

Tech Note #5: ADA (American Disabilities Act)

The Americans with Disabilities Act (ADA) requirements which affect many public and private commercial buildings became effective January 26, 1992. These ADA requirements are intended to ensure equal access to all persons regardless of physical disabilities. The following window and door hardware related guidelines may be applied to all new construction and remodeling (after 1/26/92).

Height of Operating Mechanisms

Hardware for window or door operation should not be higher than 48 inches above the finished floor surface (see fig. #1). Some allowances can be made for window hardware height depending on parallel approach clear floor space (see fig. #2) which can increase the maximum side reach height to 54 inches (see fig. #3).

AmesburyTruth has developed many products which allow operating height to be reduced to help meet these guidelines. In addition to the standard tie bars available for our casement locks, we have introduced new Multi-Point Locking Systems. Both of these products allow lock activation from a low point on the window frame. These products, as well as our swinging and sliding door hardware, help manufacturers to meet these requirements with a choice of style and price.

Hardware Operation

The controls and operating mechanisms used on windows and doors shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be not greater than 5 lbs. force (22.2N).

Acceptable hardware designs for swinging doors include lever-operated or push type mechanisms as well as U-shaped handles. The opening/closing force of swinging doors should be less than 5 lbs. (22.2N). When sliding doors are fully open, operating hardware shall be exposed and usable from both sides and should open/close with a maximum force of 5 lbs. (22.2N).

A number of our products are capable of helping manufacturers meet the requirements of Sec. 309.4 *- they can be operated with one hand, do not require tight grasping,

pinching or twisting of the wrist, and can be activated with 5 pounds of force or less. For example, AmesburyTruth's #11403 ADA Operator handle for Maxim and the #14267 or #14268 for Encore product line has a larger diameter and longer contour shape to make it easier for a person with limited mobility to crank open/close a casement or awning style window. The operator has been tested utilizing a 5-pound torque test inspection tool to confirm that it can be activated with 5 pounds of force or less.

Other products that AmesburyTruth offers to help you achieve ADA requirements are our many styles of window hinges. When these hinges are properly selected and applied on a casement or awning window they will assist you in meeting this force requirement.

The performance of these products, and their ability to meet the applicable ADA standards, are affected by a number of variables. These variables include, but are not limited to, the type of window, construction and size of the window on which it is used, the installation of the window, hardware positioning, potential sash sag, and weather stripping. While AmesburyTruth can assist you in your selection of the appropriate ADA product, AmesburyTruth cannot guarantee that its performance in the field will be ADA compliant because of these variables. We recommend that you perform your own testing to determine whether your product as manufactured and assembled complies with the ADA standards.

AmesburyTruth is committed to addressing the needs and concerns of our customers. If you find that you have other questions regarding this issue, please contact our Technical Service Department.

AmesburyTruth's Sentry II product line, which includes both motorized window operation and motorized locking, will permit even the largest windows to meet the requirements. Sliding doors mounted on AmesburyTruth's ball bearing roller assemblies and operated with AmesburyTruth's Patio Door Handles and support hardware should help manufacturers meet ADA standards if properly selected and applied.

Note: The force guidelines do not apply to the force required to retract latch bolts or disengage other devices that may hold the door in a closed position.

Manually Operated Windows

Windows requiring pushing, pulling, or lifting to open (for example: double hung, sliding, casement, and awning units without cranks) should require no more than 5 lbs. of force (22.2N) to open or close.

Handles and lifts are also available to assist the person opening/closing the window.

To Obtain Further Information



The above information deals with only hardware related issues. More information is available in the ADA guidelines. For copies of the Americans with Disabilities Act guidelines, please call:

ADA Office Information Line: 1-202-514-0301

or write:

Americans with Disabilities Act

Civil Rights Division

U.S. Department of Justice

Washington, DC 20530

***Americans with Disabilities Act, 309.4 Operation. Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 pounds (22.2 N) maximum.**

