JL INDUSTRIES

MEETING CODE REQUIREMENTS WHEN INSTALLING CABINETS CONTAINING DUAL COMPONENTS SUCH AS FIRE DEPARTMENT HOSES, VALVES AND EXTINGUISHERS

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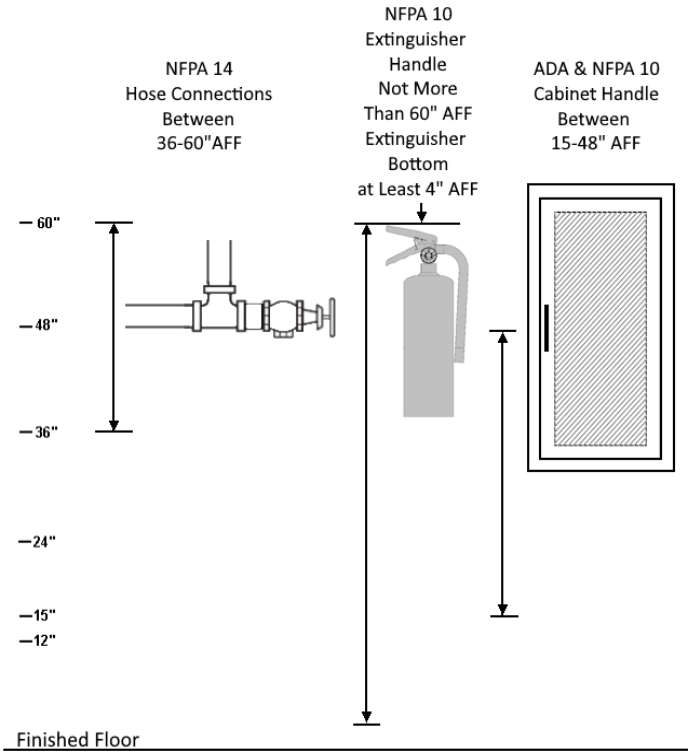
Due to overlapping NFPA, IBC and ADA recommendations, planning for the installation of cabinets containing multiple components such as fire extinguishers, fire department valves and fire hoses, can be complicated. An illustration of the differences is shown below.



Below are Excerpts from the Applicable Codes & Guidelines

IBC/IFC 2024 -International Building/Fire Code Section 906.9.1 & 906.9.3
Maximum Height of Extinguisher Handle is 60” AFF - Installation Height is the Same as NFPA10. Minimum Height of the Bottom of the Extinguisher Must be at Least 4” AFF.

NFPA 14—National Fire Protection Association 7.3 Location of Hose Connections Section 7.3.1.1 & 7.3.1.1.1
Hose Connections & Station Need to be located between 36” and 60” AFF. When Combining these Fire Fighting Components, this Factor Should be Considered First, as the Location of Plumbing is More Difficult to Change than the Height of a Cabinet.

NFPA 10 Chapter 6 - Installation of Portable Fire Extinguishers Section 6.1.3.8.1 & 6.1.3.8.3
Maximum Height of Extinguisher Handle is 60” AFF - Installation Height is the Same as IBC/IFC. Minimum Height of the Bottom of the Extinguisher Must be at Least 4” AFF.

ADA—Americans with Disabilities Section 308 Forward Reach—Mounting Heights for Cabinets
Cabinet Handle Must be Between 15” and 48” AFF. Applies Only to the Cabinet Handle, Not to Valves or Fire Extinguisher. ADA does not require the user to be able to use the extinguisher, only to open the cabinet.

Notes: This article does not address fire extinguishers in excess of 40 lbs. weight.
The information provided is for reference only. Please review code information and consult with your AHJ.

