



Standard Test Methods for Detention Sliding Door Locking Device Assembly¹

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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, smoke, and fire conditions of sliding device assemblies in detention and correctional institutions. These test methods give an indication of the performance characteristics of devices 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 sliding devices 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. However, these test methods do not address door construction. It is recognized that in order to meet the intent of these test methods, door assemblies shall be compatible with the level of performance required by Test Methods F 1450.

1.3 The values stated in inch-pound units are to be regarded as the standard. The values given 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:

F 1450 Test Methods for Hollow Metal Swinging Door Assemblies for Detention Facilities²

2.2 NFPA Standards³:

NFPA101 Life Safety Code

NFPA105 Installation of Smoke Control Door Assemblies

NFPA252 Methods of Fire Tests of Door Assemblies

2.3 UL Standard⁴:

UL-1034 Standard for Burglary Resistant Electric Locking Mechanisms

3. Terminology

3.1 Definitions:

3.1.1 *controlled passage, n*—the capability to restrict the unauthorized movement of individuals.

3.1.2 *cover box, n*—the enclosure that contains, secures, and protects all horizontal tracks, cables, tubing, wiring, motors, etc. that support and control the door; the enclosure is continuous across the horizontal door movement and may be continuous across several doors. Also referred to as horizontal mechanism housing.

3.1.3 *deadlocked, adj*—mechanical condition of the locking mechanism that secures against unlocking or unlatching by end pressure, lifting, prying, or other manipulations against the mechanism.

3.1.4 *door guide, n*—horizontal member attached to the wall adjacent to the bottom of the door used to control the bottom of the door.

3.1.5 *forcible egress, n*—the ability to pass a 5 × 8 × 8 in. (127 × 203.2 × 203.2 mm) rigid box through an opening in the test sample created by destructive testing procedures with no more than 10 lb (44.48 N) of force.

3.1.6 *hand tools, n*—items permitted for use in disengaging a lock when it fails to disengage either remotely or manually. For example, hand screwdrivers (of various sizes and tip configurations including tips for coverplate security screws), claw hammer, ball peen hammer, chisel, pliers (any common size), and locking pliers. These tools are commonly carried in a correctional facility maintenance tool kit.

3.1.7 *leading edge, n*—the end of the door panel that travels across the door opening.

3.1.8 *lock column, n*—the vertical enclosure that contains, secures, and protects the mechanical locking mechanism.

3.1.9 *locked, adj*—the door is held in place by the engagement of the locking mechanism in the door. Sliding doors must be deadlocked to be secure. A sliding door is not considered locked unless it is also deadlocked.

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 *Annual Book of ASTM Standards*, Vol 04.07.

³ Available from the National Fire Protection Association, Battery March Park, Quincy, MA 02269.

⁴ Available from Underwriters Laboratories, 333 Pfingsten Rd., Northbrook, IL 60062.