

## CHAPTER 29

# COMBUSTIBLE FIBERS

### SECTION 2901 GENERAL

**2901.1 Scope.** The equipment, processes and operations involving combustible fibers shall comply with this chapter.

**2901.2 Applicability.** Storage of combustible fibers in any quantity shall comply with this section.

**2901.3 Permits.** Permits shall be required as set forth in Section 105.6.

### SECTION 2902 DEFINITIONS

**2902.1 Definitions.** The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

**BALED COTTON.** A natural seed fiber wrapped in and secured with industry-accepted materials, usually consisting of burlap, woven polypropylene, polyethylene or cotton or sheet polyethylene, and secured with steel, synthetic or wire bands, or wire; also includes linters (lint removed from the cottonseed) and motes (residual materials from the ginning process).

**BALED COTTON, DENSELY PACKED.** Cotton, made into banded bales, with a packing density of at least 22 pounds per cubic foot (360 kg/m<sup>3</sup>), and dimensions complying with the following: a length of 55 inches (1397 mm), a width of 21 inches (533.4 mm) and a height of 27.6 to 35.4 inches (701 to 899 mm).

**COMBUSTIBLE FIBERS.** Readily ignitable and free-burning materials in a fibrous or shredded form, such as cocoa fiber, cloth, cotton, excelsior, hay, hemp, henequen, istle, jute, kapok, oakum, rags, sisal, Spanish moss, straw, tow, wastepaper, certain synthetic fibers or other like materials. This definition does not include densely packed baled cotton.

**SEED COTTON.** Perishable raw agricultural commodity consisting of cotton fiber (lint) attached to the seed of the cotton plant, which requires ginning to become a commercial product.

### SECTION 2903 GENERAL PRECAUTIONS

**2903.1 Use of combustible receptacles.** Ashes, waste, rubbish or sweepings shall not be placed in wood or other combustible receptacles and shall be removed daily from the structure.

**2903.2 Vegetation.** Grass or weeds shall not be allowed to accumulate at any point on the premises.

**2903.3 Clearances.** A minimum clearance of 3 feet (914 mm) shall be maintained between automatic sprinklers and the top of piles.

**2903.4 Agricultural products.** Hay, straw, seed cotton or similar agricultural products shall not be stored adjacent to structures or combustible materials unless a clear horizontal distance equal to the height of a pile is maintained between such storage and structures or combustible materials. Storage shall be limited to stacks of 100 tons (91 metric tons) each. Stacks shall be separated by a minimum of 20 feet (6096 mm) of clear space. Quantities of hay, straw, seed cotton and other agricultural products shall not be limited where stored in or near farm structures located outside closely built areas. A permit shall not be required for agricultural storage.

**2903.5 Dust collection.** Where located within a building, equipment or machinery which generates or emits combustible fibers shall be provided with an approved dust-collecting and exhaust system. Such systems shall comply with Chapter 13 and Section 511 of the *International Mechanical Code*.

**2903.6 Portable fire extinguishers.** Portable fire extinguishers shall be provided in accordance with Section 906 as required for extra-hazard occupancy protection as indicated in Table 906.3(1).

### SECTION 2904 LOOSE FIBER STORAGE

**2904.1 General.** Loose combustible fibers, not in suitable bales or packages and whether housed or in the open, shall not be stored within 100 feet (30 480 mm) of any structure, except as indicated in this chapter.

**2904.2 Storage of 100 cubic feet or less.** Loose combustible fibers in quantities of not more than 100 cubic feet (3 m<sup>3</sup>) located in a structure shall be stored in a metal or metal-lined bin equipped with a self-closing cover.

**2904.3 Storage of more than 100 cubic feet to 500 cubic feet.** Loose combustible fibers in quantities exceeding 100 cubic feet (3 m<sup>3</sup>) but not exceeding 500 cubic feet (14 m<sup>3</sup>) shall be stored in rooms enclosed with 1-hour fire-resistance-rated fire barriers, with openings protected by an approved opening protective assembly having a fire protection rating of <sup>3</sup>/<sub>4</sub> hour, constructed in accordance with the *International Building Code*.

**2904.4 Storage of more than 500 cubic feet to 1,000 cubic feet.** Loose combustible fibers in quantities exceeding 500 cubic feet (14 m<sup>3</sup>) but not exceeding 1,000 cubic feet (28 m<sup>3</sup>) shall be stored in rooms enclosed with 2-hour fire-resistance-rated fire barriers, with openings protected by an approved opening protective assembly having a fire protection rating of 1½ hours, and constructed in accordance with the *International Building Code*.

**2904.5 Storage of more than 1,000 cubic feet.** Loose combustible fibers in quantities exceeding 1,000 cubic feet (28 m<sup>3</sup>) shall be stored in rooms enclosed with 2-hour fire-resistance-rated fire barriers, with openings protected by an approved opening protective assembly having a fire protection

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rating of 1½ hours, and constructed in accordance with the *International Building Code*. The storage room shall be protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1.

**2904.6 Detached storage structure.** A maximum of 2,500 cubic feet (70 m<sup>3</sup>) of loose combustible fibers shall be stored in a detached structure suitably located, with openings protected against entrance of sparks. The structure shall not be occupied for any other purpose.

### SECTION 2905 BALED STORAGE

**2905.1 Bale size and separation.** Baled combustible fibers shall be limited to single blocks or piles not more than 25,000 cubic feet (700 m<sup>3</sup>) in volume, not including aisles or clearances. Blocks or piles of baled fiber shall be separated from adjacent storage by aisles not less than 5 feet (1524 mm) wide, or by flash-fire barriers constructed of continuous sheets of noncombustible material extending from the floor to a minimum height of 1 foot (305 mm) above the highest point of the piles and projecting not less than 1 foot (305 mm) beyond the sides of the piles.

**2905.2 Special baling conditions.** Sisal and other fibers in bales bound with combustible tie ropes, jute and other fibers that swell when wet, shall be stored to allow for expansion in any direction without affecting building walls, ceilings or columns. A minimum clearance of 3 feet (914 mm) shall be required between walls and sides of piles, except that where the storage compartment is not more than 30 feet (9144 mm) wide, the minimum clearance at side walls shall be 1 foot (305 mm), provided that a center aisle not less than 5 feet (1524 mm) wide is maintained.