

3.3.124 Stay Rollers (Sliding Door, Horizontal). A device used on horizontally sliding doors at their back lower corners to guide the door and prevent the door from moving away from the wall under fire conditions.

3.3.125 Strike.

3.3.125.1 Electric Strike. A strike that, when activated, either releases or retains a projected latch or dead bolt.

3.3.125.2 Open Back Strike. A strike applied to the inactive leaf of a pair of doors and cut away at the back to allow either leaf to open or close independently.

3.3.126 Strike Plate. A wear plate for projecting hardware or a wear plate and keeper for a latch bolt.

3.3.127 Struts. Adjustable vertical members that extend from the head of the hollow metal door frame to the ceiling to hold the frame rigidly in place.

3.3.128 Temperature Rise. The temperature increase above ambient that has developed on the unexposed face of the fire door assembly at the end of 30 minutes of exposure to the standard fire test.

3.3.129 Threshold. A builders hardware component that is installed beneath a closed door.

3.3.130 Track Brackets (Sliding Doors). Hardware bolted to the wall that serves to support the track.

3.3.131 Transom. An opening in a fire door frame above the door opening that is filled by a solid panel or with glazing material.

3.3.132* Transom and Side Light Frame. A fire door frame prepared for the application of a glazing material above and alongside the door opening.

3.3.133* Transom and Side Panel Frame. A fire door frame prepared for the application of solid metal or wood panels above and alongside the door opening.

3.3.134* Transom Light Frame. A fire door frame prepared for the application of a glazing material above the door opening that has a horizontal member such as a transom bar provided to separate the glazed opening from the door opening.

3.3.135 Transom Panel. A panel, fixed or removable, installed in a frame above the door.

3.3.136* Transom Panel Frame. A fire door frame prepared for the application of a transom panel above the door opening that has a horizontal member such as a transom bar provided to separate the transom opening from the door opening unless the transom panel or the bottom of the panel and the top of the door are rabbeted.

3.3.137 Undercutting. Trimming the lowest edge of a door panel for clearance.

3.3.138 Vent (Sliding Door, Vertical and Horizontal Tin-Clad Only). A hole cut in a fire door to allow for venting of the products of combustion.

3.3.139 Vertical Guide Pocket. A partial enclosure at the vertical edge of the proscenium that protects the vertical edges and guides of a fire safety curtain.

3.3.140 Vertically Sliding Door. Labeled single-piece doors and sectional doors operating in a vertical direction.

3.3.141 Viewer. A viewing device installed in a door to allow observation of persons opposite the security side of the door without having to open the door.

3.3.142 Volume Control Damper. A fire damper, smoke damper, or combination fire/smoke damper that is also used to control the volume of air in an HVAC system.

3.3.143 Wedge (Sliding Door, Horizontal Tin-Clad and Flush Sheet Metal). A plate mounted on the face of a sliding door designed to force the door against the wall.

3.3.144 Window. Integral fabricated units, placed in an opening in a wall, primarily intended for the admission of light, or light and air, and not intended primarily for human entrance or exit.

3.3.145 Window Frame. The perimeter of a window.

3.3.146 Window Sash. The horizontal or vertical sliding component of a window.

3.3.147 Window Ventilator. The part of a projected window, casement window, or pivoted window that opens.

3.3.148 Wire Glazing Clips. Small, spring wire clips used to hold glass in place where windows are glazed only with glazing compound.

Chapter 4 General Requirements

4.1 General Limitations.

4.1.1 Classification. Fire doors and fire windows shall be classified by designating a required fire protection rating expressed in hours or fractions thereof. (See Annex D.)

4.1.2* Fusible Links.

4.1.2.1 The particular fusible link used shall depend on the temperature and load requirements of the application.

4.1.2.2 Multiple links shall be permitted to be used to meet the load rating requirements where the load rating of a single link is exceeded.

4.1.3 Appurtenances.

4.1.3.1 Preparation of fire door assemblies for locks, latches, hinges, remotely operated or remotely monitored hardware, concealed closers, glass lights, vision panels, louvers, astragals and split astragals, and the application of plant-ons and laminated overlays shall be performed in accordance with the manufacturer's inspection service procedure and under label service. (See Annex E and Annex F.)

4.1.3.2* The following job site preparations shall be permitted:

- (1) Holes for surface-applied hardware, function holes for mortise locks, and holes for labeled viewers
- (2) A maximum $\frac{3}{4}$ in. (19 mm) wood and composite door undercutting
- (3) Installation of protection plates (see 6.4.5)

4.1.3.2.1 Surface-applied hardware shall be applied to the door or frame without removing material other than drilling round holes to accommodate cylinders, spindles, similar operational elements, electrified hardware, and through-bolts in doors.

