SECTION 4

Fire-Rated Pre-assembled Doors:

Table of Contents

3070 Fire-Rated Door System Description & Dimensions
4070 Fire-Rated Door System Description & Dimensions
6070 Fire-Rated Door System Description & Dimensions
Subframe (Framed Opening) Detail
Existing Opening Anchors (EOA) Detail
Adjustable “L” Bracket Anchor Detail
Installation Guide
Specifications
3070 Fire-Rated Pre-assembled Door System

3070 Fire-Rated Pre-assembled Door Includes The Following Components:

1. 1 ½ Hour (B-Label), 20 Gauge, Galvanized, Insulated Door Leaf
2. 5 ¾", 1 ½ Hour (B-Label), 16 Gauge, Galvanized, Insulated, Door Frame
3. 16 Gauge, Galvanized Subframe (Framed Opening), Sized to Match Girt Depth
4. Cylindrical Lever Lock – Grade 2 (26D Finish) UL Rated
5. (3) Ball-Bearing Hinges – 4 ½” x 4 ½” with a Non-Removable Pin (26D Finish)
6. 5 ¾”, Aluminum Threshold – ADA Compliant
7. Door Bottom Sweep with Drip Channel
8. Adjustable Full Aluminum Channel Weatherseal
9. 12 Gauge, Galvanized, Adjustable Mounting Clips
10. Grade 3 Auto Closer with Standard Parallel Arm – Sprayed Aluminum Finish (UL Rated)
11. Packaging – Each Door System is Packaged in Heavy Duty Wood Crating
12. All Fasteners and Anchors Included for Complete Installation
4070 Fire-Rated Pre-assembled Door System

Includes the following components:

1. 1 ½ Hour (B-Label), 18 Gauge, Galvanized, Insulated Door Leaf
2. 5 ¾", 1 ½ Hour (B-Label), 16 Gauge, Galvanized, Insulated, Door Frame
3. 16 Gauge, Galvanized Subframe (Framed Opening). Sized to Match Girt Depth
4. Cylindrical Lever Lock – Grade 2 (26D Finish) UL Rated
5. (3) Ball-Bearing Hinges – 4 ½" x 4 ½" with a Non-Removable Pin (26D Finish)
6. 5 ¾", Aluminum Threshold – ADA Compliant
7. Door Bottom Sweep with Drip Channel
8. Adjustable Full Aluminum Channel Weatherseal
9. 12 Gauge, Galvanized, Adjustable Mounting Clips
10. Grade 3 Auto Closer with Standard Parallel Arm – Sprayed Aluminum Finish (UL Rated)
11. Packaging – Each Door System is Packaged in Heavy Duty Wood Crating
12. All Fasteners and Anchors Included for Complete Installation
6070 Fire-Rated Pre-assembled Door System

6070 Fire-Rated Pre-assembled Door Includes The Following Components:

1. 1 ½ Hour (B-Label), 20 Gauge, Galvanized, Insulated Door Leafs
2. 5 ¾", 1 ½ Hour (B-Label), 16 Gauge, Galvanized, Insulated, Door Frame
3. 16 Gauge, Galvanized “Z” Astragal – Attached to Inactive Leaf
4. 16 Gauge, Galvanized Subframe (Framed Opening). Sized to Match Girt Depth
5. (1) Cylindrical Lever Lock – Grade 2 (26D Finish) UL Rated – Installed on Active Leaf Only
6. (2) Surface Bolts (Top and Bottom) Attached to “Inactive” Leaf (26D Finish)
7. (6) Ball-Bearing Hinges – 4 ½” x 4 ½” with a Non-Removable Pin (26D Finish)
8. 5 ¾", Aluminum Threshold – ADA Compliant
9. (2) Door Bottom Sweeps with Drip Channel
10. Adjustable Full Aluminum Channel Weatherseal
11. 12 Gauge, Galvanized, Adjustable Mounting Clips
12. (1) Grade 3 Auto Closer – Sprayed Aluminum Finish – Mounted to “Active” Leaf Only (UL Rated)
13. Packaging – Each Door System is Packaged in Heavy Duty Wood Crating
14. All Fasteners and Anchors Included for Complete Installation
Subjamb (Framed Opening) Detail

Adjustable "L" Bracket Anchor Detail (Located at Top of Subjamb)

