Are Your Patio Doors ADA-Compliant?

Accessibility Isn’t Just the Law; It’s the Right Thing to Do

BY RICHARD RINKA

The Americans with Disabilities Act (ADA) has prompted several government agencies to publish regulations and guidelines requiring that public buildings and multi-family dwellings (buildings consisting of four or more dwelling units) include certain features of accessible design, all of which reference ICC/ANSI A117, Accessible and Usable Buildings and Facilities. The latter identifies three types of dwelling or sleeping units. Each may include balconies, patios or terraces. These are classified as Type B units (often called “adaptable” units), Type A units and “Accessible” units, which are fully wheelchair-accessible.

Obviously, the major elements of buildings involved in accessibility are doors. What may not seem so obvious at first, given their inherently wide openings and overall expanse, are requirements for sliding glass doors.

In particular, when providing or installing sliding glass doors in new multi-family residential units, or those undergoing significant renovation, manufacturers, specifiers and installers should take the following into account.

Clearance

Doors must have a minimum clear opening width of 32 inches for wheelchair access, with a maximum of 48 inches. It is widely assumed that since sliding glass door panels are 36 inches, clearance will not be an issue; however, due to frames and hardware, the clean opening width may not exceed the minimum clear opening width of 32 inches. In most cases, in order to meet the minimum clear opening requirement, the overall width of the sliding glass doors will be 6 feet, 6 inches. All doors must also have a minimum clear-opening height of not less than 78 inches (measured from the top of the threshold to the bottom of the stop).

Thresholds

Exterior sliding door tracks must not exceed ¾ of an inch in height. Note that this is ¼-inch higher than the maximum allowed for swinging door thresholds. Thresholds higher than ¼ of an inch must be beveled with a slope no greater than 1:2.

For conventional sliding glass doors, a ¾-inch track height can dependably achieve a water test pressure of only four pounds per square foot (psf). Aftermarket ramps are available to help address unique conditions.

Note that while Type B units allow for a dropped patio, patios within Type A units must provide an accessible threshold. A 4-inch exterior step-down is permissible to enhance water resistance in Type B units, subject to local building official approval, if permeable decking can be added within half an inch of the interior floor level for accessibility.

Door Opening Force

The force for pushing or pulling open an interior hinged or sliding door (other than a fire door) must be no greater than 5 pounds. The maximum force refers to the continuous application of force necessary to maintain motion and fully open a door, not the initial force needed to overcome the inertia of the door.

However, ADA standards do not specify the opening force for exterior doors, although some state and local codes may pose requirements.

For accessible sliding glass doors, automatic, motorized or mechanical-assist “add-ons” are available. Automation isn’t required by the ADA, but is recommended because it solves compliance issues. For example, installers do not have to meet ADA standards for hardware type, maneuvering clearance or push/pull force.

Hardware

Door hardware must not require more than five pounds of force to operate. It must also be operable with one hand and without tight grasping, pinching or twisting of the wrist. Accessible hardware must be located and detailed in a way that meets “reach” limitations.

Maneuvering Space

Maneuvering clearances provide needed space at sliding doors to provide easier passage for the mobility-impaired. The applicable spaces are defined so that individuals using wheelchairs or other mobility devices will be able to:

- Approach the door;
- Reach the door or door hardware;
- Maneuver through the doorway; and
- Close the door behind themselves.

In all cases, the maneuvering space should have a level surface, that is, a maximum slope of 1:48.

Building owners and general contractors are advised to work with an experienced door systems contractor or manufacturer that understands the ADA standards.

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