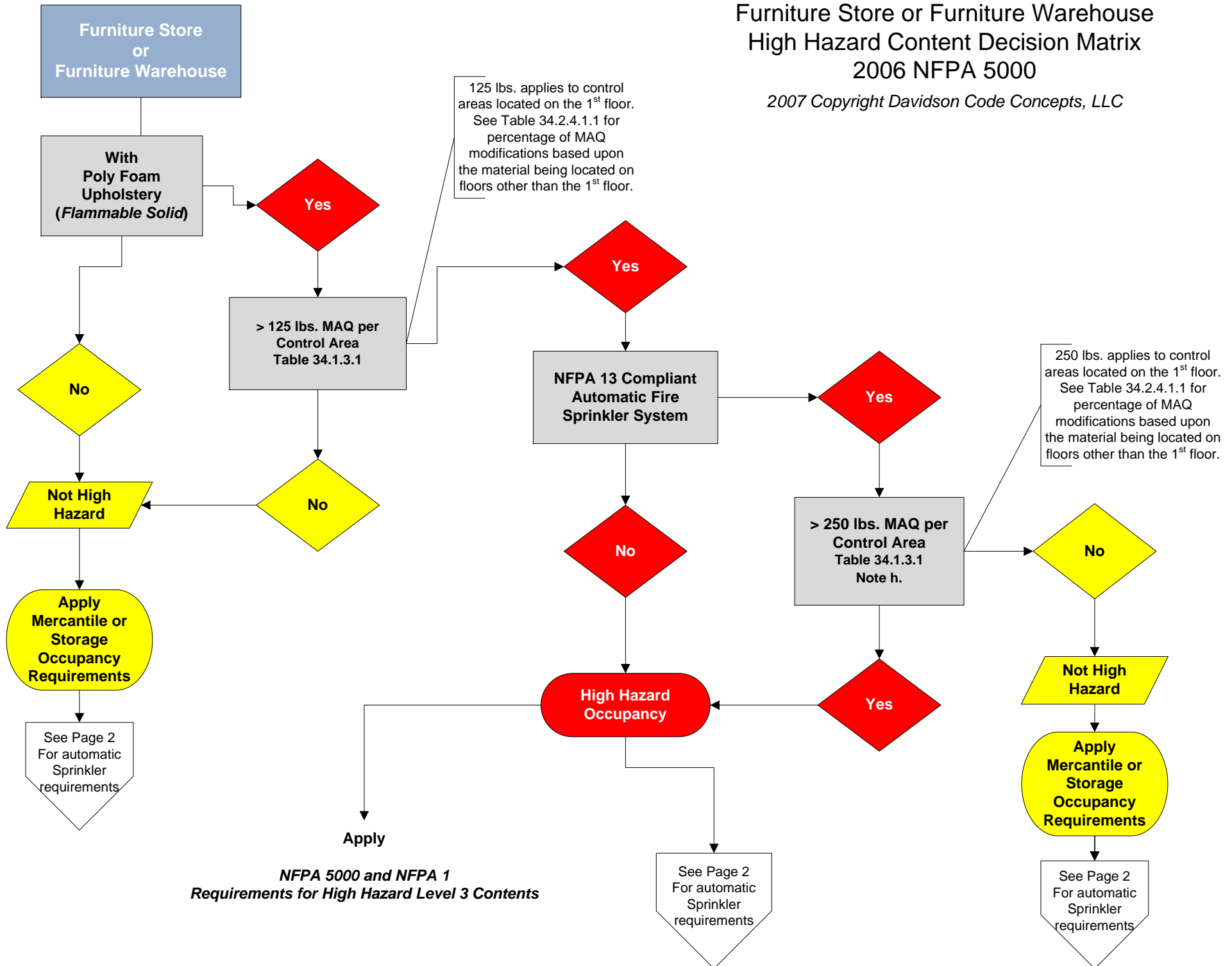


Furniture Store or Furniture Warehouse High Hazard Content Decision Matrix 2006 NFPA 5000

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Automatic Sprinkler System Requirements

High Hazard Contents Mercantile Occupancy Storage Occupancy

NFPA 13 Design Criteria

NFPA 5000 High Hazard Occupancy

34.3 Requirements for Occupancies Exceeding the Maximum Allowable Quantities per Control Area for High Hazard Contents.

34.3.2 General Requirements. The requirements set forth in 34.3.2 shall apply to buildings, or portions thereof, that are required to comply with Protection Level 1 through Protection Level 5 where required by 34.3.1.1 through 34.3.1.5.

34.3.2.1 Fire Protection Systems. Buildings, or portions thereof, required to comply with Protection Level 1 through Protection Level 5 shall be protected by an approved automatic fire sprinkler system complying with Section 55.3.

NFPA 5000 Mercantile Occupancy

27.3.5 Extinguishment Requirements.

27.3.5.1 Mercantile occupancies shall be protected by an approved, supervised automatic sprinkler system in accordance with NFPA 13 and 55.3.2 as follows:

- (1) Throughout all mercantile occupancies three or more stories in height
- (2) Throughout all mercantile occupancies exceeding 12,000 ft² (1115 m²) in gross area
- (3) Throughout stories below the level of exit discharge where such stories have an area exceeding 2500 ft² (232 m²) and are used for the sale, storage, or handling of combustible goods and merchandise
- (4) Throughout mixed occupancies in accordance with 6.2.2 where the conditions of 27.3.5.1(1), (2), or (3) apply to the mercantile occupancy

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NFPA 5000 Storage Occupancy

30.3.5* Extinguishment Requirements.

30.3.5.1 Fire Sprinklers.

30.3.5.1.1 Storage occupancies, other than low hazard storage occupancies, shall be protected by an approved, supervised automatic sprinkler system in accordance with NFPA 13 as follows:

- (1) Throughout all storage occupancies three or more stories in height
- (2) Throughout all storage occupancies exceeding 12,000 ft² (1115 m²) in fire area
- (3) Where the total area of all floors, including mezzanines, exceeds 24,000 ft²

AUTOMATIC SPRINKLER SYSTEM DESIGN

NFPA 13- 2002 edition classifies upholstered furniture as a Group A plastics material (See Section 5.6.3 and Table A.5.6.3 and Table A.5.6.4.1).

The minimum water supply and sprinkler discharge requirements for mercantile showrooms are found in Section 11.2.3 for general occupancies which shall be Ordinary Hazard Group 2 (OH-2) Density.

For storage occupancies the water flow design requirements are in Section 12.3.3 for rack storage up to 25 feet, Section 12.3.5 for rack storage over 25 feet, and Section 12.1.10 for solid pile up to 12 feet in height

CHECK WITH THE MANUFACTURER, HIGHER DENSITIES SUCH AS THOSE FOR EXTRA HAZARD MAY BE RECOMMENDED

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