16 Gauge Galvanized Subjamb

Standard Sizes (To Match Girt Depth)
6-1/2", 8", 8-1/2", 9-1/2"

Bottom Anchor Detail (Part of Subjamb)
Existing Opening Anchor Detail

PT. D-14195
NYLON (PLASTIC) PLUG

Snap in completed opening anchor used with existing wall conditions. Drill a 25/32" hole in soffit and align the anchor. Use a Dyna-Bolt or a bolt into a steel expansion shield. Install a plastic plug to cover the hole.
Adjustable “L” Bracket Anchor Detail

ANCHORS SCREWED TO JAMB WITH #10 1-1/4” TEK SCREWS. BOTH ANCHORS SHOULD BE ATTACHED FLUSH WITH ENDS AND CENTERED IN JAMB PRIOR TO SHIPPING.

ADJUSTABLE ANCHOR AT SUBJAMB
PRE-ASSEMBLED DOOR INSTALLATION GUIDE

GENERAL PRE-INSTALLATION NOTE

DO NOT REMOVE the screws holding the door leaf closed until the door is completely installed. These screws assist in holding the door/frame square during the installation process. Removing the screws may result in operation problems of the door.

KEYS, ANCHORS, FASTENERS, & INSTRUCTIONS for this door are located in the padded envelope that is attached to the door frame or closer.

INSTALLATION STEPS

1. After uncrating the door, position it under the girt with the outside edge of the threshold flush with the edge of the concrete. The extended header should be up against the outside face of the girt.
2. PLUMB AND SQUARE DOOR UNIT. Check the gap between the top of door and header. It MUST be consistent.
3. When the door is plumb, secure the door header to the face of the girt with (2) self drilling screws. These screws can be removed later if they should interfere with the sheeting or trim.
4. Anchor the door to the floor with the base clips and the (4) anchor bolts provided.
5. Back out the screws holding the top jamb clips and slide clips up to wall girt. Attach clip to wall girt using the self drilling tek screws provided.
6. Remove screws holding door leaf shut and check for proper operation.
7. Anchor threshold to floor using (3) anchors provided. Caulking of threshold is required.
8. Adjust weather-stripping and sweep to eliminate light leaks.

ADJUSTMENTS and OPERATION

1. Check frame to ensure unit is PLUMB AND SQUARE. If Door System is NOT PLUMB AND SQUARE it may affect operational functions of the hardware.
2. Check floor level at each jamb. Shim under jamb needing adjustment.
3. If gap around door is unequal, shim hinges appropriately.

AFTER INSTALLATION CARE

WARNING: Industrial and/or commercial chemicals used in cleaning or sealing, as well as those chemicals contained in concrete may react negatively with the finishes on the parts of this door. This reaction may destroy the galvanization and finishes on these products resulting in future rust and void any warranties.

DO NOT allow concrete or commercial/industrial chemicals/sealants to come in contact with the finishes on this door. Residential strength 409 is recommended for cleaning if necessary.
Door Panel

CONSTRUCTION—Standard door panels will be a flush 1-3/4” leaf with each face formed of 20 or 18 gauge steel to present a completely smooth and unbroken surface on faces of door. Visible seams permitted at door edges. With 16 gauge steel channels forming the top and bottom end closures, the face panels shall be securely projection welded around their entire perimeters. Welding shall occur approximately every 2” on center.

Door panels and end closures shall be manufactured of hot dip material in the 0.6 ounce (A60) coating class conforming to ASTM designations A924 and A653. The material shall be treated in the mill to insure superior prime and paint adhesion.

The panels shall be securely bonded by a thermosetting adhesive to an odorless, rigid foam (nominal 1lb. density) that is resistant to vermin, fungus, bacteria, moisture, mildew and rot.

HARDWARE PREPARATIONS—Lockset locations are in accordance with ANSI/DHI A115.1 (mortise) and A115.2 (bored). The lockset reinforcement shall be 14 gauge.

Hinge mortises shall be reinforced with 10 gauge steel welded in place and tapped for 1 ½ pairs of 4 ½” x 4 ½” template hinges. Mortises shall extend the full width of hinge stile and filler plates shall be provided to permit installation of hinges for right or left hand swing, as specified. The 4 ½” preparation shall accept both regular and heavyweight hinges.

