

# Hardware Highlights



## ANSI/BHMA A156.32-2014 American National Standard for Integrated Door Opening Assemblies

A156.32-2014 establishes requirements for Integrated Door Opening Assemblies with steel, wood and fiberglass reinforced doors which are supplied to the customer with integral hardware. At a minimum, they shall include a door, frame, hanging device, and latching mechanism. For further information, consult the full standard, ANSI/BHMA A156.32 for Integrated Door Opening Assemblies.

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 integrated door opening assemblies certified to A156.32 (<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
Attributes such as the force to retract the latch and force to close the door are measured to ensure ease of egress and smooth closing. The forces to open the door vary by the type of hardware. For example: lever operated locks must open with a maximum torque of 28 in-lbf.	Building products are expected to last a long time, and builders hardware is no exception. Grade 1 integrated door hardware assemblies, for example, must pass a rigorous test through one million cycles of opening and closing including twist tests to ensure door integrity.	Locksets are counted on to allow carefree operation to those who are authorized, and ensure a high degree of security from the outside. Several aggressive tests are specified, including a door impact test with Two blows of 50 ft-lbf plus two blows of 90 ft-lbf for Grade 1.

**Building Codes** Builders hardware provides several attributes that are essential to building safety and performance, including egress and fire protection. BHMA locksets are designed to comply with all applicable requirements. For example, hardware for fire doors is evaluated and listed to UL 10C by an accredited third-party testing laboratory.

**Accessibility** There are various types of trim 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.” Lever or paddle type trim meets these stipulations, while knob trim should be avoided for accessible routes. In addition, BHMA certified hardware must comply with the operational forces in their respective standards, which have been shown to be suitable for accessible applications.

**Sustainability** Integrated door hardware assemblies 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.

**Function Numbers:** Another significant contribution of standards for product specification is a numbering system for lock function. Please consult A156.32 for the full list; an example is provided here:

Example: Q1221 denotes a grade one integrated door opening assembly with a pair of single acting wood doors with a cylindrical lock.

To purchase a copy of any BHMA Standard, go to [www.buildershardware.com](http://www.buildershardware.com) or call 800-699-9277.  
This document is not a substitute for the full standard. Refer to the entire standard for full information.