

**ANSI/BHMA A156.30-2003**



**AMERICAN NATIONAL STANDARD  
FOR  
HIGH SECURITY CYLINDERS**



**SPONSOR**

**BUILDERS HARDWARE MANUFACTURERS ASSOCIATION, INC.**

**AMERICAN NATIONAL STANDARDS INSTITUTE, INC.  
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FOREWORD (This Foreword is not a part of ANSI/BHMA A156.30)

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. High Security Cylinders 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 some hardware items fit certain specified cutout 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 grades related to performance and security. Choice of grades and specific product is made on the basis of utility, aesthetics, security objectives and end use desired. This Standard describes products in terms of High Security *Levels* rather than *Grades*.

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 manufacturers' 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.

#### ORDERING INFORMATION

BHMA standards, publications, and matchplates can be ordered at:

[www.buildershardware.com](http://www.buildershardware.com) - Search entire catalog, order printed or electronic versions, and download electronic versions right to your computer.

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To find products that are third-party certified to this standard and other ANSI/BHMA standards please visit

[www.buildershardware.com](http://www.buildershardware.com).

The Builders Hardware Manufacturers Association (BHMA) Certification Program was developed as a means for producers of builders hardware to indicate compliance with American National Standards sponsored by BHMA. Participating manufacturers certify compliance with the standards based on a continuing program of passing the prescribed tests. Third party testing is performed by a Nationally Recognized Test Laboratory. The program is open to all manufacturers of builders hardware whether or not they are members of BHMA.

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## 1. SCOPE

1.1 This standard includes security performance based requirements for both mechanical and electrified high security cylinders. For the purpose of this standard, High Security Cylinder includes mechanical lock cylinders, electromechanical cylinders, and the electronic lock sub assemblies that are analogous to the cylinder assemblies. Cylinders include their keys or electronic credentials; their retainers (mechanical pins, levers, discs) or electronic control device; and their cylinder tailpiece or cam or electronic output port.

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

### 1.3 Levels and Grades

1.3.1 **Levels** Manufacturers shall indicate the high security level of their cylinders. Cylinders shall meet all the tests for their level listing, indicated in accordance with Section 8. Levels indicate special security features and are separate from Grades. A lockset mated with a cylinder having no Grade listing, even though the cylinder has a high security level is considered ungraded.

1.3.2 **Grades** To obtain cylinder *Grade* listings, and for the mating lock to retain its Grade listing, cylinders must be tested in accordance with ANSI/BHMA A156.5 for Auxiliary Locks and Associated Products. Assemblies take the grade of the lowest graded component. Electrified products shall also meet the requirements of A156.25 for Electrified Locking Devices to obtain a grade listing.

## 2. DEFINITIONS

2.1 **Audit Trail** A retrievable, recorded chronology of the individual valid keys inserted into the electrified cylinder.

2.1 **Biometrics** A method to identify a user from within a population of possible users, according to a characteristic, or multiple characteristics which can be reliably associated with a particular individual, without an identity being explicitly claimed by the user.

2.3 **Cam** In this Standard, a component fastened to the back of a mortise cylinder plug or mortise cylinder turn. When rotated, it engages the lock mechanism.

2.4 **Controlling Device** A device which processes the input signal and gives instructions to the output device to perform certain functions.

2.5 **Credentials** The key media containing the combination code that identifies a user.

### 2.6 Cylinders

2.6.1 **Cylinder Body** The portion of a cylinder that surrounds the plug and contains the tumbler mechanism. The cylinder body is sometimes called a cylinder shell.

2.6.2 **Cylinder Guard** That portion that surrounds the otherwise exposed portion of a cylinder to protect the cylinder from wrenching, cutting, pulling or prying.

2.6.3 **Cylinder Housing** The portion of a lock that surrounds and retains the cylinder body. It is often part of a lock case.

2.6.4 **Cylinder Plug** A component of the cylinder within the body, which is actuated when the correct key is used.