ION Complies with ADA Requirements

Technical Review

To comply with the regulations of the American with Disabilities Act (ADA), Natural Choice Corporation evaluated all applicable guidelines and incorporated the requirements into the design of the ION Drinking Water Appliance. In all cases, the ION Drinking Water Appliance complies with the ADA regulations.

For the past few years, businesses all across the U.S., including Fortune 500 companies, have used the ION Drinking Water Appliance to replace Drinking Fountains.

For this reason, we have prepared this guide to explain how the ION complies with ADA requirements and how it is different from a traditional Drinking Fountain.

Difference between ION and Drinking Fountains

The ION Drinking Water Appliance is not a Drinking Fountain, where users access a water stream with their mouths. The regulations define a Drinking Fountain to include a "spout that directs the water flow in a trajectory that is parallel or nearly parallel to the floor" (Section 4.15.3). The intent is to allow all individuals to place their mouth in the Drinking Fountain water stream and the source of that water stream can be no higher than 36", to allow access from a wheelchair.

Because the ION Drinking Water Appliance is designed for cups only, the applicable ADA requirements are Reach Requirements; i.e. to dispense water by pressing the Touch Panel on the ION.

Compliance with ADA Reach Requirements

Reach Requirements are found in Section 4.2 "Space Allowance and Reach Ranges", which states the maximum Forward Reach shall be 48" and the maximum Side Reach shall be 54".

Locating the ION according to ADA Reach Requirements:

1. If the ION is placed on a countertop (standard height is 36") the Touch Panel to dispense water requires a reach of 51", well below the 54" ADA requirement for Side Reach.

2. If the ION is placed on a Base Cabinet (i.e. to replace a Drinking Fountain) the Touch Panel to dispense water requires a reach of 50", well below the 54" ADA requirement for Side Reach.

IMPORTANT – be sure that the ION is located to allow Side Reach access from a wheelchair.
4.2 Space Allowance and Reach Ranges.

4.2.5 Forward Reach. If the clear floor space only allows forward approach to an object, the maximum high forward reach allowed shall be 48 in (1220 mm). The minimum low forward reach is 15 in (380 mm). If the high forward reach is over an obstruction, reach and clearances shall be as shown in Fig. 5(b).

(a) High Forward Reach Limit

(b) Maximum Forward Reach over an Obstruction

NOTE: x shall be ≤ 25 in (635 mm); z shall be ≥ x. When x < 20 in (510 mm), then y shall be 48 in (1220 mm) maximum. When x is 20 to 25 in (510 to 635 mm), then y shall be 44 in (1120 mm) maximum.

Fig. 5
Forward Reach
4.2.6 Side Reach. If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allows shall be 54 in (1370 mm) and the low side reach shall be no less than 9 in (230 mm) above the floor. If the side reach is over an obstruction, the reach and clearances shall be as shown in Fig 6(c).
ADA Guidelines
(as reprinted from the Code of Federal Regulations, 28 CFR Part 36)

5.8 Vending Machines and other Equipment
Spaces for vending machines and other equipment shall comply with 4.2 and shall be located on an accessible route.

A4.27 Controls and Operating Mechanisms
A4.27.3 Height. Figure A8 further illustrates mandatory and advisory control mounting height provisions for typical equipment.

Electrical receptacles installed to serve individual appliances and not intended for regular or frequent use by building occupants are not required to be mounted within the specified reach ranges. Examples would be receptacles installed specifically for wall-mounted clocks, refrigerators, and microwave ovens.