

# STEELCRAFT®

## FN16 AND FN14-SERIES FLUSH FRAMES



FLUSH FRAMES



### FEATURES AND BENEFITS:

Steelcraft's FN16-Series Flush Narrow 1" (25mm) Face Frames offer the following unique features which enhance long term functionality and durability.

1. **Narrow 1" (25mm) face** provides a very slim appearance to the door opening.
2. **Die-mitered corner connections** (head/jamb) The standard corners insure attractive, tight and closed miters.
3. **Patented universal hinge preparations** allow for easy field conversion from standard weight (.134) hinges to heavy weight (.180) hinges.
4. **Rubber silencers** are factory installed.
5. **Factory applied baked on rust inhibiting primer** in accordance with ANSI A250.10.

### ABOUT THE PRODUCT:

The FN16 and FN14-Series 3-Sided Flush Narrow 1" (25mm) Face Frames are designed for heavy and extra-heavy duty applications in both commercial and institutional buildings. They can be installed in both interior and exterior locations, and in virtually all types of buildings and wall constructions. These frames are to be installed as part of the wall framing sequence. They can be specified and/or supplied as either KD (knock-down) for field assembly prior to installation, or SUA (set-up and welded) for installation as a pre-welded unit.

### APPLICATIONS:

The FN-Series 3-Sided Flush Narrow 1" (25mm) Face Frames are designed to meet the aesthetics needs of a very slender face dimension, and still maintain the functionality of the conventional flush framing systems. The FN16-Series Narrow Face Frames are typically used in the following types of wall constructions:

Wall Construction	Application	Typical Wall Anchors
Masonry	wrap or butted	Wire masonry
Existing masonry	butted	Bolted through soffit
Wood stud	wrap	Lock-in wood stud anchor
Steel stud	wrap	Lock-in steel stud anchor

### SPECIFICATION COMPLIANCE:

1. Overall frame construction for the Steelcraft FN16 and FN14-Series Flush Narrow 1" (25mm) Face Frames meet and exceed the requirements of ANSI A250.8-1998 (commonly referred to as SDI-100).
2. Hardware preparations and reinforcements are in accordance with ANSI A250.6-1997. Locations are in accordance with ANSI/DHI A115.

### FIRE RATINGS:

The FN-Series Narrow 1" (25mm) Face Frames meet fire rating requirements. They are listed for installations requiring compliance to both negative pressure testing (ASTM E152 and UL-10B) and positive pressure standards (UBC 7-2 and UL-10C). Refer to the "Fire Rated" section of the Steelcraft Spec Manual for particular listings.

Steel Thickness	Opening	Usage Frequency <sup>1</sup>	Applications
14 gage (1.7mm)	Interior & Exterior	Extra heavy to Maximum duty	<ul style="list-style-type: none"> <li>• 16 &amp; 14 gage steel doors</li> </ul>
16 gage (1.3mm)	Interior & Exterior	Heavy to Extra-heavy	<ul style="list-style-type: none"> <li>• 20, 18 &amp; 16 gage steel doors</li> <li>• Commercial grade wood doors</li> </ul>
Steel Type	Opening	Applications	
Non Galvanneal <sup>3</sup>	Mainly Interior	<ul style="list-style-type: none"> <li>• Typical building conditions</li> </ul>	
Galvannealed <sup>2</sup>	Mainly Exterior	<ul style="list-style-type: none"> <li>• Used in locations with high humidity and/or weather exposure</li> </ul>	

