

MU Series multi-use



About the product

Steelcraft's MU Series multi-use flush frames are designed for light to 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. They have a jamb profile similar to the DW frames, but are designed 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 welded for installation as a complete unit.

Installation

1. Installation shall conform to the published Steelcraft installation instructions, ANSI A250.11-2012 (formerly SDI 105) Recommended Erection Instructions for Steel Frames and HMMMA 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 MU Series multi-use flush frames offer the following unique features which enhance long-term functionality and durability. Features can vary depending on the steel thickness of the frame:

1. **Die-mitered corner connections** of the MU Series multi-use flush frame corners lock together once the frame is installed. The tab/lock design:
 - a. prevents the head from rising
 - b. keeps the head and jamb members in alignment
 - c. keeps the miter tight
 - d. includes wedge-lock corner clips. Screws are supplied to secure miter.
2. **Patented universal hinge preparations** allow for easy field conversion from standard weight .134" (3.3 mm) thick hinges to heavy weight 0.180" (4.7 mm) 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 A250.10-2011.

Specification compliance

1. Overall frame construction for Steelcraft MU Series multi-use flush frames meet the requirements of ANSI A250.8-2014 (SDI 100).
2. Hardware preparations and reinforcements are in accordance with ANSI A250.6. Locations are in accordance with ANSI/DHI A115 unless otherwise stated.

