

# Hardware Highlights



## ANSI/BHMA A156.23-2010 American National Standard for Electromagnetic Locks

Standard ANSI/BHMA A156.23-2010 establishes requirements for electromagnetic locks and includes cyclical, dynamic, operational, strength and finish tests. This product is used for access control. For further information, consult the full standard, ANSI/BHMA A156.23 for Electromagnetic Locks.

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 bored locks certified to A156.23 (<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:

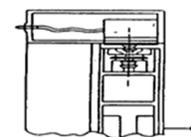
DURABILITY	STRENGTH & SECURITY	ELECTRICAL TESTS	APPEARANCE
Building products are expected to last a long time, and builders hardware is no exception. Grade 1 electromagnetic locks, for example, must withstand one million cycles of opening and closing while continuing to meet electrical and strength requirements.	Holding force and impact resistance are among the tests performed to ensure the locks are capable of providing the required strength and security. The product is rated in increments; holding force, for example, starts at 500 pounds and continues through 2000+.	Five separate electrical tests are conducted to address the reliability and operation of the product: residual magnetism, over voltage, inductive kickback, dielectric voltage withstand, and temperature rise.	An additional duty of builders hardware is to be aesthetically attractive and stay that way. Electromechanical locks are required to pass salt spray testing and humidity testing per ANSI/BHMA A156.18-2006 for Materials and Finishes.

**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.

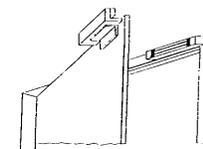
**Sustainability** Locksets contribute to building sustainability through their verified durability, as well as material characteristics such as recycled content and recyclability. The reliable closing and sealing of openings can also contribute to energy conservation. BHMA has developed Product Category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

**Type Numbers:** Another significant contribution of standards for product specification is a numbering system for lock function. Please consult A156.23 for the full list; an example is provided here:

Shear lock is mortised in header. Armature recessed in top of door. For out swinging doors. Lock and armature are in shear (parallel) contact when locked. E08571



Lock mounted on face of header. Armature mounted on pull side of door with an angle bracket. E08531



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This document is not a substitute for the full standard. Refer to the entire standard for full information.