### MATERIAL:

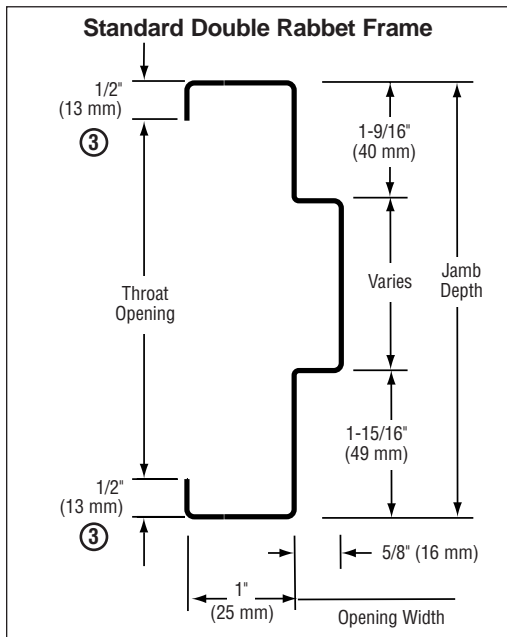
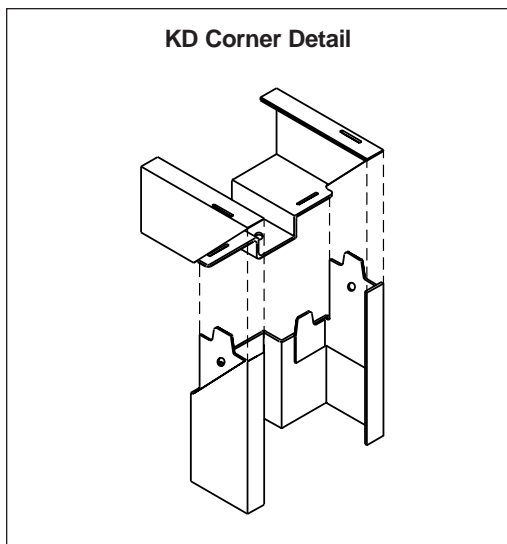
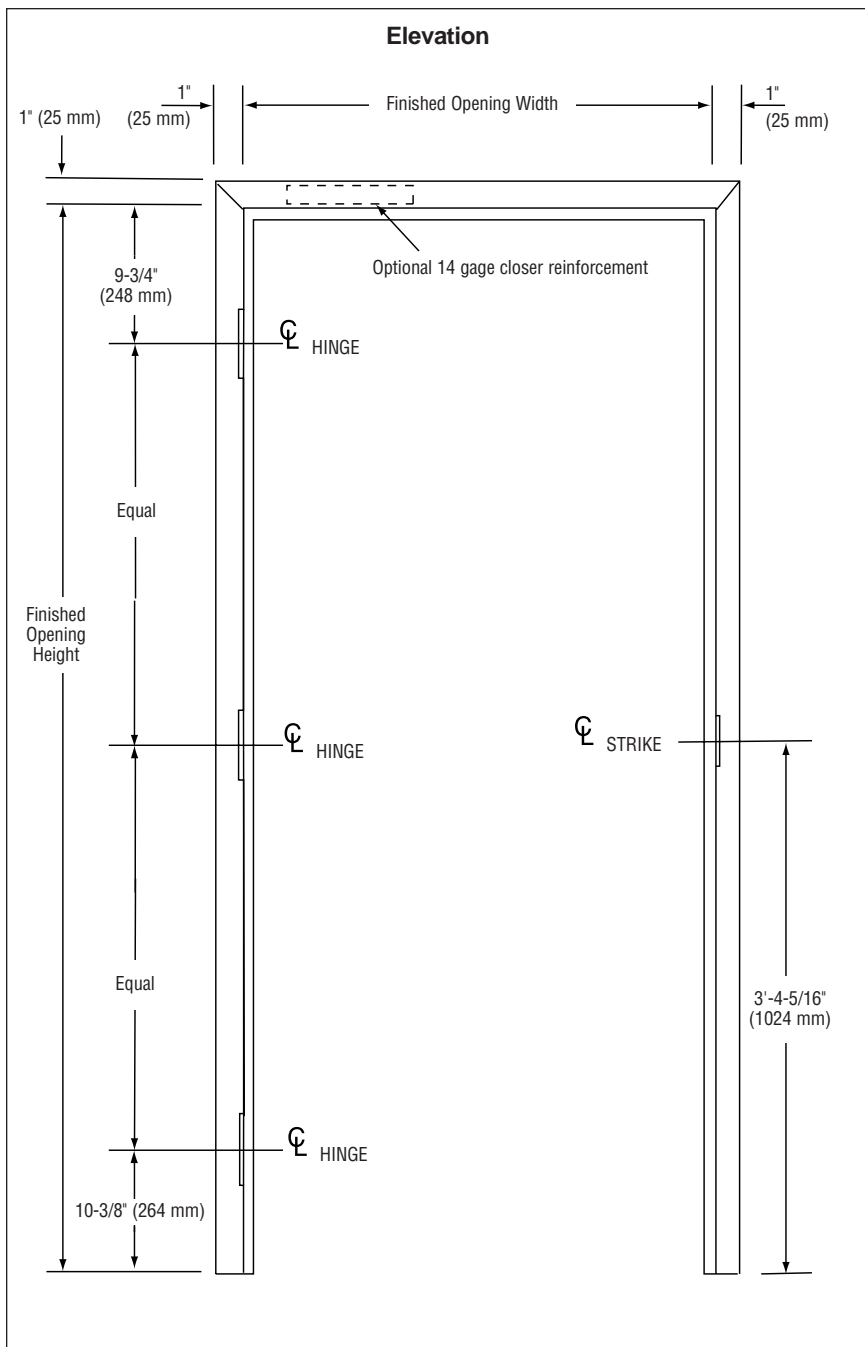
FN16-Series Narrow 1" (25mm) Face frames are supplied from either 14 gage (1.7mm) or 16 gage (1.3mm) steel. Depending on environmental and usage conditions, the steel can be either non galvannealed or galvannealed. All frames are supplied with a factory applied baked on primer for field applied finish paints.