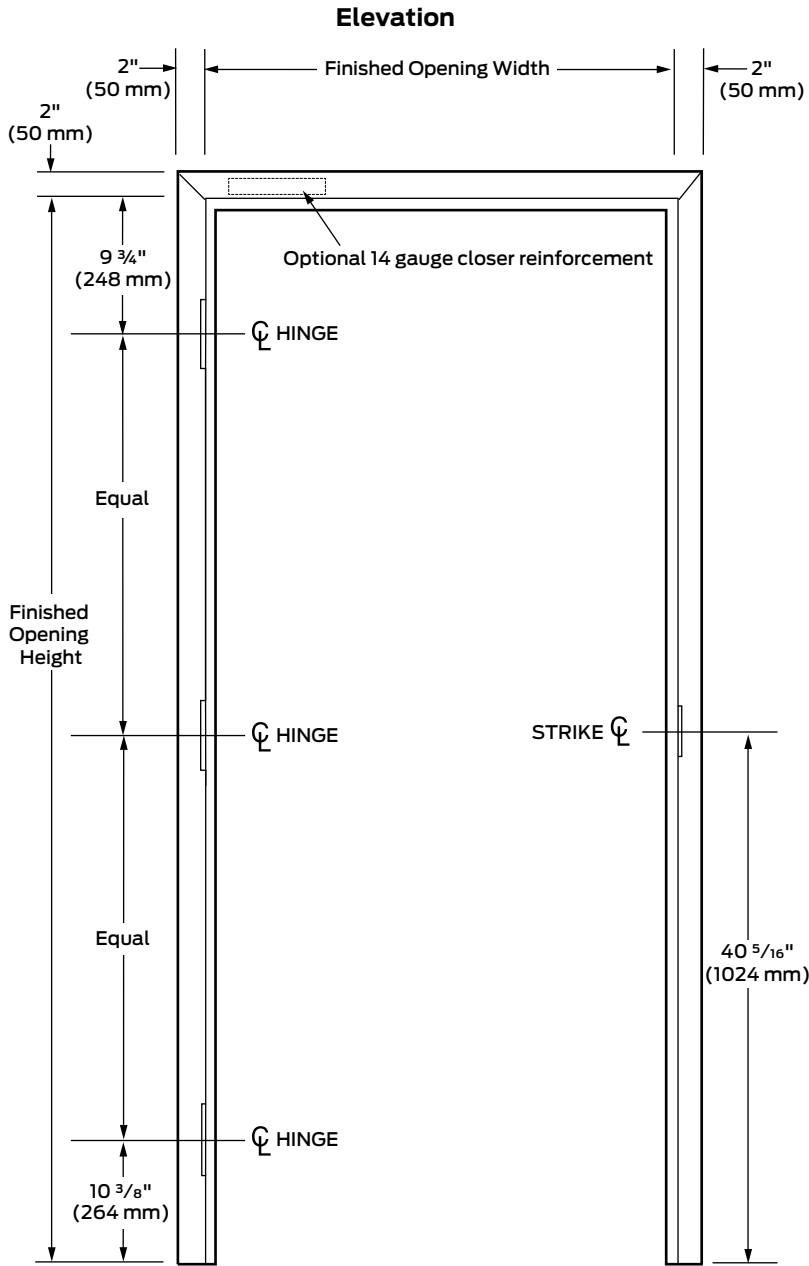
Fire ratings

MU Series multi-use 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.

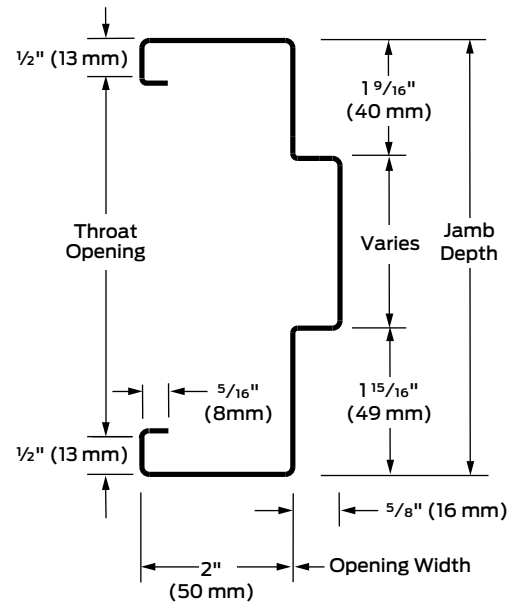
Applications

Steelcraft MU Series multi-use flush frames are typically installed in wall construction types as defined in the chart below:

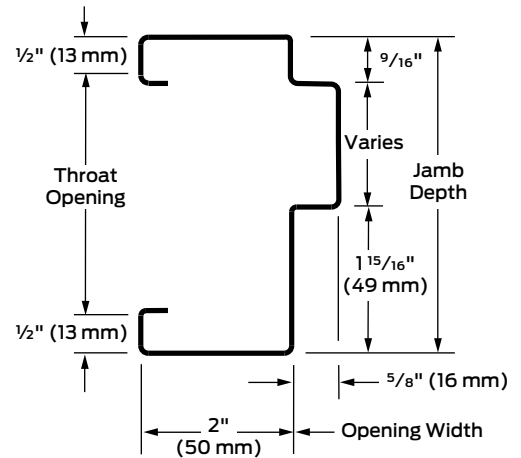
Frame applications			
Profile	Steel thickness	Wall construction	Typical wall anchors
MU16	16 Gauge [0.053" (1.3 mm)]	Wood or steel stud	Lock-in stud anchor
MU16	16 Gauge [0.053" (1.3 mm)]	Masonry	Wire masonry
MU16	16 Gauge [0.053" (1.3 mm)]	Existing Masonry	Bolted through soffit
MU14	14 Gauge [0.067" (1.7 mm)]	Wood or steel stud	Lock-in stud anchor
MU14	14 Gauge [0.067" (1.7 mm)]	Masonry	Wire masonry
MU14	14 Gauge [0.067" (1.7 mm)]	Existing masonry	Bolted through soffit



