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AMERICAN NATIONAL STANDARD

FOR

INTERCONNECTED LOCKS



SPONSOR

BUILDERS HARDWARE MANUFACTURERS ASSOCIATION, INC.

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AMERICAN NATIONAL STANDARD

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FOREWORD (This Foreword is not a part of ANSI/BHMA A156.12)

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. Interconnected Locks is one such section and this Standard is a 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, material and dimensional requirements have been established to insure safety and stability to which the public is entitled. There are no restrictions on design except for those dimensional requirements imposed for reasons given above.

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.

In most cases, products have been described in grade levels related to performance. Choice of grade and specific product are to be made on the basis of utility, aesthetics, security objectives and end use desired.

The BHMA numbers which indicate functions of interconnected locks 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 mean of egress. Some communities require 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 This Standard establishes performance requirements for Interconnected Locks and includes operational tests, strength tests, security tests, cycle tests, finish tests and dimensional criteria.
- 1.2 Tests described in this Standard are performed under laboratory conditions. In actual usage, results vary because of installation, door and frame construction, maintenance and environmental conditions.
- 1.3 When interconnected locks are used in fire door assemblies, they shall have been tested and listed for use in fire doors by a Nationally Recognized Independent Testing laboratory and shall be under an inplant follow-up inspection service.
- 1.4 **Grade Qualifications** (Also See Appendix A.) Manufacturers shall indicate the Grade level of their locks. Locks shall meet all tests for their grade listing. A Grade 1 lock shall meet all Grade 1 criteria, a Grade 2 lock shall meet all Grade 2 criteria, and a Grade 3 lock shall meet all Grade 3 criteria in each classification.

2. **DEFINITIONS**

2.1 **Backset** The distance from the edge of the door measured at the centerline of the door thickness to the cross bore at the center.

2.2 Bolts

- 2.2.1 **Dead Bolt** A lock component having an end, which protrudes from, or is withdrawn into, the lock front by action of the lock mechanism. When the door is closed and the dead bolt thrown, it extends into a hole provided in the strike, locks the door, and does not retract with end pressure.
- 2.2.2 **Latch Bolt** A lock component having a beveled end which projects from the lock front in its extended position, but is forced back into the lock case by end pressure or drawn back by action of the lock mechanism. When the door is closed, the latch bolt projects into a hole provided in the strike, and holds the door in a closed position.
- 2.2.3 **Dead Locking Latch Bolt** A type latch bolt incorporating a plunger which, when depressed, automatically locks the projected latch bolt against return by end pressure. Also called dead latch.
- 2.2.4 **Deadlocking Latchbolt Plunger** A component of the latch bolt which, when actuated, automatically locks a projected latch bolt against return by end pressure.

2.3 Cylinders

- 2.3.1 **Cylinder** The subassembly of a lock containing a plug with a keyway and cylinder body with tumbler mechanism.
- 2.3.2 **Cylinder Body** The portion of a cylinder that surrounds the plug and contains the tumbler mechanism.
- 2.3.3 **Cylinder Plug** A component of the cylinder within the body which is actuated when the correct key is inserted.
- 2.3.4 **Interchangeable Core Cylinder** A cylinder that is removable from the lock with a designated key without disassembly of the lock.
- 2.3.5 **Cylinder Guard** That portion that surrounds the otherwise exposed portion of a cylinder to protect the cylinder from wrenching, cutting, pulling or prying.
- 2.3.6 **Cylinder Housing** The portion of a lock that surrounds and retains the cylinder body. It is often part of a lock case.