Mounting Heights for Cabinets

The National Fire Protection Association (NFPA) and ADA have created guidelines for the mounting of cabinets and extinguishers to provide safety and/or easy access to the equipment. ADA guidelines (section 307), specify reach ranges for building occupants who require access to equipment such as cabinets. Please note that since extinguishers are considered a “non-fixed” component by the ADA, they are not required to meet standards for operability.

According to the ADA Standards for operable parts (308), the cabinet handle cannot be mounted higher than 48” above finished floor (AFF) for applications which allow for a forward or side approach in a wheelchair to the object. Reach ranges for children are lower than 48”. Operable parts including alarms pulls and hardware for fire extinguisher cabinets, must be usable with one hand and without tight grasping, pinching or twisting of the wrist, or more than 5 lbs of force. Non-fixed elements, such as fire extinguishers, are not subject to the ADA standards. Fire hose cabinets and other elements used only by fire fighters are not required to comply (205, 309). See website listed below for more information. ADA website Be sure to consult your local A.H.J. before installation.

These restrictions also fall within the current National Fire Protection Association (NFPA) guidelines, which call for a maximum mounting height of 60” AFF to the top of the extinguisher. NFPA 10 - 6.1.3.8.1: Fire extinguishers having a gross weight not exceeding 40 lb (18.14 kg) shall be installed so that the top of the fire extinguisher is not more than 5 ft (1.53 m) above the floor. NFPA 10 - 6.1.3.8.2: Fire extinguishers having a gross weight greater than 40 lb (18.14 kg) (except wheeled types) shall be installed so that the top of the fire extinguisher is not more than 3 1/2 feet (10.7 m) above the floor. JL models 8000 and 5900 series valve cabinets can be ordered without the shelf to allow for lower mounting height of valve piping to meet both the NFPA 14 and ADA.

Calculating Mounting Heights for Cabinets

1. Use the “Wall Opening” columns from the most current submittal online to calculate height. Be sure to select from the correct wall opening column for “standard” or “fire-rated” openings, as they differ.
2. Select your door type from below. Cabinets with both standard pull and a Saf-T-Lok™ are mounted lower on the wall than cabinets with centered pulls.
3. Calculate where the bottom of the opening for your cabinet will need to be situated based on the formulas provided below.

<table>
<thead>
<tr>
<th>Door with Standard Pull Centered &amp; No Lock - F, S, V, D, C70, P Or Any Door with Flush Pull - Lock or No Lock</th>
<th>Door with Standard Pull &amp; Lock - E, G, W, B10, C71 and Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Pull is Centered on Door</td>
<td>Lock is Centered on Door</td>
</tr>
<tr>
<td>Lock and Flush Pull are Centered on Door and Windows are Offset on Opposite Side of Door</td>
<td>Pull is Centered 3-5/8” Above Lock</td>
</tr>
<tr>
<td>Flush Pull is Centered on Door</td>
<td></td>
</tr>
<tr>
<td>Example for 24” High Non FX Cabinet</td>
<td>Example for 24” High Non FX Cabinet</td>
</tr>
</tbody>
</table>

Calculate Bottom Edge of Wall Opening to Have Door Pull Centered at 48” AFF:

48” minus (Wall Opening Height Divided by 2).  
Example for 1017F10: 48” - (25” ÷ 2) = 35.5” AFF

Calculate Bottom Edge of Wall Opening to Have Door Pull Centered at ~ 48” AFF:

44” minus (Wall Opening Height Divided by 2).  
Example for 1017G10: 44” - (25” ÷ 2) = 31.5” AFF
Projection Requirements

JL Offers a Wide Range of Cabinet Choices that Meet ADA Guidelines. Look for Model Numbers in Blue to find cabinets that comply with ADA projection requirements.

► Cabinets with the number “2” as the fourth character of the model number such as 1012. These models project only 4” from the wall and include a flush pull as shown at right.
► All trimless, flat trim (3/8”) and corner models with any handle.
► All 1 1/4”, 1 1/2”, 2 1/2” or 3” trim models with any handle—excluding bubble cabinets.
► Clear Vu bubble cabinets with flat 3/4”, 1-1/2” and 1-1/4” trim.
► Orbit cabinets project 4” or less from the wall and fit the Orbit low profile fire extinguishers.

The federal regulations for ADA Standards for Accessible Design Section: Protruding Objects Section (307) specify that “objects projecting from walls with their leading edges between 27” and 80” (685 mm and 2030 mm) above the finished floor (AFF) shall protrude no more than 4” (100mm) maximum horizontally into the circulation path.

Please note that a surface-mounted, recessed or semi-recessed cabinet with a 4” or less projection that is installed with the bottom edge at least 27” AFF, meets ADA projection requirements. Objects with a leading edge lower than 27” can protrude any amount. See drawing at right.

These are national standards which are subject to change by local authorities having jurisdiction. ADA requirements, in particular, are constantly evolving through ongoing legislative and judicial actions. Be sure to consult your local A.H.J. before installation.

For more information: Protruding Objects Extinguishers as building fixtures

CABINET STYLES WITH 4” OR LOWER PROFILE THAT MEET ADA PROJECTION REQUIREMENTS

Trimless Recessed Flange For 5/8” Drywall or 3/4” Plaster
3/8” Flat Trim
1-1/2” Square Trim
2-1/2”, 3” Rolled Edge
4” Rolled Edge with Recessed Pull Standard