<sup>1</sup> Usage frequency is based on ANSI A250.8-1998

<sup>2</sup> Reinforcements for galvannealed frames are also galvannealed

<sup>3</sup> Commercial quality carbon steel

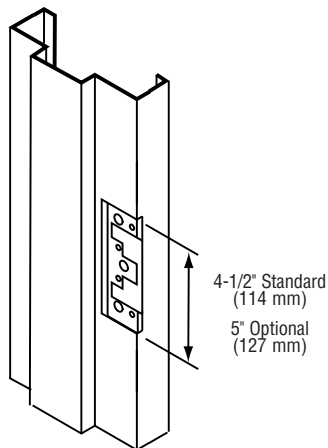
*Details are subject to change without prior notice.*



**CONSTRUCTION NOTES:**

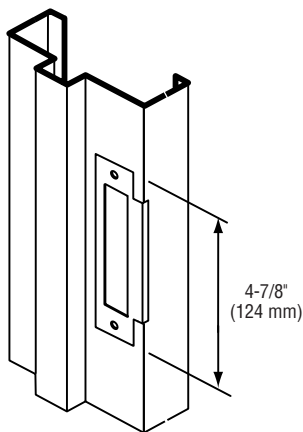
- Door opening size maximum:**  
 Single door opening size 4'0" x 8'0" (1219mm x 2438mm)  
 Double door opening size 8'0" x 8'0" (2438mm x 2438mm)
- Jamb depths (profile) availability:**  
**Double rabbet:**  
 minimum = 4<sup>3</sup>/<sub>4</sub>" (121mm)  
 maximum = 20" (508mm)
- Standard profile dimensions (variations available):**  
 Face = 1" (25mm)  
 Stop = 5/8" (16mm)  
 Returns = 1/2" (13mm) all frames except 5<sup>3</sup>/<sub>4</sub>" (146mm) which is 7/16" (11mm)
- Standard die-mitered corners:**  
 Four (4) concealed tabs interlock head and jambs.

### Universal Mortise Hinge Prep

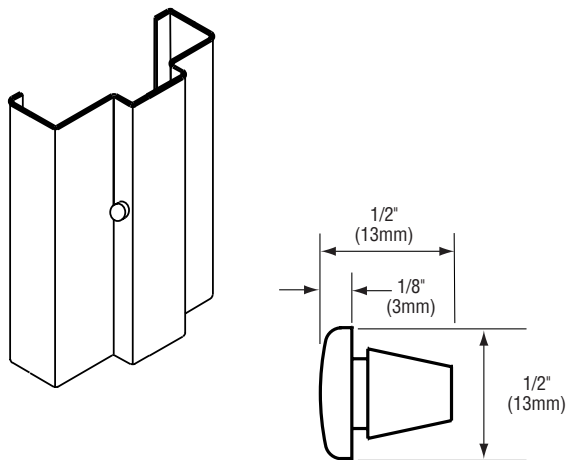


7 Gage Hinge Reinforcement

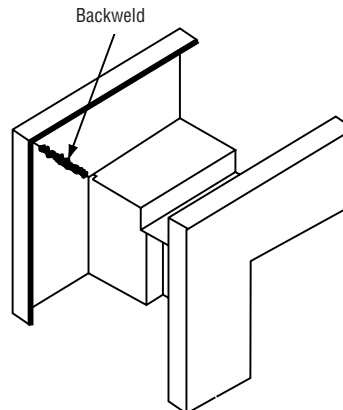
### 4<sup>7</sup>/<sub>8</sub>" Strike Prep (ASA)