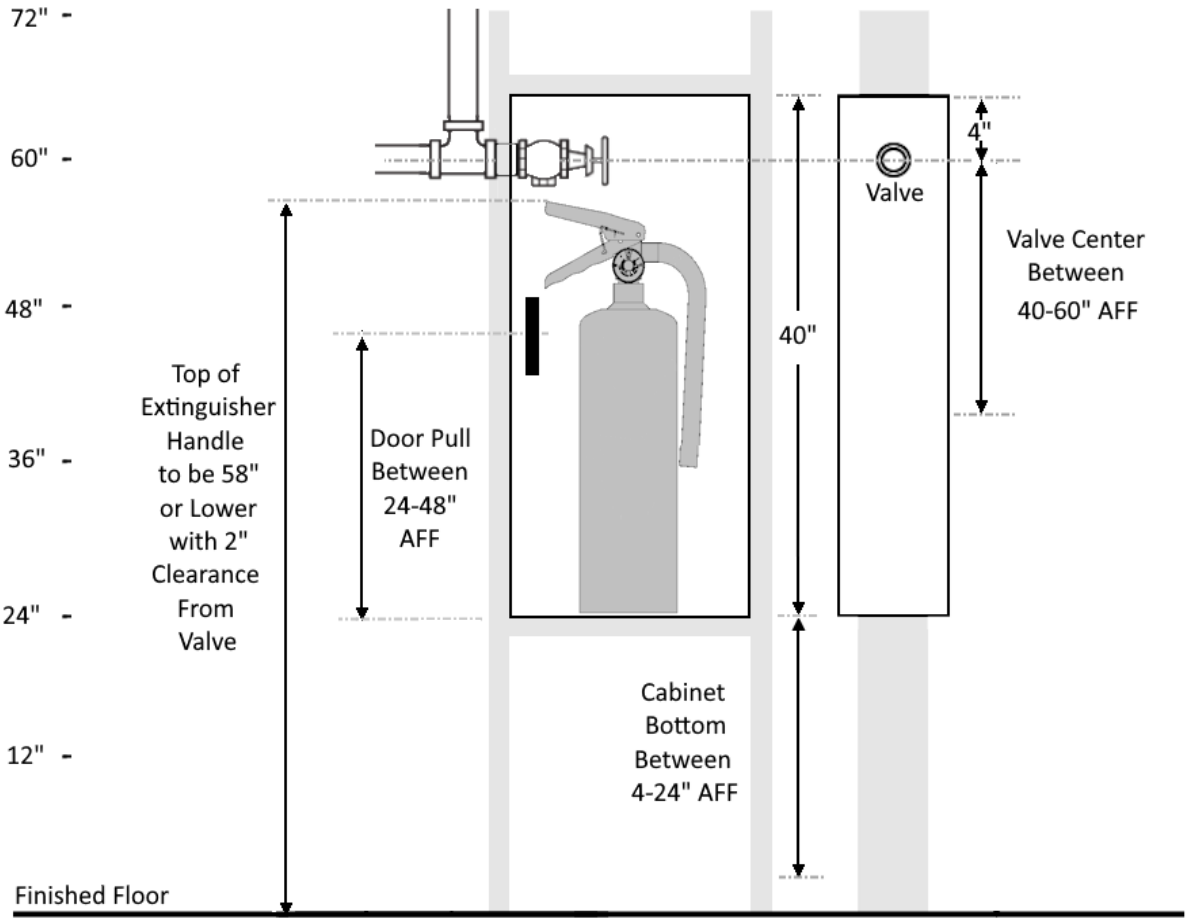
RECOMMENDATIONS FOR CROWNLINE 8000 SERIES AND EMBASSY 5900 SERIES 40" TUB HEIGHT CABINETS WITH FIRE EXTINGUISHER AND FIRE DEPARTMENT VALVE

The conflict is most evident when a fire department valve is to be installed in the same 40" cabinet as a fire extinguisher. In order to put the cabinet handle in a reachable area lower than 48" and the extinguisher handle no higher than 60", we recommend that the valve access be located at the top of the cabinet and the extinguisher at the bottom.

1. **Plan for the Plumbing to the Valve in the Cabinet to Meet NFPA 14:** This is the primary factor in locating these cabinets in the wall. Maximum height to the center of the valve for this cabinet model can be no greater than 60" and no lower than 40" above the finished floor (AFF). The cabinet can be installed with the valve center at any height between 40" and 60", but if a tall fire extinguisher is used, be sure that it does not interfere with operation of the valve—see # 2 below.

2. **Locate Fire Extinguisher Handle Position per NFPA 10:** We recommend that the top of the fire extinguisher handle be at least 2" below the valve handle when the valve is in any position, so as not to interfere with valve operation. Depending on the valve handle, it could be as high as 58" AFF. This is not required, but follows the guidelines of NFPA 14 that require the at least 2 inches (50 mm) between any part of the cabinet, other than the door and handle of the valve when the valve is in any position ranging from fully open to fully closed.

