

5-13-2020

Colleges/Universities

We understand that many facilities will be adding Alcohol Based Hand Rub dispensers and are providing the following code requirements to assist you in making the product available, while remaining compliant with fire and building code requirements.

Definitions:

Control Area

Spaces within a building where quantities of hazardous materials not exceeding the maximum allowable quantities per control area are stored, dispensed, used or handled. *(2018 IFC, Section 202)*

Fire Area

The aggregate floor area enclosed and bounded by fire walls, fire barriers, exterior walls or horizontal assemblies of a building. Areas of the building not provided with surrounding walls shall be included in the fire area if such areas are included within the horizontal projection of the roof or floor next above. *(2018 IFC, Section 202)*

Flammable Liquid

A liquid having a closed cap flash point below 100° F (38° C). Flammable Liquids are further categorized into a group known as Class I Liquids. Class I category is subdivided as follows:

- Class IA Liquids having a flash point below 73° F (23° C) and having a boiling point of 100° F (38° C).
- Class IB Liquids having a flash point below 73° F (23° C) and having a boiling point at, or above, 100° F (38° C).
- Class IC Liquids having a flash point at, or above, 73° F (23° C) and below 100° F (38° C).

Flash Point

The minimum temperature in degrees Fahrenheit at which a liquid will give off sufficient vapors to form an ignitable mixture with air near the surface or in the container but will not sustain combustion. *(2018 IFC, Section 202)*

Level 1 Aerosol

Those with a total chemical heat of combustion that is less than or equal to 8,600 British thermal units per pound (Btu/lb) (20 kJ/g).lb *(2018 IFC, Section 202)*

Acronyms:

ADA: Americans with Disability Act

IFC: International Fire Code (part of the International Code Council – ICC)

Regulatory Compliance:

How do fire code authorities define ABHRs?

An alcohol-containing preparation designed for application to the hands for reducing the number of viable microorganisms on the hands and containing ethanol or isopropanol in an amount not exceeding 95-percent by volume. *(2018 IFC, Section 202)*

How large can the ABHR Dispensers be?

When mounted in rooms separated from the corridor:

The maximum capacity of each dispenser shall be 68 ounces (2 L). *(2018 IFC 5705.5)*

When mounted in corridors:

Level 2 and 3 aerosol containers shall not be allowed in corridors. The maximum capacity of each Class I or II liquid dispenser shall be 41 ounces (1.21 L) and the maximum capacity of each Level 1 aerosol dispenser shall be 18 ounces (0.51 kg). (2018 IFC 5705.5.1)

How much ABHR product can be stored in a control area?

The maximum quantity allowed in a corridor within a control area shall be 10 gallons (37.85 L) of Class I or II liquids or 1135 ounces (32.2 kg) of Level 1 aerosols, or a combination of Class I or II liquids and Level 1 aerosols not to exceed, in total, the equivalent of 10 gallons (37.85 L) or 1,135 ounces (32.2 kg) such that the sum of the ratios of the liquid and aerosol quantities divided by the allowable quantity of liquids and aerosols, respectively, shall not exceed one. (2018 IFC 5705.5.1)

What are the requirements to comply with Americans with Disabilities Act (ADA)?

- a. Operation – The dispenser needs to be operable with one hand without grasping, pinching or twisting of the wrist and the force required to activate must not be greater than 5 lbf.
(ADA section 4.27.4)
- b. Protrusion - Objects with their leading edges between 27 inches and 80 inches above the finished floor shall protrude no more than 4 inches into walks, halls, corridors, passageways or aisles.
(ADA section 4.4.1)
- c. Accessibility - Dispensers should be mounted so the operating mechanisms are at a height less than 48 inches from the floor.
(ADA sections 4.271 – 4.27.3)

Product Placement:

How close can the ABHR dispensers be to each other?

Dispensers shall be separated from each other by horizontal spacing of not less than 48 inches (1220 mm). (2018 IFC 5705.5)

How close can the ABHR dispenser be to an electrical outlet?

The dispensers shall not be installed above, below, or closer than 1 inch (25 mm) to an electrical receptacle, switch, appliance, device or other ignition source. The wall space between the dispenser and the floor or intervening countertop shall be free of electrical receptacles, switches, appliances, devices or other ignition sources (2018 IFC 5705.5)

Is it acceptable to install the ABHR dispenser over a carpeted area?

Only in a sprinklered building. Dispensers installed in occupancies with carpeted floors shall only be allowed in smoke compartments or fire areas equipped throughout with an approved automatic sprinkler system (2018 IFC 5705.5)

Product Specification:

What is the maximum allowable level of alcohol content in an ABHR?

95% isopropyl or ethyl alcohol. (2018 IFC Section 202)

Does IFC allow Alcohol Based Hand Sanitizers to be used in Aerosol Dispensers in corridors?

Level 2 and 3 aerosols are not permitted to be in corridors. The maximum capacity of each Level 1 aerosol dispenser shall be 18 ounces (0.51 kg). (2018 IFC 5705.5)

