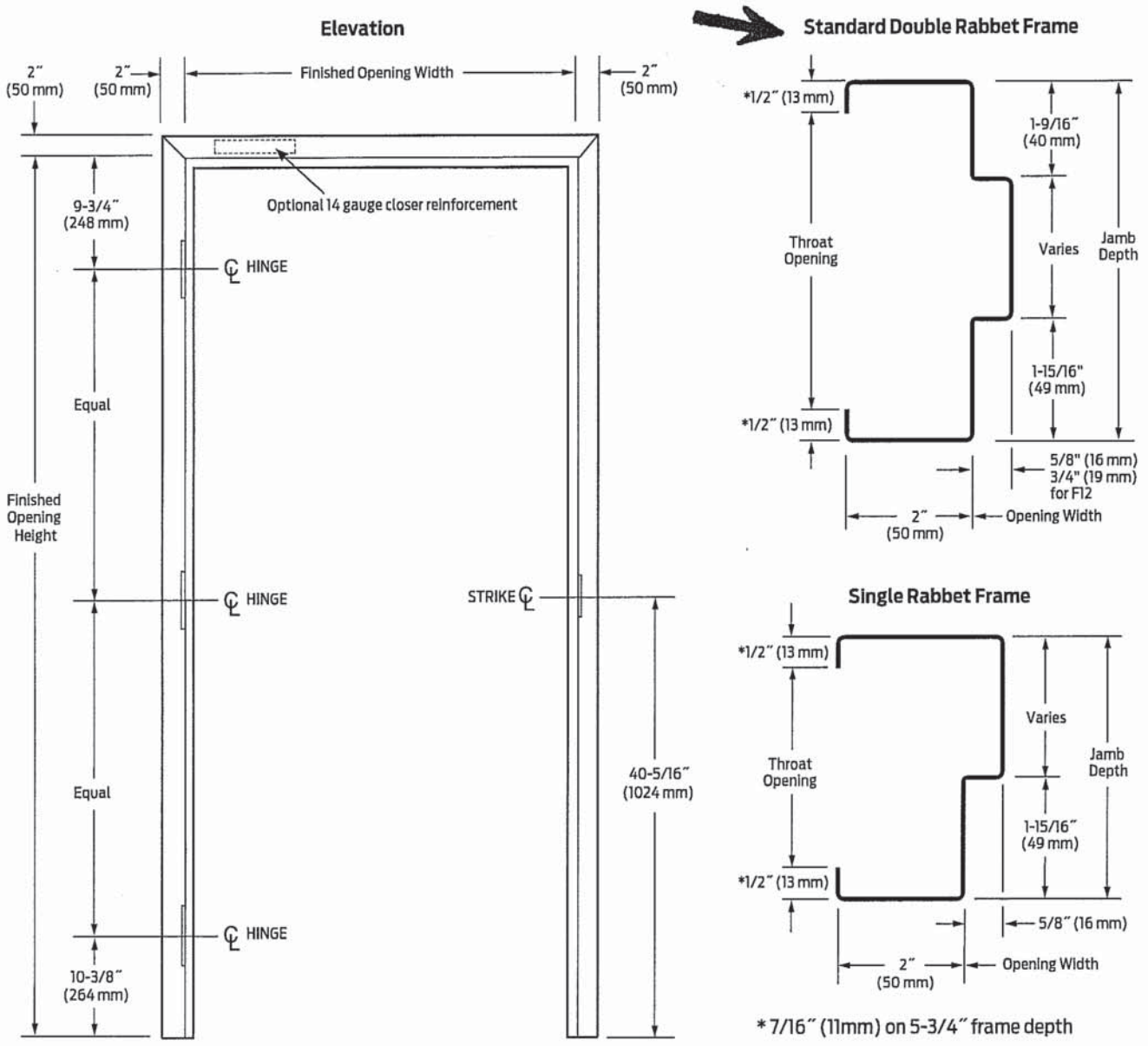
F Series

STEELCRAFT



Frame sizing options

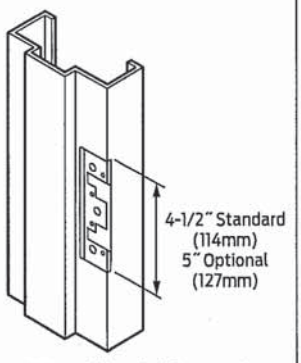
Series	Maximum opening size		Jamb depth availability(profile)				Standard profile dimensions(variations available)			Corners
	Single	Pair	Single rabbet		Double rabbet		Face	Stop	Return	Standard
			Minimum	Maximum	Minimum	Maximum				
F16 F14	5'0" x 11'0"(1524mm x 3353mm)	10'0" x 11'0"(2439mm x 3353mm)	3" (76mm)	20" (508mm)	4-1/2" (114mm)	20" (508mm)	2" (50mm)	5/8" (16mm)	1/2"* (13mm)	DIE MITERED with four (4) concealed tabs interlocking head and jambs
F12	4'0" x 8'0"(1219mm x 2438mm)	8'0" x 8'0"(2438mm x 2438mm)	N/A	N/A	4-3/4" (121mm)	14-3/4" (375mm)	2" (50mm)	3/4" (19mm)	1/2" (13mm)	Square cut for welded corners

* Except 5-3/4" (146mm) depth, which is 7/16" (11mm) N/A - Not Available12 gauge standard profile is equal rabbet

F Series

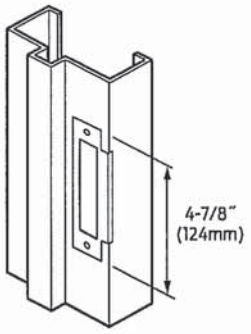
STEELCRAFT

Universal Mortise Hinge Prep

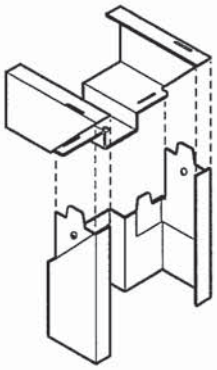


7 Gauge Hinge Reinforcement

