



## Key Excerpts

# Safety Cabinets Storage Products Security Products



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### OSHA 29 CFR 1910.106(e)(2)(ii)(b):

#### Incidental storage or use of flammable and combustible liquids.

(b) The quantity of liquid that may be located outside of an inside storage room or storage cabinet in a building or in any one fire area of a building shall not exceed:

- (1) 25 gallons of Class IA liquids in containers
- (2) 120 gallons of Class IB, IC, II or III liquids in containers
- (3) 660 gallons of Class IB, IC, II or III liquids in a single portable tank

### OSHA 29 CFR 1910.106(d)(3)(i&ii):

**Design, construction, and capacity of storage cabinets - (i) Maximum capacity.** Not more than 60 gallons of Class I or Class II liquids, nor more than 120 gallons of Class III liquids may be stored in a storage cabinet.

**(ii) Fire resistance.** Storage cabinets shall be designed and constructed to limit the internal temperature to not more than 325°F. when subjected to a 10-minute fire test using the standard time-temperature curve as set forth in Standard Methods of Fire Tests of Building Construction and Materials, NFPA 251-1969. All joints and seams shall remain tight and the door shall remain securely closed during the fire test. Cabinets shall be labeled in conspicuous lettering, "Flammable-Keep Fire Away." (a) Metal cabinets constructed in the following manner shall be deemed to be in compliance. The bottom, top, door, and sides of cabinet shall be at least No. 18 gauge sheet iron and double walled with 1 1/2" air space. Joints shall be riveted, welded or made tight by some equally effective means. The door shall be provided with a three-point lock, and the door sill shall be raised at least 2" above the bottom of the cabinet.

**(ii)(b) Wooden cabinets** constructed in the following manner shall be deemed in compliance. The bottom, sides, and top shall be constructed of an approved grade of plywood at least 1 inch in thickness, which shall not break down or delaminate under fire conditions. All joints shall be rabbeted and shall be fastened in two directions with flathead woodscrews. When more than one door is used, there shall be a rabbeted overlap of not less than 1 inch. Hinges shall be mounted in such a manner as not to lose their holding capacity due to loosening or burning out of the screws when subjected to the fire test.

### International Fire Code\*:

#### 3404.3.2 Liquid storage cabinets.

Where other sections of this code require that liquid containers be stored in storage cabinets, such cabinets and storage shall be in accordance with Sections 3404.3.2.1 through 3404.3.2.3.

**3404.3.2.1.1 Materials.** Cabinets shall be listed in accordance with UL 1275, or constructed of approved wood or metal in accordance with the following:

1. Unlisted metal cabinets shall be constructed of steel having a thickness of not less than 0.044 inch (1.12 mm) (18 gage). The cabinet, including the door, shall be double walled with 1-1/2 inch (38 mm) airspace between the walls. Joints shall be riveted or welded and shall be tight fitting.

**3404.3.2.1.2 Labeling.** Cabinets shall be provided with a conspicuous label in red letters on contrasting background which reads:

FLAMMABLE-KEEP FIRE AWAY.

**3404.3.2.1.3 Doors.** Doors shall be well fitted, self-closing and equipped with a three-point latch.

**3404.3.2.1.4 Bottom.** The bottom of the cabinet shall be liquid tight to a height of at least 2 inches (51 mm).

### NFPA 1, The Uniform Fire Code –2006 Edition\*\*:

#### 60.1.2.23 Hazardous Materials Storage Cabinets.

(d.) Doors shall be well fitted, self-closing, and equipped with a self-latching device.

### NFPA Code 30 – 2008 Edition\*\*\*:

**9.5.1** The volume of Class I, Class II, and Class IIIA liquids stored in an individual storage cabinet shall not exceed 120 gal (460 L).

**9.5.2** The total aggregate volume of Class I, Class II, and Class IIIA liquids in a group of storage cabinets shall not exceed the maximum allowable quantity of flammable and combustible liquids per control area based on the occupancy where the cabinets are located.

**9.5.4** Storage cabinets shall not be required by this code to be ventilated for fire protection purposes.

**9.5.4.1** If not ventilated, storage cabinet vent openings shall be sealed with the bungs supplied with the cabinet or with bungs specified by the cabinet manufacturer.

**9.5.4.2** If ventilated for any reason, the storage cabinet vent openings shall be ducted directly to outdoors in such a manner that will not compromise the specified performance of the cabinet and in a manner that is acceptable to the authority having jurisdiction.

### The National Fire Code of Canada (NFC) 1995 Edition, section 4.2.10.5 references storage Cabinets must conform to ULC-C1275.

#### ULC/ORD-C1275-84

**1.1** These requirements cover storage cabinets for flammable liquid containers which are intended for the storage of flammable liquid and permitted by the relevant sections of the National Fire Code of Canada.

**1.2** The cabinets are tested to determine their ability to withstand a standard fire exposure for a period of 10 minutes without developing an internal temperature rise in excess of 139°C above ambient.