Alcohol-Based Hand Rub and Fire Safety

Information provided by the OSHR Safety, Health and Workers’ Compensation Division

Due to increased use of alcohol-based hand rub in the workplace to mitigate the spread of COVID-19, please review North Carolina Fire Prevention Code Chapter 57 (Flammable and Combustible Liquids).

Section 5705.5 includes the following Hand Sanitizer Dispenser specifications:

The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or II liquids shall be in accordance with all of the following:

- Maximum capacity of each dispenser shall be 68 ounces (2 liters).
- Minimum separation between each dispenser shall be 48 inches (1,219 mm).
- Dispensers shall not be installed above, below or closer than one 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, device, or other ignition source.
- Dispenser shall be mounted so that the bottom of the dispenser is not less than 42 inches (1,067 mm) and not more than 48 inches (1,219 mm) above the finished floor.
- Dispensers shall not release their contents, except when the dispenser is manually activated. Facilities shall be permitted to install and use automatically activated “touch free” alcohol.
- Based hand rub dispensing devices within the following requirements.
  - The facility or persons responsible for the dispensers shall test the dispenser each time a new refill is installed in accordance with the manufacturer’s care and use instructions.
  - Dispensers shall be designed and must operate in a manner that ensures accidental or malicious activations of the dispensing device are minimized. At a minimum, all devices subject to, or used in accordance with this section shall have the following safety features:
    - Any activations of dispenser shall only occur when an object is placed within 4 inches (98 mm) of the sensing device.
    - Dispenser shall not dispense more than the amount required for hand hygiene consistent with labeling instructions as regulated by USFDA.
    - An object placed within the activation zone and left in place will cause only one activation.
- Storage and use of alcohol-based hand rubs shall be in accordance with the applicable provisions of Sections 5704 and 5705.
- 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 in accordance with Section 903.3.1.1 or 903.3.1.2.

In addition to the provisions of Section 5705.5 where wall-mounted dispensers containing alcohol-based hand rubs are installed in corridors or rooms and areas open to the corridor, they shall be in accordance with all of the following:

- Level 2 and 3 aerosol containers are not allowed in corridors.
- The maximum capacity of each Class I or II dispenser shall be 41 ounces (1.21 liters) and the maximum capacity of each level 1 aerosol dispenser shall be 18 ounces (0.51 kg).
- The maximum quantity allowed in a corridor within a control area shall be 10 gallons (37.85 liters) of Class I or II liquids or 1,135 ounces (32.2 kg) of Level 1 aerosols not to exceed, in total, the equivalent of 10 gallons (37.85 liters) 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.
- The minimum corridor width shall be 72 inches (1,829 mm).
- Projections into a corridor shall be in accordance with Section 1003.3.3. (No more than 4 inches into the corridor width.)

Requirements for placement and capacity of pedestal mounted sanitizer stations would be the same as for wall mounted. Calculations for maximum capacity of sanitizer within a control area would include the pedestal mounted stations.