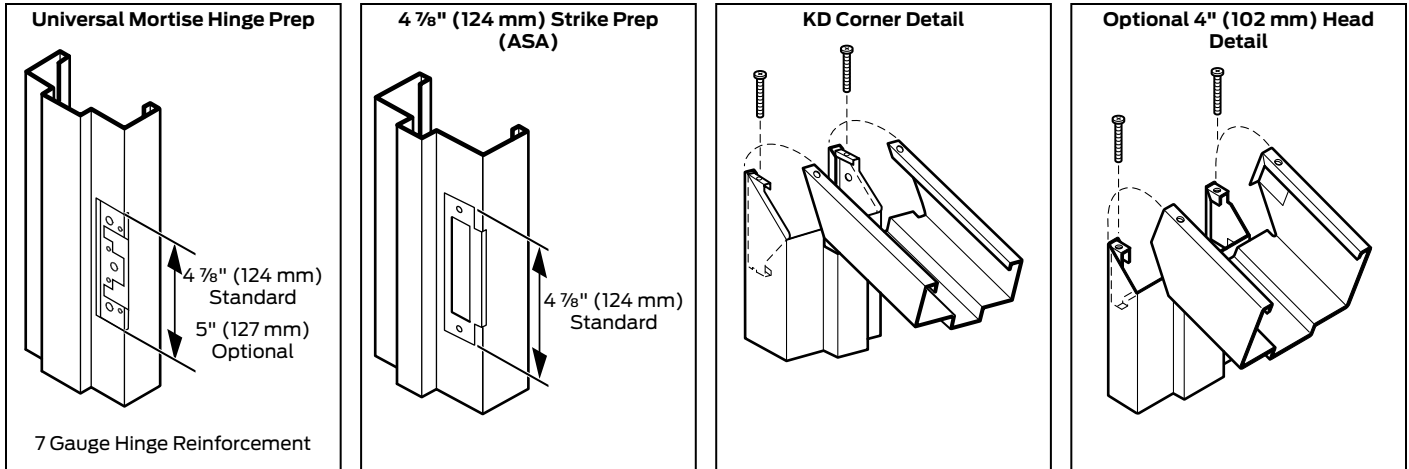
Standard Double Rabbet Frame



Narrow Double Rabbet Frame for frame depths 4-3/8" and narrower



Frame sizing options										
Series	Maximum opening size		Jamb depth availability(profile)				Standard profile dimensions (variations available)			Corners
	Single	Pair	Narrow double rabbet		Double rabbet		Face	Stop	Returns	Standard
			Min.	Max.	Min.	Max.				
MU16	4'0" x 9'0" (1219 mm x 2743 mm)	8'0" x 9'0" (2439 mm x 2743 mm)	3 1/4" (83 mm)	4 3/8" (111 mm)	4 1/2" (114 mm)	20" (508 mm)	2" (51 mm)	5/8" (16 mm)	1/2" (13 mm)	DIE MITERED with interlocking Soffit tab
	MU14	4'0" x 9'0" (1219 mm x 2743 mm)	8'0" x 9'0" (2439 mm x 2743 mm)	3 1/4" (83 mm)	4 3/8" (111 mm)	4 1/2" (114 mm)	20" (508 mm)	2" (51 mm)	5/8" (16 mm)	