All door panels shall be prepared with a 12 gauge closer reinforcement, which will accept most regular and parallel arm applications. When called for on drawings, or otherwise specified, doors shall be prepared with 14 gauge reinforcements for panic devices and push-pull plates.

Door Frame

CONSTRUCTION—Frames shall be formed of 16 gauge steel. Headers and jambs shall have self-aligning slots and tabs for secure locking of the assembly. Headers to be equipped at each joint with 18 gauge channel-shaped reinforcements. All corners shall present neat butt joints. All stop heights are 5/8”. All frame returns are 7/16”.

All frame members shall be manufactured of hot dip material in the 0.6-ounce (A60) coating class conforming to ASTM A924 and A653. The material shall be treated in the mill to insure superior prime and paint adhesion.
HARDWARE PREPARATIONS—Hinge jambs shall be mortised and reinforced with 10 gauge steel welded in place and tapped for 1 ½ pairs of 4 ½” x 4 ½” template hinges. Hinge reinforcements shall be covered with a welded-in steel plaster guard. Strike jambs shall be mortised and reinforced to receive an ANSI/DHI A115.1 strike (4 7/8” Universal) or optional 2 ¾” strike. Strike jambs shall be prepared to receive three mutes.

**Painted Finish**

The door panels and frames shall be chemically cleaned and treated with a Bonderite chemical. They are then given a heavy coat of electrostatic – applied finish paint that is baked on. The finish paint shall be a durable formulation, providing good resistance to both mar and abrasion tests. Weather and chemical resistance shall be a property of the finish. The finish is in accordance with the ANSI/SDI Standard A224.1

**Subframing (if required for installation)**

The subframing creates a framed opening and consists of two galvanized steel 16 gauge C-channels that matches the girt depth for the building. They shall be factory installed and can be prepared to meet most any application (curbs, wainscot). For masonry applications, wire anchors will be provided in lieu of the subframing, or in the case of finished openings, the door frames can be prepared with existing opening anchors.

**Standard Hardware & Components**

The THRESHOLD is factory installed, is 5 ¾” wide (matches frame depth) and is an extruded aluminum. It is saddle shaped not exceeding ½” in height which meets ADA requirements.

The HINGES are factory installed and shall be 1 ½ pair, 4 ½” x 4 ½”, five knuckle, two ball bearings, with a non-rising removable pin. They are a template standard weight with a US26D (Satin Chrome) finish.

The LOCKSET is factory installed and shall be a heavy duty commercial Grade 2 cylindrical lever with a US26D (Satin Chrome) finish having a 2 ¾” backset. The lockset complies with ANSI A156.2, Series 4000, Grade 2. The function on the lockset is an entrance function (Function #116, ANSI #F81).

The WEATHERSEAL is factory installed onto the two jambs and header. It is adjustable and is composed of an extruded aluminum with an extra large Qlon Kurf bulb.
The DOOR SWEEP is factory installed and is composed of an extruded aluminum with a heavy-duty vinyl insert. It is also adjustable and incorporates a drip cap that weeps water away from the threshold.

The SUBFRAME CLIPS are factory installed, adjustable and are composed of 12 gauge galvanized steel. There are two per door.

All of the FASTENERS required for the installation of the pre-assembled door are included in the standard package. The fasteners included are (4) ½” x 2 ¼” hex head sleeve anchors, (3) ¼” x 2” flat head sleeve anchors and (18) #10 x 1” hex head tek screws.

**Packaging**

The entire door system is packaged in a heavy-duty wooden crate that has been adapted for forklift handling. A bubble packet on the door includes instructions on the lockset and closer (if applicable), all the fasteners required for installation, keys for the lockset and three hinge shims.

**Conformance Standards**

- The galvanized doors and frames comply with ASTM A924 general requirements for steel sheet metallic coated by the hot-dip process (formally ASTM A525).
- Lockset preparation on door leafs shall be manufactured in accordance with ANSI/DHI A115.1 (mortise) and A115.2 (bored).
- The strike edge of all door leafs shall be prepared for ANSI/DHI A115.1 strike (4 7/8” Universal).
- The strike jambs shall be mortised and reinforced to receive an ANSI/DHI A115.1 strike (4 7/8” Universal).