DRINKING FOUNTAINS MUST BE ADA ACCESSIBLE

HYDRATION WHITE PAPER
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Drinking fountains are part of an extensive list of publicly accessible building elements within the current 2010 ADA (Americans with Disabilities Act) Standards for Accessible Designs created by the U.S. Access Board and enforced by the Department of Justice (DOJ). To the surprise of many, accessible drinking fountains are high up on the list, only behind public restrooms and telephones, and surmounting public parking, storage, and alarms.

In the 1990s, the first President Bush signed the Americans with Disabilities Act to ensure anyone with a disability had equal access to public accommodations and commercial facilities. From a building owner perspective, this act often called for significant and expensive reconstruction, as there is no “Grandfather Clause” allowing for existing facilities to bypass the new regulations. All new and existing facilities, regardless of age, were to comply with the new standards, from adding wheelchair ramps and upgrading bathroom stalls and sinks, to retrofitting drinking fountains to allow for wheelchair access.

The key section that pertains to drinking fountains is Part 36, Title III for the Nondiscrimination on the Basis by Disability of Public Accommodations and in Commercial Facilities. The significant requirements for proper specification and installation of this section are outlined in the remainder of this article.

Keep in mind, the ADA Standard pays little attention to able-bodied persons when looking at requirements for drinking fountain installation heights and clearances. This is because the assumption is that an able-bodied person with no stooping or standing issues can bend over and obtain a drink of water from a fountain installed at practically any height.

SIGNIFICANT REQUIREMENTS

LOCATION AND QUANTITY [Section 211]

The standard does not call out specifics for locations of drinking fountains, but they are commonly found installed near to restroom facilities for easy access to water. It is stated:

- No fewer than two drinking fountains shall be provided on each publicly accessible floor of a building:
  - One fountain for standing persons with disabilities bending or stooping, such as those with a walker or crutches
  - One fountain for those in a wheelchair

These two fountains can be next to each other by installing what is commonly referred to as a “hi-lo” drinking fountain, the high for standing persons with stooping disabilities, and the low for wheelchair accessibility. Facilities can also place the high and low units as separate units in nearby areas. This is particularly helpful in historical renovations with tight spaces and difficult to move walls.

When it comes to quantity of drinking fountains, local plumbing codes determine how many are required based on building load capacity. The ADA only stipulates that where there are drinking fountains, there must be two: one high and one low.
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If more than the minimum number of fountains are provided, 50% must be high and 50% for low. If the required or provided number of fountains is an odd number, there is flexibility in which one you can have more of, in other words, if 7 fountains are required, you can do either 4 high and 3 low, or 3 high and 4 low.

SIZE AND POSITION [Section 305]

Clear floor or ground space must be a minimum of 30" x 48" for either a forward or parallel approach. For building elements like drinking fountains, it is a key stipulation in the ADA. Many states, such as California, exceed the national standard and call for a 32" x 48" clear floor space.

ALCOVE INSTALLATIONS [Section 305.7]

Many jurisdictions prefer accessible building elements like drinking fountains to be located within an alcove, out of the path of travel.

- **FORWARD APPROACH** – 36" wide minimum where the depth exceeds 24" [Section 305.7.1]
- **PARALLEL APPROACH** – 60" wide minimum where the depth exceeds 15" [Section 305.7.2]
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TOE AND KNEE CLEARANCE [Section 306]
Space under an element between 9” and 27” above the finish floor or ground shall be considered knee clearance. The illustration at right shows how clear floor space is not just on the floor, but that it must also box-out a clear space that is 30” wide extending from the floor all the way up to the 27” inch minimum required knee clearance.

PROTRUDING OBJECTS [Section 307]
Another set of dimensional limits apply to wall-mounted elements. Protruding into corridors, paths of travel, and even areas of circulation like large lobby areas, objects with leading edges more than 27” and not more than 80” above the finish floor or ground cannot protrude more than 4” horizontally into the pathway. In an advisory from the Department of Justice (DOJ), it explains that 27” or less is detectable by a sight impaired person using a cane.

Where drinking fountains cannot be placed in an alcove, out of the path of travel, then a cane touch skirt can be used to bring the high-side fountain’s lower leading edge down to 27” above the finished floor for cane detection.
REACH RANGES [Section 308]

Reach ranges are an important consideration with the ever-increasing popularity of bottle fillers.

- **UNOBSTRUCTED REACH** – In instances where you may have a standalone wall-mounted bottle filler with no drinking fountain, the high forward reach can be 48” maximum.

- **OBSTRUCTED REACH**
  - In instances where a drinking fountain is installed and protrudes 20” or less horizontally from the wall, the high forward reach range can be at a 48” maximum.
  - In instances where a drinking fountain is installed and protrudes more than 20” – 25” horizontally from the wall, the high forward reach range can be at a 44” maximum.

Section 308 also includes reach ranges for Children’s Use, and a DOJ Advisory introduces the below table of dimensions broken down by children’s ages.

**CHILDREN’S REACH RANGES** (12 years and younger)

<table>
<thead>
<tr>
<th>Forward or Side Reach</th>
<th>Ages 3 &amp; 4</th>
<th>Ages 5 to 8</th>
<th>Ages 9 to 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (Maximum)</td>
<td>36 inches</td>
<td>40 inches</td>
<td>44 inches</td>
</tr>
<tr>
<td>Low (Minimum)</td>
<td>20 inches</td>
<td>18 inches</td>
<td>16 inches</td>
</tr>
</tbody>
</table>
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In Chapter 6, Section 602, further clarity around the required clear floor space is provided stating “Units shall have a clear floor or ground space complying with Section 305 positioned for a forward approach and centered on the unit.” This is referencing the wheelchair accessible low fountain that must be positioned for a forward approach and “centered on the unit,” not the center of the alcove. This is a key detail that is commonly misunderstood. The illustration to the right helps visualize how the clear floor space for the front approach affects installation and alcove design.

NEW ICC-ANSI STANDARD A117.1-2017
BOTTLE FILLING STATIONS

In January of 2017, a revised version of the A117.1 was published, and it incorporated bottle filling stations to the drinking fountain section referenced above. It states that a bottle filler may be provided at the high side drinking fountain used for standing persons, “provided that a bottle filling station is also located at the wheelchair accessible drinking fountain” and complies with sections 602.4.1 and 602.401.

Controls for the bottle filling stations can be hand operated or automatic, and the reach should be no higher than 48” above the surface floor. If the bottle filler is installed above a child height fountain, the reach cannot exceed 44”.

Whether it’s public buildings, airports, universities, hospitals, or commercial buildings, providing easy access to elements of all facilities by all people is the goal of the ADA Standards for Accessible Design.
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ABOUT HAWS®

The modern drinking fountain was invented in 1906 by Luther Haws, then three years later, the Haws Sanitary Drinking Faucet Company was formed in Berkeley, California. Today, Haws manufactures a range of drinking fountain models designed with ADA compliance in mind. Many of the Haws drinking fountains, bottle fillers, and supplemental products meet ADA compliance. From indoor wall-mounted to outdoor pedestal fountains, Haws continues to provide ADA compliant hydration solutions.

For more information regarding ADA compliant hydration products, visit www.hawsco.com.