Handout F.01

Flammable and Combustible Liquid Approved Storage Cabinets and Limitations

2018 IFC Section 5704.3

Approved storage cabinets for the storage of flammable and combustible Class I, II and IIIA liquids in closed containers that do not exceed 60 gallons in individual capacity.

Quantity limitations when stored in cabinets on the ground floor per control area (4 control area maximum)

- Class IA: 60 gallons maximum or 120 gallon maximum in sprinklered building
- Class IB and IC: 240 gallons maximum or 480 gallon maximum in sprinklered building
- Class II: 240 gallons maximum or 480 gallon maximum in sprinklered building
- Class IIIA: 660 gallons maximum or 1320 gallon maximum in sprinklered building

Control area separation refer to 2018 IFC section 5003.8.3

Classification of Flammable and Combustible Liquids

- Class IA: Liquids having a flash point below 73°F and having a boiling point below 100°F
- Class IB: Liquids having a flash point below 73°F and having a boiling point at or above 100°F
- Class IC: Liquids having a flash point at or above 73°F and having a boiling point below 100°F
- Class II: Liquids having a closed cup flash point to or above 100°F and below 140°F
- Class IIIA: Liquids having a closed cup flash point to or above 140°F and below 200°F

Design and Construction of Cabinets

Cabinets shall be listed in accordance with UL1275 or;

Unlisted metal cabinets shall be constructed of steel have at thickness of not less than 0.044 inch (18 gauge). The cabinet, including the door, shall be double walled with 1 1/2-inch air space between the walls. Joints shall be riveted or welded and shall be tight fitting. Doors shall be well fitted, self-closing and equipped with a three-point latch. The bottom of the cabinet shall be liquid tight to a height of not less than 2 inches. or;

Unlisted wooden cabinets, including doors, shall be constructed of minimum one-inch thick exterior grade plywood. All joints shall be rabbeted and shall be fastened in two directions with wood screws. Door hinges shall be of steel or brass. Cabinets shall be painted with an intumescent-type paint. Doors shall be well fitted, self-closing and equipped with a three-point latch. The bottom of the cabinet shall be liquid tight to a height of not less than 2 inches.

Labeling

Cabinets shall be provided with conspicuous label in 4" red letters on contrasting background that reads: "FLAMMABLE-KEEP FIRE AWAY"

Capacity

The combined total quantity of liquids in a cabinet shall not exceed 120 gallons

Robert Doehl, Building Official
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