4.1.3.2.2 The holes described in 4.1.3.2.1 shall not exceed a diameter of 1 in. (25.4 mm), with the exception of holes for cylinders, unless otherwise permitted by 4.1.3.2.3.

4.1.3.2.3 Holes exceeding a diameter of 1 in. (25.4 mm) shall be permitted for surface-applied hardware installed in accordance with the door manufacturer's listing and the hardware manufacturer's listing.

4.1.3.2.4 When performed at the job site, drilling raceways for wires or preparation for fire pins shall be in accordance with the door manufacturer's listing and when permitted by the laboratory with which the door is listed.

4.1.3.2.5 Where the door manufacturer's listing does not contain provisions for drilling raceways, the raceways shall be considered field modifications in accordance with 5.1.5.1.

4.1.4 Signage. Informational signs shall be permitted to be installed on the surfaces of fire doors in accordance with 4.1.4.1 through 4.1.4.4 or in accordance with the manufacturer's published listing.

4.1.4.1 The total area of all attached signs shall not exceed 5 percent of the area of the face of the fire door to which they are attached.

4.1.4.2 Means of Attachment.

4.1.4.2.1 Signs shall be attached to fire doors by use of an adhesive.

4.1.4.2.2 Mechanical attachments such as screws or nails shall not be permitted.

4.1.4.3* Signs shall not be installed on fire protection-rated glazing in fire doors.

4.1.4.4 Signs shall not be installed on the surface of fire doors so as to impair or otherwise interfere with the proper operation of the fire door.

4.1.5 Sliding Doors.

4.1.5.1 Sliding doors shall be permitted to have integral swinging doors.

4.1.5.2 Where sliding doors include an integral swinging door, they shall be permitted to be used on exits to the exterior of the building.

4.2 Listed and Labeled Products. (See 3.2.3 and 3.2.4 for definitions.)

4.2.1* Listed items shall be identified by a label.

4.2.1.1 At a minimum, the label for fire doors shall contain the following information:

- (1) The words "fire door."
- (2) The manufacturer's name or a code that can be traced back to the manufacturer.
- (3) The marking of a third-party certification agency.
- (4) The fire protection rating of the door.
- (5) A unique serial number, if provided by the listing agency.
- (6) The fire test standard designation to which the assembly was tested.
- (7)* The temperature transmission rise at 30 minutes. If the temperature transmission rise of a fire door exceeds 650°F (361°C), the temperature rise shall be permitted to be omitted.

4.2.1.2 For swinging doors provided with builders hardware, the minimum latch throw shall also be shown. (See 4.3.3.)

4.2.1.3 Where applicable, a statement that no hose stream test was conducted shall be provided.

4.2.1.4 The label for fire door frames shall contain the following information:

- (1) The words "fire door frame"
- (2) The manufacturer's company name or a code that can be traced back to the manufacturer
- (3) The marking of a third-party certification agency
- (4) The fire protection rating of the frame
- (5) The fire test standard designation to which it was tested

4.2.1.4.1 Fire door frames rated at 3 hours when installed with masonry anchors in masonry walls or rated at 1 ½ hours when provided with wood stud or steel stud anchors and installed in gypsum board walls shall not be required to be provided with a fire protection rating.

4.2.1.4.2 In lieu of 4.2.1.4.1, fire door frames shall be marked with the label or embossment of the third-party certification agency and the manufacturer's name or a code that can be traced back to the manufacturer.

4.2.1.4.3 Where applicable, a statement that no hose stream test was conducted shall be provided.

4.2.1.5 At a minimum, the label for fire window frames shall contain the following information:

- (1) The words "fire window frame"
- (2) The manufacturer's company name or a code that can be traced back to the manufacturer
- (3) The marking of a third-party certification agency
- (4) The fire protection rating
- (5) The fire test standard designation to which it was tested

4.2.1.6 The label for oversized doors shall contain the following information:

- (1) The words "oversized fire door"
- (2) The manufacturer's company name or a code that can be traced back to the manufacturer
- (3) The marking of a third-party certification agency
- (4) The basis of a fire protection rating

Δ 4.2.2* New fire protection-rated and fire resistance-rated glazing shall be marked in accordance with Table 4.2.2, and such marking shall be permanently affixed.

4.2.3 Labels shall be applied in locations that are readily visible and convenient for identification by the AHJ after installation of the assembly.

N 4.2.4 Where a swinging fire door assembly is installed in a location not requiring a rated opening protective, the label shall be permitted to be removed and the provisions of Chapter 5 shall not apply.

4.2.5 The label or the listing shall be considered evidence that samplings of such devices or materials have been evaluated by tests and that such devices or materials are produced under an in-plant, follow-up inspection program.

4.2.6 Specification of items of a generic nature, such as hinges, that are not labeled shall comply with the specifications contained in this standard.