



## Standard Practice for Installation of Exit Devices in Security Areas<sup>1</sup>

This standard is issued under the fixed designation F 571; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

<sup>€1</sup> NOTE—Keywords were added and Footnote 4 was corrected editorially in April 1993.

### 1. Scope

1.1 This practice provides information for the installation of exit devices used in areas of security to achieve the greatest security possible without violating the requirements and spirit of NFPA 101.

1.2 Security of a high level is not always possible with these products but the use of certain types and functions of exit devices will afford a much higher degree of security than the use of other types and functions.

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

### 2. Referenced Documents

#### 2.1 ASTM Standards:

F 476 Test Methods for Security of Swinging Door Assemblies<sup>2</sup>

#### 2.2 Builders Hardware Manufacturers Association Standards:

BHMA A 156.3 Exit Devices<sup>3</sup>

BHMA A 156.5 Auxiliary Locks and Associated Products<sup>3</sup>

#### 2.3 National Fire Protection Agency Standards:

NFPA 80 Fire Doors and Windows<sup>4</sup>

NFPA 101 Code for Safety to Life from Fire in Buildings and Structures<sup>4</sup>

#### 2.4 Underwriters Laboratories Standards:

UL 305 Panic Hardware<sup>5</sup>

UL 1034 Burglary Resistant Electric Locking Mechanisms<sup>5</sup>

### 3. Terminology

#### 3.1 Definitions of Terms Specific to This Standard:

3.1.1 *astragal*—a vertical molding attached to the meeting

edge of a leaf or both leaves of a pair of doors.

3.1.2 *coordinator*—a device that holds the active door of a pair open until the inactive door has preceded it in the closing cycle.

3.1.3 *exit device*—a locking device always operable from the inside (egress side) by pushing on an activating mechanism usually called a push pad or cross bar.

3.1.4 *mortise device*—a lock mechanism that is installed into a cavity provided in the edge of a door.

3.1.5 *mullion*—a vertical member in an opening for two doors permitting each door to be operated independently from the other.

3.1.6 *rim device*—a single lock mechanism applied to the surface of a door.

3.1.7 *vertical rod device*—a top and bottom lock mechanism connected by rods, either surface or concealed, to the activating mechanism.

### 4. Significance and Use

4.1 This practice is not meant to include products other than exit devices except to the extent that such products directly relate to the use of exit devices. When other products are described, the security attributes of the other products are described generally in the documents referenced in Section 2.

### 5. General

5.1 NFPA 101 and many building codes require exit devices in certain locations and should be consulted.

5.2 UL 305 and BHMA A156.3 have specific requirements for the performance of exit devices and should be consulted.

5.3 Exit devices for fire doors require a label designating them as “fire exit hardware.” This means they have been investigated for both fire resistance and panic. Exit devices used on non-fire doors require a listing for panic. These labels and listings shall be by a nationally recognized, independent testing laboratory. A periodic examination service is also required.

NOTE 1—For more information on exit devices, see NFPA 80.

### 6. Installation Guidelines

#### 6.1 Doors and Frames:

6.1.1 Doors and frames installed in locations where exit devices are used for purposes of security should have minimum

<sup>1</sup> This practice is under the jurisdiction of ASTM Committee F-12 on Security Systems and Equipment, and is the direct responsibility of Subcommittee F12.50 on Locking Devices.

Current edition approved Aug. 28, 1987. Published October 1987. Originally published as F 571 – 79. Last previous edition F 571 – 79.

<sup>2</sup> *Annual Book of ASTM Standards*, Vol 15.07.

<sup>3</sup> Available from Builders Hardware Manufacturers Association, 60 E. 42<sup>nd</sup> St., Rm 1807, New York, NY, 10017.

<sup>4</sup> Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

<sup>5</sup> Available from Underwriters Laboratory, Inc., 333 Pfingsten Road, Northbrook, IL 60062.