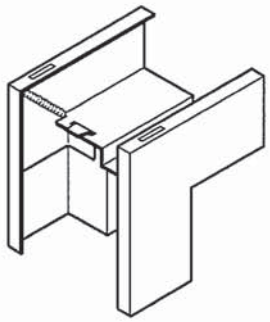
4-7/8" Strike Prep (ASA)



KD Corner Detail



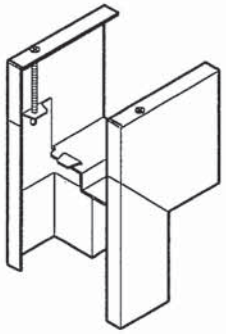
Welded Corner



General notes

1. Variations in jamb depths available in 1/8" (3mm) increments.
2. All F Series frames are supplied standard with masonry wire or lock-in jamb anchors and adjustable base anchors. Anchors are designed for maximum wall/frame engagement and installation flexibility.
3. F Series frames are to be installed as part of the wall framing sequence.
4. Depending on environmental and usage conditions the steel can be either cold rolled or galvannealed. Galvannealed steel is recommended for all exterior applications.
5. 12 gauge flush frames, F12, are standard equal rabbet profiles with 3/4" stops.
6. For KD Corner and optional 4" Head, tabs in rabbeted area should be bent outward, not inward, during assembly (as shown).
7. F Series frames with 4" heads are mainly used in masonry applications when 2" face heads do not match course blocking.

