ADA and NFPA 101 Wall Projection Rules for Mounting Extinguishers

There is an important discussion currently underway about the manner in which portable fire extinguishers are installed, especially as it relates to the Americans with Disabilities Act (ADA) and health care occupancies required to comply with NFPA 101. It should be noted that ADA was adopted into law in 1990, and the wall projection criteria related to the mounting method of portable fire extinguishers hasn’t changed; therefore, it would be inaccurate to say that current practices are ADA violations. Most existing extinguishers are code compliant and new installations need to comply with the original intentions of all applicable regulations, including ADA and NFPA 101. This document is intended to clarify the requirements and dispel some misinformation that is circulating among the industry. The 2010 ADA Accessibility Guidelines (ADAAG) have two heights for installing protruding objects on walls. They relate to people with sight disabilities. The upper height is 80 inches above the walking surface to avoid a head injury from running into the object. The lower limit is 27 inches above the walking surface. This means that any protrusion that extends to a point 27 inches or less from the walking surface complies with the ADA rules regarding protrusions from walls. This rule is intended to accommodate the sight-impaired population.

A sight-impaired person with a cane can detect a protruding object mounted on a wall with a cane and walk around it. An extinguisher with the bottom at 27 inches or less off the floor can be detected with a cane. Installing the extinguisher hanger so that the bottom of the extinguisher is 27 inches or less from the finished floor is ADA compliant.

Extinguishers Installed on Hangers and in Surface Mounted Cabinets
Surface mounted extinguisher cabinets follow the same rules as extinguishers on hangers. Where the bottom of the extinguisher or the bottom of the surface mounted cabinet is 27 inches or less above the floor, the ADA 4-inch protrusion rule does not apply because ADA permits the extinguisher or cabinet to protrude any distance from the wall. Extinguishers that are not in the circulation path (a circulation path is a way of passage for pedestrian travel such as walks, hallways, ramps, stairways, landings, platform lifts and courtyards) are exempt from these ADA protrusion rules.

Extinguishers Installed in Semi-Recessed and Recessed Extinguisher Cabinets
One reason semi-recessed and recessed cabinets are selected is for aesthetics (they look nice). Another reason is where an extinguisher bottom needs to be higher than 27 inches from the floor. These cabinets are used because they comply with the ADA 4-inch protrusion rule.
NFPA 101 and Extinguishers

NFPA 101, Life Safety Code establishes rules for people to leave buildings safely during evacuations. The current rules establish a maximum protrusion limit of 4 ½ inches where extinguishers are normally installed in the path of egress (e.g. corridors). Extinguisher cabinets are commonly used for compliance. Some extinguishers installed on hangers are within the 4½inch limit, but they may pose unnecessary obstructions. Installing recessed and semi-recessed extinguisher cabinets in the path of egress achieves the desired result of removing obstructions from the egress route. These projection requirements pertain to all objects and fixtures, including extinguishers and extinguisher cabinets.

Some sales and marketing information relating to this issue may be misleading or not complete. We are providing this information to clarify the actual requirements. Your knowledge of these rules will support code compliant installations and potential savings for the end users.

Limits of Protruding Objects


March 2018