



## Standard Test Methods for Security of Swinging Door Assemblies<sup>1</sup>

This standard is issued under the fixed designation F476; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 These test methods cover door assemblies of various materials and types of construction for use in wall openings to deter unwanted intruders.

1.2 Door assemblies, covered by these test methods, also include individual components such as the hinge, lock, door, strike, and jamb.

1.3 These test methods are designed to measure the capability of a swinging door assembly to restrain or delay and frustrate the commission of “break-in” crimes.

1.4 These test methods apply primarily to typical entry door assemblies.

1.5 *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:<sup>2</sup>

F471 [Terminology Relating to Combination Locks](#) (Withdrawn 2011)<sup>3</sup>

### 3. Terminology

#### 3.1 Definitions:

3.1.1 *bolt, n*—any movable projection that blocks the movement of one object relative to another.

3.1.2 *bolt projection (or bolt throw), n*—distance from the edge of the door, at the bolt center line, to the farthest point on the bolt in the projected position, when subjected to end pressure.

<sup>1</sup> These test methods are under the jurisdiction of ASTM Committee F12 on Security Systems and Equipment and are the direct responsibility of Subcommittee F12.50 on Locking Devices.

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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

<sup>3</sup> The last approved version of this historical standard is referenced on [www.astm.org](http://www.astm.org).

3.1.3 *component, n*—as distinguished from a part, a subassembly that combines with other components to make up a total door assembly.

3.1.3.1 *Discussion*—The prime components of a door assembly include: door, lock, hinges, jamb, strike, and wall.

3.1.4 *cylinder, n*—complete operating unit that usually consists of the plug shell, tumblers, springs, plug retainer, a cam/tailpiece or other actuating device, and all other necessary operating parts.

3.1.5 *cylinder core (or cylinder plug), n*—central part of a cylinder, containing the keyway, that is rotated by the key to operate the lock mechanism.

3.1.6 *deadbolt, n*—bolt, which requires a deliberate action to extend, and resists end pressure in the unlocking direction when fully extended.

3.1.7 *dead latch (or dead locking latch bolt), n*—latchbolt with a deadlocking mechanism.

3.1.8 *door assembly, n*—any combination of a door, frame, hardware, and other accessories that is placed in an opening in a wall that is intended primarily for access or for human entrance or exit.

3.1.9 *jamb, n*—vertical members of a door frame (such as, those fixed members to which the door is secured).

3.1.10 *key-in-knob lockset, n*—any lockset with a key operated cylinder in one or more knobs.

3.1.11 *key-in-lever lockset, n*—any lockset with a key operated cylinder in one or more level handles.

#### 3.1.12 *latch:*

3.1.12.1 *n*—mechanical or magnetic door fastener that can automatically keep a door, gate, and so forth, closed.

3.1.12.2 *v*—engagement of a latch when a door, gate, and so forth, is pushed or pulled closed.

3.1.13 *latch bolt, n*—spring-actuated bolt, normally with one or more beveled surfaces, that, when aligned with the strike, engages it automatically.

3.1.14 *lock, n*—any device that prevents access or use by requiring special knowledge or equipment.

3.1.15 *lock front, n*—outer plate through which the locking bolt projects and which is usually flush with the edge of the door.