3. **Make Sure that Center of Door Pull Meets ADA Recommendations**: We offer 2 door pull styles for these models; one is 20" above the bottom of the cabinet; the other is 23-5/8" above the bottom of the cabinet. For either version, the door pull for this cabinet will be no higher than 48" and no lower than 24", which meets the ADA criteria.

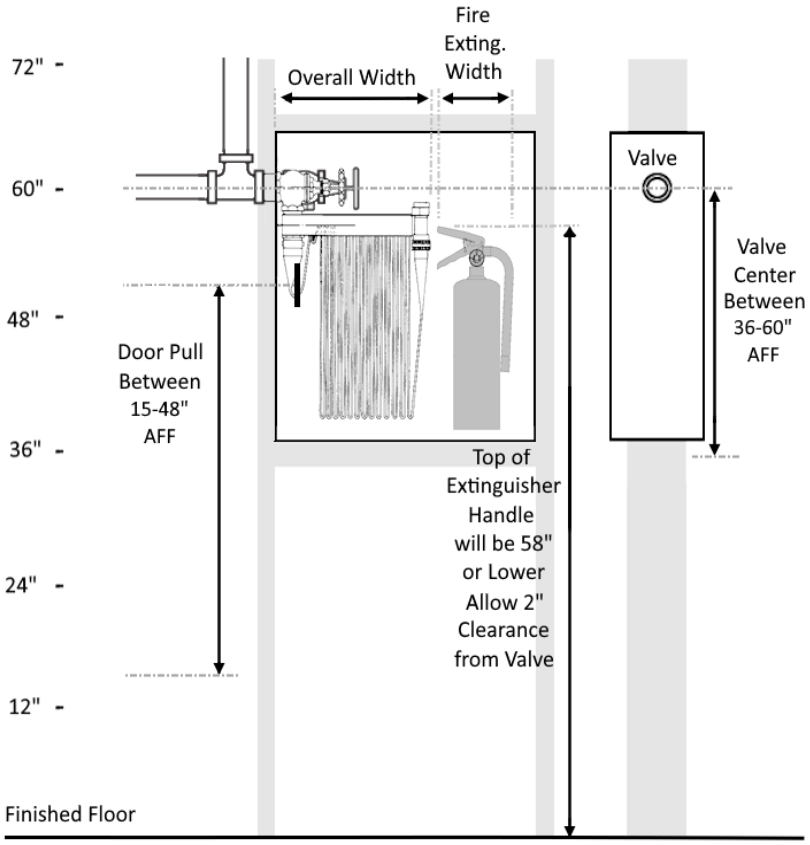


MINIMUM AND MAXIMUM CABINET INSTALLATION DIMENSIONS

CALCULATING SPACE WHEN COMBINING HOSE RACK AND EXTINGUISHER OR FIRE DEPARTMENT VALVE AND EXTINGUISHER IN SIDE-BY-SIDE CABINETS

For these side-by-side cabinets, mounting height is easier to calculate, but selecting the right cabinet size to contain the components is also a factor.

1. **Use the Hose Rack or Valve Specifications to Calculate the Space Needed:** Note: To calculate overall hose rack and valve width be sure to use the dimension from the cabinet wall to the end of the hose clip. Overall valve width should be measured from the wall to the outside of the valve handle or outlet, whichever part protrudes farthest into the cabinet. You can get those dimensions from your supplier's specifications.
2. **Find Fire Extinguisher Size:** Fire Extinguisher overall width can be found on your suppliers specifications. For instance, a typical 10 lb ABC fire extinguisher is about 7-3/4" wide including the hose.
3. **Add Component Widths Together:** Example; Add hose rack or valve overall width of 19-3/4" to the fire extinguisher width of 7-3/4" = **27.5" (**total width needed inside cabinet). Allow for an extra inch, so that the extinguisher can be easily removed from the cabinet in the event of a fire.
4. **Find the Right Cabinet:** Look at the available cabinets to see which models provide enough space for your components. For the example above, a 30" or wider cabinet would work.
5. **Calculate Where to Mount the Cabinet:** If you mount the valve center between 36" and 60", you just have to make sure that the door pull of the cabinet is between 15" and 48" AFF. Position the extinguisher so that the top of the handle is no higher than 60" AFF and allows a minimum of 2" distance from the valve handle in any position from open to closed.



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