



Standard Test Methods for Detention Locks for Swinging Doors¹

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1. Scope

1.1 These test methods cover the apparatus, procedures, and acceptance conditions for evaluating the normal operational performance and the performance characteristics under assault conditions of locks used in swinging door assemblies in detention and correctional institutions. Thus, they give only an indication of the performance characteristics of locks in actual service. Such variables as installation and maintenance conditions are not considered.

1.2 It is the intent of these test methods to help ensure that detention locks perform at or above minimum acceptable levels to control passage to unauthorized or secure areas, to confine inmates, and to delay and frustrate escape attempts and resist vandalism. It is recognized that in order to meet the intent of these test methods, door and frame assemblies must be compatible with the level of performance required by Test Methods F1450.

1.3 The values stated in inch-pound units are to be regarded as the standard. The values in parentheses are for information only.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

E152 Test Method for Fire Tests Of Door Assemblies (Withdrawn 1995)³

F1450 Test Methods for Hollow Metal Swinging Door Assemblies for Detention and Correctional Facilities

¹ These test methods are under the jurisdiction of ASTM Committee F33 on Detention and Correctional Facilities and are the direct responsibility of Subcommittee F33.04 on Detention Hardware.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ The last approved version of this historical standard is referenced on www.astm.org.

F1592 Test Methods for Detention Hollow Metal Vision Systems

F1643 Test Methods for Detention Sliding Door Locking Device Assembly

F1758 Test Methods for Detention Hinges Used on Detention-Grade Swinging Doors

F1915 Test Methods for Glazing for Detention Facilities

2.2 ANSI Standard:⁴

ANSI A156.5 Auxiliary Locks and Associated Products

2.3 UL Standards:⁵

UL-437 Standard for Key Locks

UL-1034 Standard for Burglary Resistant Electric Locking Mechanisms

3. Terminology

3.1 Definitions:

3.1.1 Bolts:

3.1.1.1 *bolt projections, n*—distance the lock bolt extends from the lock case measured with the lock bolt in an extended position.

3.1.1.2 *dead bolt, n*—lock component having an end that protrudes from or is withdrawn into the lock front by action of the lock mechanism by rotating the key or thumb turn. When the door is closed and the dead bolt is thrown, it extends into a hole provided in the strike, locking the door, and will not return with end pressure.

3.1.1.3 *deadlocking latch bolt, adj*—component that, when actuated, automatically locks the projected latch bolt against return by end pressure. Also referred to as an auxiliary latch bolt or roller bolt.

3.1.1.4 *latch bolt, n*—lock component having a beveled end that projects from the lock front in its extended position but may be forced back into the lock case by end pressure or drawing back by action of the lock mechanism. When the door is closed, the latch bolt projects into a hole provided in the strike, holding the door in a closed position. Sometimes referred to as a *snapholt*.

3.1.2 *bolt throw, n*—distance the lock bolt travels from a retracted to a fully extended position.

⁴ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036.

⁵ Available from Underwriters Laboratories (UL), Corporate Progress, 333 Pfingsten Rd., Northbrook, IL 60062.