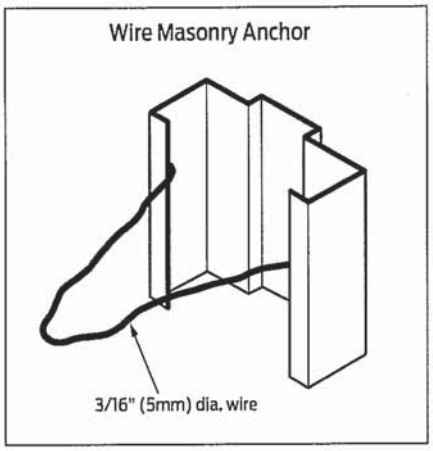
Optional 4" (102mm) Face Head Detail

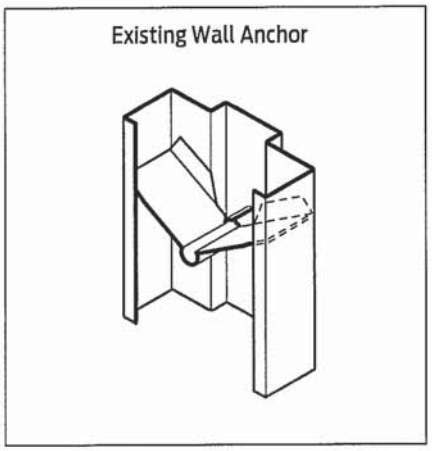


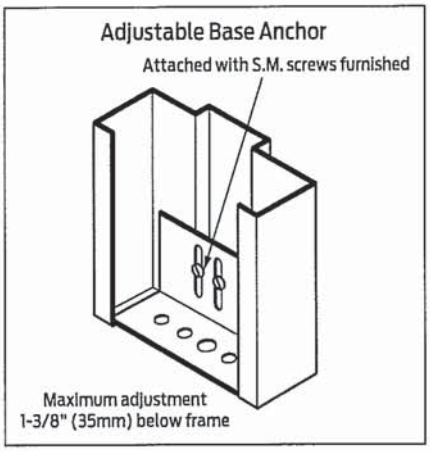
Frame options

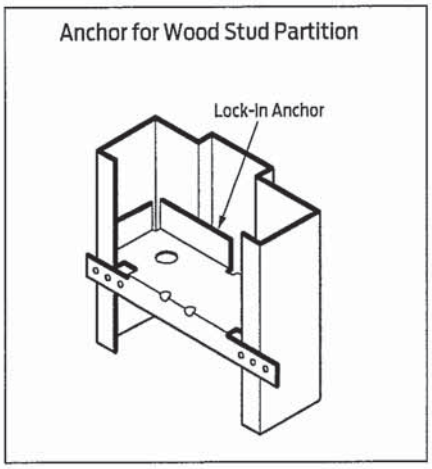
Series	Frame profile		Corner connections				4" (102mm) heads
			KD (Knock-down)		SUA (Set-up & weld)		
	Single rabbet	Double rabbet	Single rabbet	Double rabbet	Single rabbet	Double rabbet	
F16	Typically for walls less than 3-3/4" (95mm) thick. Minimum walls thickness 2" (51mm)	Typically for walls less than 3-3/4" (95mm) thickness or greater	3 interlocking corner tabs per factory die-miter. See the "KD Corner Detail	4 interlocking corner tabs per factory die-miter. See the "KD Corner Detail	Available when specified, and in accordance with ANSI A250.8-2003 (SDI 100).		Die-mitered for use with 2" (51mm) face double rabbet jambs. Available when specified for KD or SUA applications.
F14							
F12	N/A		N/A	N/A	Standard Saw Cut and welded, and in accordance with ANSI A250.8-2003 (SDI 100)		For use with 2" (51mm) face double rabbet jambs.

