

ANSI/BHMA A156.31-2019

Revision of ANSI/BHMA A156.31-2013



STANDARD
FOR
ELECTRIC STRIKES AND FRAME MOUNTED ACTUATORS



SPONSOR
BUILDERS HARDWARE MANUFACTURERS ASSOCIATION, INC.

AMERICAN NATIONAL STANDARDS INSTITUTE
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AMERICAN NATIONAL STANDARD

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FOREWORD (This Foreword is not a part of ANSI/BHMA A156.31)

The general classification of builders hardware includes a wide variety of items which are divided into several categories. To recognize this diversity, a sectional classification system has been established. Auxiliary Locks and Associated Products is one such section and this Standard is the result of the collective efforts of members of the Builders Hardware Manufacturers Association, Inc. who manufacture this product. The total Product Standards effort is, therefore, a collection of sections, each covering a specific category of items.

Performance tests, and where necessary, dimensional requirements, have been established to ensure safety, security and stability to which the public is entitled. There are no restrictions on design, except for those dimensional requirements imposed for the reasons given above. It is also required that locks fit certain cut-out dimensions.

This Standard is not intended to obstruct, but rather to encourage the development of improved products, methods, and materials. The BHMA recognizes that errors will be found, items will become obsolete, and new products, methods, and materials will be developed. With this in mind, the Association plans to update, correct, and revise these Standards on a regular basis. It shall also be the responsibility of manufacturers to request such appropriate revisions.

In most cases, products have been described in grade levels related to performance and security. Choice of grade and specific product are made on the basis of utility, aesthetics, security objectives and end use desired. When two different graded products are combined in an assembly, the whole assembly carries the lower grade of the products.

The BHMA numbers which indicate types of hardware do not identify grade, finish, or design and are not intended to be used without necessary supplementary information. Individual manufacturer's catalogs are consulted.

Users of this Standard consult applicable local building codes as to requirements affecting the functions of locks used on fire doors and doors within a means of egress. Some communities require the use of exterior door locks having a dead bolt with a 1 in. (25.4 mm) projection for the purpose of providing greater security. Only functions compatible with the requirements of the applicable building codes are used.

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1. SCOPE

1.1 ANSI/BHMA A156.31 establishes requirements for Electric Strikes and Frame Mounted Actuators, and includes operational and finish tests.

1.2 Tests described in this Standard are performed under laboratory conditions. In actual usage, results vary because of installation, maintenance and environmental conditions.

2. DEFINITIONS

2.1 **Continuous Duty** A characteristic of a product that is rated for being powered constantly.

2.2 **Electric Strike** An electro-mechanical device used in place of a standard strike for the purpose of allowing a locked door to be opened by push or pull without manual lock operation.

2.3 **Fail Safe** Locking an output device with the application of power and having the device unlock when the power is removed. Also called fail unlock, reverse action, and power locked.

2.4 **Fail Secure** Unlocking an output device with the application of power and having the device lock when the power is removed. Also called failed locked, non fail safe, power to unlock, and standard action.

2.5 **Fail Maintained** An output device to which the removal of power does not change the locked or unlocked mode.

2.6 **Frame Mounted Actuator** A frame mounted mechanism, which manipulates a component of a cooperating locking mechanism in a door in response to signals from an input or controlling device.

2.7 **Intermittent Duty** A characteristic of a product that is not rated for continuous powered operation.

2.8 **Keeper** The mechanical component of an electric strike that holds or releases the latchbolt or deadbolt. Also called electric strike bolt, jaw, gate, or lip.

2.9 **Monitor Switch** One or more sensors that indicate various latch or door and latch conditions.

3. PRODUCT FEATURES

3.1 **Electric Strikes** Some typical features include multiple voltages, monitor switches, fail safe or fail secure operation, field adjustability, AC or DC operation, special dead latch accommodations, lip extension, and hand reversibility. Consult individual manufacturers' catalogs.

3.2 **Frame Mounted Actuators** Some typical features include multiple voltages, monitor switches, fail safe or fail secure operation, field adjustability, and AC or DC operation. Actuator depths are permitted to vary to allow for different frame configurations. Consult the individual manufacturers' catalogs.

4. GENERAL REQUIREMENTS

4.1 **Failure** of any test results in complete failure to the standard.

4.2 **Grading** Locking devices are available in various performance grades. Electrified systems, which can be built from the combination of various products or devices, shall carry the least stringent BHMA grade of the device used in the system.