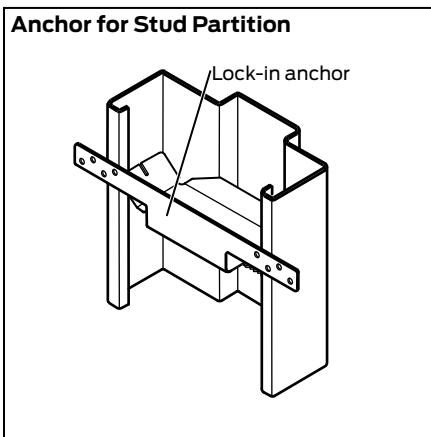
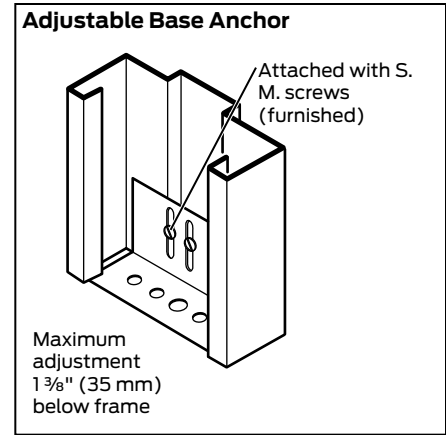
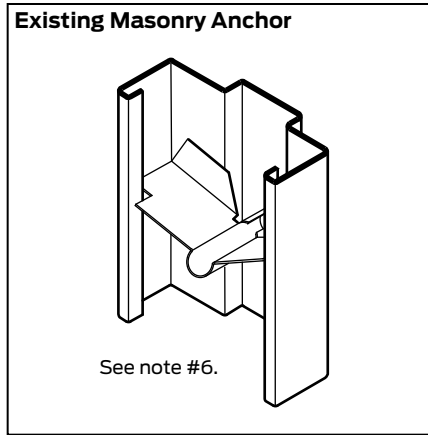
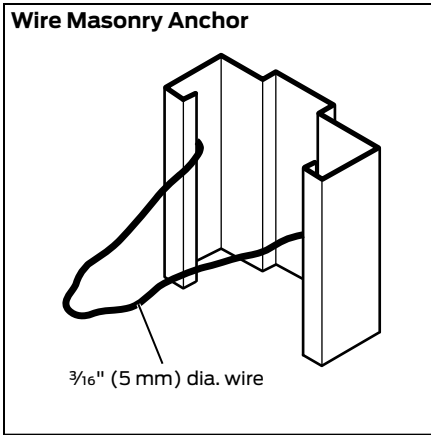


General notes

1. Variations in jamb depths available in 1/8" (3 mm) increments.
2. All MU 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. MU 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 galvanized. Galvanized steel is recommended for all exterior applications.
5. MU Series with 4" heads are used mainly in masonry applications when 2" face heads do not match block coursing, or in drywall applications when installed in close proximity to a F Series or MU Series frame installed with a 4" head.

Frame options							
Series	Frame profile		Corner connections				4" (102 mm) Heads
			KD (Knock-down)		SUA (Set-up & weld)		
	Narrow double rabbet	Double rabbet	Single rabbet	Double rabbet	Single rabbet	Double rabbet	
MU16	Typically for walls less than 3 3/4" (95 mm) thick.	Typically for walls less than 3 3/4" (95 mm) thickness or greater	Factory Die-Mitered, Soffit Tab included. Corner clip assembly screws required.		Available when specified, and in accordance with ANSI A250.8-2014 (SDI 100).		Die-mitered for use with 2" (51 mm) face jambs. Corner Clip assembly screws required.
MU14	Minimum walls thickness = 2" (51 mm)						

N/A - Not Available



Anchoring and installation notes

1. **MU16 Series Multi-use flush 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 filed 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. Installation shall conform to the published Steelcraft installation instructions, SDI 105 Recommended Installation Instructions for Steel Frames.
5. All fire rated frames must be installed in accordance with NFPA Pamphlet 80 and the Authority Having Jurisdiction.
6. When using Standard Exiting Wall Anchors the anchor must be field modified (notched) to provide clearance for the backbend return.

Framing applications							
Series	Steel type	Building type	Opening	Usage frequency ¹	KD Corner ⁴	SUA Corner ⁵	Applications
MU16	Non-Galvannealed ²	Institutional and Commercial	Interior	Heavy to extra heavy duty	✓	✓	Typical building conditions
	Galvannealed ³		Mainly Exterior				High humidity and/or weather exposure
MU14	Non-Galvannealed ²	Institutional and Commercial	Interior	Extra heavy to maximum duty	✓	✓	Typical building conditions
	Galvannealed ³		Mainly Exterior				High humidity and/or weather exposure

1 Usage frequency is based on ANSI A250.8-2014 (SDI 100)

2 Commercial quality carbon 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