### Rubber Silencer



### Welded Corner



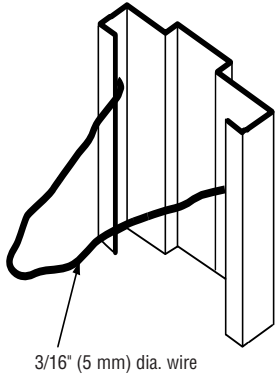
### GENERAL NOTES:

1. **Frame profile** – variations in jamb depths available in 1/8" (3mm) increments:
  - **Double rabbet** – typically for walls 3<sup>3</sup>/<sub>4</sub>" (95mm) thick and over
2. **Corner connections**
  - **KD (knock-down)** – Factory die-mitered:
  - **Double rabbet frames** – 4 tabs per miter
  - **SUA (set-up and welded)** – available when specified, and in accordance with ANSI A250.8-1998 (SDI-100).
3. **4" (102mm) heads** – not available in this frame series
4. **Standard hardware preparations:**

Standard mortised and reinforced with mortar guards for:

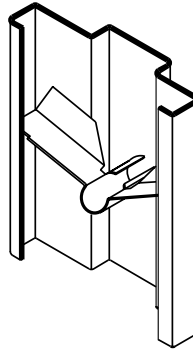
  - **Universal hinge preps** – 4<sup>1</sup>/<sub>2</sub>" (114mm) patented preparation which allows easy and quick conversion from standard to heavy weight hinges.
  - **Strikes** – 4<sup>7</sup>/<sub>8</sub>" (121mm) conforming to ANSI A115.1 and ANSI A115.2.
5. **Rubber silencers** are factory installed to cushion the closing of the door, and to eliminate the field problems related to inserting silencers after installation and grouting. Three (3) silencers are supplied per strike jamb and two (2) per double door head.

Wire Masonry Anchor

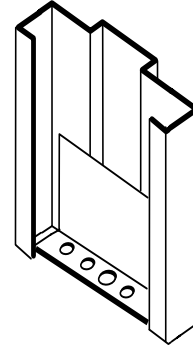


3/16" (5 mm) dia. wire

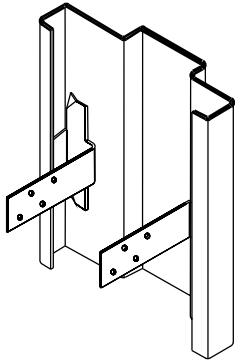
Existing Masonry Anchor



Weld-In Anchor



Anchor for Stud Partition



## ANCHORING AND INSTALLATION NOTES:

1. **FN16-Series Narrow 1" (25mm) Face Frames** are supplied standard with masonry wire and weld-in base anchors. Anchors are designed for maximum wall/frame engagement and installation flexibility.
2. **Anchoring applications:**
  - **Masonry wall** – Masonry wire anchors (3/16" [5mm] dia.) provide maximum engagements in mortar joints, and allow for full internal grouting during installation. Base anchors are attached directly to the floor. The wall is built around the anchored frame. (Refer to installation sheet #INS-2004)
  - **Existing masonry walls (EMA)** – Specifically designed (18 Ga. steel) jamb anchors are used to add support for bolting the frame into the rough opening of an existing wall. An existing wall anchor is used as the base anchor in this application. (Refer to installation sheet #INS-2014)
  - **Stud walls** – Lock-in (18 Ga. steel) jamb anchors are designed to be attached to the studs of a rough opening. After the frame is anchored, the wallboard is installed and finished. (Refer to installation sheet #INS-2005 for non-label applications)
3. **Special frame anchorage:** Frame anchor details shown on this sheet are applicable to double rabbet frames with 1" (25mm) faces. Anchor details and availability of lock-in anchors will vary with the following frame profile changes:
  - **Double rabbet** – over 8 3/4" (222mm) jamb depth anchor

details will vary.

4. **Installation caution notice:** When temperature conditions necessitate an additive to be used in the plaster or mortar to prevent freezing, the contractor installing the frames shall coat the inside of the frames in the field with a corrosion resistant coating per SDI 105.
5. Installation shall conform to the published Steelcraft installation instructions, SDI 105 *Recommended Installation Instructions for Steel Frames*, and ANSI/DHI A115-IG *Installation Guide for Doors and Hardware*.
6. All fire rated frames must be installed in accordance with NFPA Pamphlet 80 and the *Authority Having Jurisdiction*.