

# Hardware Highlights

## ANSI/BHMA A156.3-2008 American National Standard for Exit Devices

Standard ANSI/BHMA A156.3-2008 establishes requirements for exit devices and trim, automatic and self-latching flush bolts, removable mullions, coordinators, and carry-open bars. Functions and types are described and numbered. For further information, consult the full standard, ANSI/BHMA A156.3 for Exit Devices.

BHMA has created this series of *Hardware Highlights* to provide useful, accessible information about builders hardware for anyone with an interest in devices that hang, control, secure, and trim the doors. BHMA is the trade association which represents almost all of the North American manufacturers of builders hardware. One of its main activities since 1983 has been the development and maintenance of ANSI-approved standards for 35 separate product categories.

**Product Performance:** Purchasers of exit devices, flush bolts, and door coordinators certified to A156.3 (<http://buildershardware.com/cpd>) can be assured products will perform to their expectations.

Below are an explanation and some examples of the evaluations conducted for certification:

OPERATION	DURABILITY	SAFETY & SECURITY	APPEARANCE
Both opening and closing forces are defined and measured to ensure the exit device functions in a manner compatible with the human operator and associated hardware, such as door closers. Opening force tests are specified for the inside actuating bar and the outside trim.	Building products are expected to last a long time, and builders hardware is no exception. Grade 1 exit devices are subjected to 500,000 cycles with no loss of operation. Many additional tests verify the strength and durability through pushing, turning, and pulling at the trim.	Outside levers and thumb pieces must withstand heavy forces and prohibit entry. There is also a requirement that the latch mechanism withstand a 400 pound load in the direction of egress without allowing the door to swing open.	An additional duty of builders hardware is to be aesthetically attractive and stay that way. Resistance to corrosion, chemicals, abrasion, and sunlight are all considered in an array of finish tests, providing confidence in the architectural metals and coatings.

**Building Codes** Builders hardware provides several attributes that are essential to building safety and performance, including egress and fire protection. Exit devices play an essential role in ensuring the safe egress from assembly occupancies. BHMA certification includes compliance with UL 305 for Panic Devices.

**Accessibility** There are various types of builders hardware which meet the ADA and A117.1 requirements for operable parts to be “operable with one hand and shall not require tight grasping, pinching or twisting of the wrist.” With their broad actuating bars, exit devices meet these criteria, along with an operating force limit of 15 pounds, which has been shown to be suitable for accessible applications.

**Sustainability** Exit devices contribute to building sustainability through their verified durability, as well as material characteristics such as recycled content and recyclability. The reliable closing and sealing of openings can also contribute to energy conservation. BHMA has developed Product Category Rules, which will further define sustainability requirements and guide life cycle assessments and environmental performance declarations.

**Specifying Numbers:** Another significant contribution of standards for product specification is a numbering system for exit types and function. Please consult A156.1 for the full list; an example is provided here:

**Type 2: Surface Vertical Rod Exit Device**

Outside Trim Function 10: Entrance by knob or lever. Inside or outside key locks or unlocks knob or lever. Outside key releases latch.

