

The Builders Hardware Manufacturing Association
BHMA Hardware Highlights
For
ANSI/BHMA A156.25-2013
ELECTRIFIED LOCKING SYSTEMS

ANSI/BHMA A156.25-2013 establishes requirements for the locking devices, whose mechanical aspects are described in the applicable BHMA product standards; in addition, where the input or controlling device or both are an integral part of the locking device, they shall also be tested with the locking device covered by this standard. For further information about electrified locks, consult the full standard, ANSI/BHMA A156.25 for Electrified Locking Systems.

BHMA has created this series of *Hardware Highlights* to provide useful, accessible information about Builders Hardware for architects, specifiers, builders, building code officials – anyone with an interest in the devices that hang, control, secure, and trim the doors.

BHMA is the North American Trade Association, which represents almost all the North American manufacturers of Builders Hardware. One of their main activities since 1983 has been the development and maintenance of ANSI-approved standards for 35 separate product categories.

Product Performance – Purchasers of Electrified Locks certified to A156.25 (<http://www.buildershardware.com/cpd>) can be assured their products will perform to their expectations.

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

OPERATION	DURABILITY	ELECTRICAL
Reliable operation of the electrified locking device is covered through a set of tests including under voltage, over voltage, coil over voltage, followed by a slam cycle test of 10,000 cycles, then a re-check that the device operates properly. There is also a variable ambient temperature test over a range of alternating temperatures.	In addition to meeting the strength and durability test in the associated mechanical locking standard (i.e. A156.13 for Mortise Locks), the standard requires that mounting on a mechanically operated test door and performing the normal electrical operation for 50% of the respective mechanical lock standard.	The electrified locking devices are subjected to an array of electrical tests including applicable selections from UL 1034 Fifth Edition Standard for Burglary Resistant Electric Locking Mechanisms. A few to illustrate: corrosion protection, over-current protection, humidity, strain relief, and production line grounding continuity

Building Codes: Builders hardware provides several attributes that are essential to building safety and performance, including egress and fire protection. BHMA electrified locks are designed to comply with all applicable requirements.

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 closer types. Please consult A156.25 for the full list; an example is provided here:

Three sets of characters are used to define the product:

For example **L1 – A156.13 F05 G1 – E05, E07**

L denotes Locked Outdoor Type, **1** denotes High Voltage Wired

The **second set of characters** contains the mechanical product standard number, function (where applicable) and grade (example **A156.13 F05 G1**)

The **third set of characters** are used to designate additional specialized electrical functions E05 Electric Locking (Fail Safe), E07 Cylinder Monitoring