N/A - Not Available









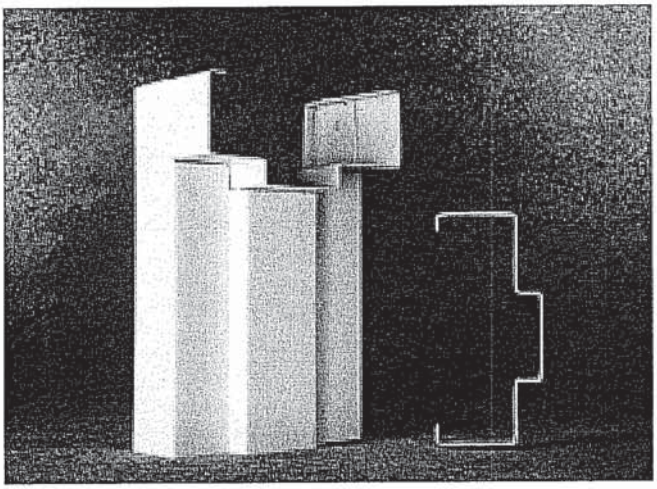
Anchoring and installation notes

1. **F16 and F14 Series commercial and Institutional frames** are supplied standard with masonry wire or lock-in jamb anchors and adjustable base anchors. Anchors are designed for maximum wall/frame engagement and installation flexibility.
2. **For anchoring applications, refer to the Frames: Anchoring systems section of this manual.**
3. **Installation Caution Notice: Grouted frames:**
   - When temperature conditions necessitate an additive to be used in the mortar to prevent freezing, the contractor installing the frames must coat the inside of frames in the field with a corrosion resistant coating per SDI 105.
   - When frames are to be grouted full, silencers must be field installed prior to grouting.
   - Steel frames, including fire rated frames, do not require grouting. Grouting is not recommended for frames in drywall.
4. All fire rated frames must be installed in accordance with NFPA Pamphlet 80 and the *Authority Having Jurisdiction.*

Framing applications

Series	Steel type	Building type	Opening	Usage frequency[1]	KD[4] Corner	SUA[5] Corner	Applications
F16	Non-Galvannealed[2]	Institutional and Commercial	Interior	Heavy to extraheavy duty	✓	✓	Typical building conditions
	Galvannealed[3]		Mainly Exterior				High humidity and/or weather exposure
F14	Non-Galvannealed[2]	Institutional and Commercial	Interior	Extra heavy tomaximum duty	✓	✓	Typical building conditions
	Galvannealed[3]		Mainly Exterior				High humidity and/or weather exposure
F12	Galvannealed[3]	Institutional and Commercial	Interior and exterior	Maximum duty	N/A	✓	Maximum traffic building conditions
							High humidity and/or weather exposure

1 Usage frequency is based on ANSI A250.8-2003
2 Commercial quality cold rolled steel
3 Reinforcements for galvannealed frames are also galvannealed
4 Knock-Down for field assembly prior to installation
5 Set-up and Welded for installation as a pre-welded unit



About the product

F Series 3-sided flush frames are designed to meet requirements for light to maximum duty applications in both commercial and institutional buildings. They are 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 canbe specified and supplied as KD (knock-down) for field assembly prior to installation or welded for installation asa complete unit.

Installation

1. Installation shall conform to the published Steelcraft installation instructions, ANSI A250.11-2001 (formerly SDI 105) *Recommended Erection Instructions for Steel Frames and HMMA 840.*
2. Fire Rated Assemblies must be in accordance with NFPA Pamphlet 80. The *Authority Having Jurisdiction* is the final authority in issues related to the installation and use of installed Fire Rated Doors.

Features and benefits

Steelcraft F Series flush frames offer the following unique features, which enhance long term functionality and durability:

1. **Die-mitered corner connections:** Die-mitered corner connection at the head and jamb insure an attractive, tight and closed mitered connection. The miter includes 4 corner tabs designed with concealed connection eliminating the need for continuous profile welding.
2. **Patented universal hinge preparations** allow for easy field conversion from standard weight .134" (3.3mm) thick hinges to heavy weight .180" (4.7mm) hinges.
3. **Adjustable base anchors** allow for installation adjustment when the floor is not level.
4. **Factory prepared** for field installed silencers.
5. **Factory applied baked on rust inhibiting primer** in accordance with ANSI A250.10-1998 (R2004).

Specification compliance

1. Overall frame construction for the Steelcraft F Series flush frames meets the requirements of ANSI A250.8-2003 (commonly referred to as SDI-100).
2. Hardware preparations and reinforcements are in accordance with ANSI A250.6-2003. Locations are in accordance with ANSI/DHI A115.

Fire ratings

The F Series flush frames meet the broadest fire rating requirements. They are listed for installations requiring compliance to both neutral pressure testing (ASTM E152 and UL 10B) and positive pressure standards (UL 10C). Refer to the **Fire Rated Section** of this manual for particular listings.

Applications

F Series frames are typically installed in wall construction types as defined in the chart below:

Frame applications

Profile	Steel thickness	Wall construction	Typical wall anchors
F16	16 Gauge [0.053" (1.3mm)]	Wood or steel stud	Lock-in stud anchor
F16	16 Gauge [0.053" (1.3mm)]	Masonry	Wire masonry
F16	16 Gauge [0.053" (1.3mm)]	Existing masonry	Bolted through soffit
F14	14 Gauge [0.067" (1.7mm)]	Wood or steel stud	Lock-in stud anchor
F14	14 Gauge [0.067" (1.7mm)]	Masonry	Wire masonry
F14	14 Gauge [0.067" (1.7mm)]	Existing masonry	Bolted through soffit
F12	12 Gauge [0.093" (2.3mm)]	Wood or steel stud	Lock-in stud anchor
F12	12 Gauge [0.093" (2.3mm)]	Masonry	Wire masonry
F12	12 Gauge [0.093" (2.3mm)]	Existing masonry	Bolted through soffit

Spec Section
081113

Hollow Metal

Manufacturer	Steelcraft Hollow Metal
Doors	LF Series - 18ga.
Core Material	Honeycomb/Polyurethane
Door Thickness	1-3/4"
Frames	F Series
Gage	16
Type	Welded

JOB NO.	PROJECT: Webster ISB	LOCATION:	SHEET of

CANNONDESIGN

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

WEBSTER UNIVERSITY ISB
PROJECT NAME

8274 BIG BEND BLVD
ADDRESS

NUMBER

WEBSTER UNIVERSITY
OWNER

CANNON DESIGN
ARCHITECT / ENGINEER

Joe Voypick
SUBMITTED BY

081113-005
CONTRACTOR / CM SUBMITTAL NO.

CANNON DESIGN SUBMITTAL NO.

DRAWING / DETAIL REFERENCE

081113
SPECIFICATION SECTION / PARAGRAPH

SteelCraft Hollow Metal
MANUFACTURER / SUPPLIER

ITEM / PRODUCT ID

REQUIRED DATE

PRIORITY

◯ CRITICAL

ITEM BEING SUBMITTED (check only one)

- ◉ Shop Drawings
- ◯ Samples (_____ copies)
- ◯ LEED Submittal
- ◯ Certification / Qualifications
- ◯ Record Documents
- ◯ Product Data
- ◯ Coordination Drawing
- ◯ Calculations
- ◯ Schedules
- ◯ O&M Manuals
- ◯ Other _____

ITEM BEING SUBMITTED FOR (check only one)

◉ Action ◯ Information Only ◯ Record

REMARKS OR DEVIATIONS

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)

PARIC

PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By:
Devin D. Gates

Joe Voypick
REVIEWED BY

9/12/16
DATE

To be completed by Reviewer

08 1113-005
CANNON DESIGN SUBMITTAL NUMBER

9/13/16
RECEIVED DATE

- ◯ A. No Exceptions Taken
  No further review of submittal is required.
- ◯ B. Make Corrections Noted
  Incorporate corrections in work; resubmission is not required.
- ◯ C. Revise and Resubmit
  Revise as noted, and resubmit for review.
- ◯ D. Rejected
  Submittal is not in compliance with Contract Documents; provide new submittal.
- ◯ E. For Record / Information Only
  Submittal was reviewed for Record / Information purposes only.
- ◯ F. Not Required for Review
  Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS ◯ See attached sheet(s) for additional comments

REVIEWED BY

09.14.16
DATE

77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0218

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 09/12/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

RE: Hollow Metal Door Shop Drawings

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☑ Shop Drawings	☑ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	**SENT VIA:**	☐ Returned
☐ Specifications	☐ Attached	☐ Returned for Corrections
☐ Other:	☐ Separate Cover Via:	☐ Due Date:

Item	*Package*	*Code*	*Rev.*	*Copies*	*Date*	*Description*	*Status*
Submittal		081113-005	1		09/12/2016	Hollow Metal Door Shop Drawings	Submitted

NOTES:

CC:

Signed: _____

Devin Gates