



ABOUT THE PRODUCT:

The DE Series Double Egress Frames meet all the design parameters of conventional double egress frames and is specified when cross corridor openings have the additional requirements of maximized clear opening width. The unique design of the DE Series frame **allows for the use of swing clear hinges**. This must be considered if your local building code has a minimum clear opening width requirement.

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 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.

FRAME APPLICATIONS

Profile	Steel Thickness	Wall Construction	Typical Wall Anchors
DE16	16 Gage [0.053" (1.3mm)]	Wood or Steel Stud	Weld-in Stud Anchor
		Masonry	Wire Masonry
		Existing Masonry	Bolted Through Soffit
DE14	14 Gage [0.067" (1.7mm)]	Wood or Steel Stud	Weld-in Stud Anchor
		Masonry	Wire Masonry
		Existing Masonry	Bolted Through Soffit

FEATURES AND BENEFITS:

Steelcraft DE Series Double Egress Frames offer the following unique features, which enhance long term functionality and durability:

1. **Die-mitered corner connection** insures tight fit and assembly. Frame must be welded by prior to installation.
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. **Factory prepared** for field installed silencers.
4. **Factory applied baked on rust inhibiting primer** in accordance with ANSI A250.10-1998 (R2004).
5. **Unique design to meet clear width corridor applications.**

SPECIFICATION COMPLIANCE:

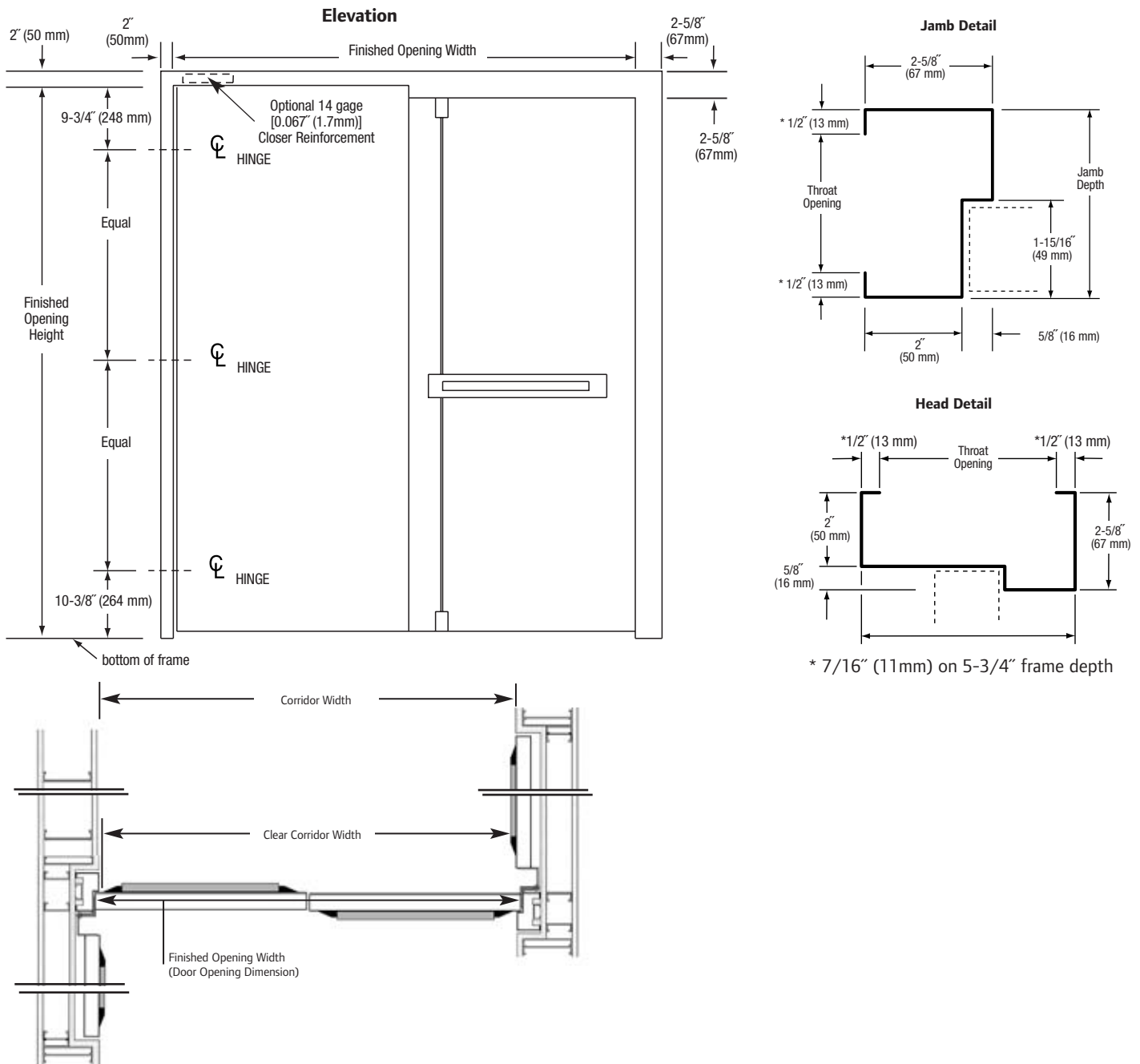
4. Overall frame construction for the Steelcraft DE16 and DE14 Series Double Egress Frames meet and exceed the requirements of ANSI A250.8-2003 (commonly referred to as SDI-100).
2. Hardware preparations and reinforcements are in accordance with ANSI A250.6-2003. Locations are in accordance with ANSI/DHI A115 unless otherwise stated.

FIRE RATINGS:

The DE Series Double Egress 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 (UBC 7-2 and UL 10C). Refer to the **Fire Rated Section** of this manual for particular listings.

APPLICATIONS:

DE Series Double Egress Frames are typically Installed in wall construction types as defined in the chart below:



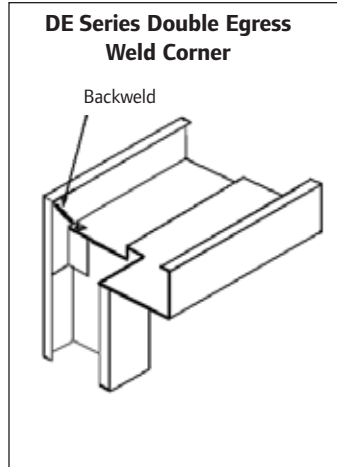
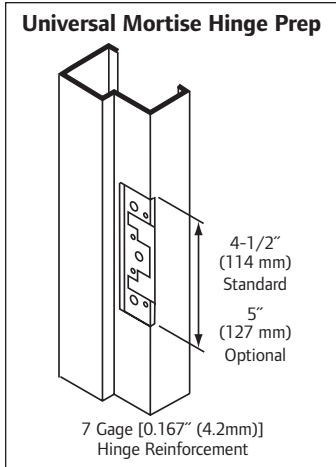
Finished opening width (Door Opening Dimension) is the dimension from frame door rabbet to the opposite rabbet.

NOTE: for FE and DE-series double egress frames is 1/8" (3.2 mm) undersized from the standard nominal opening width. Example: 6' 0" (1829 mm) head = 71-7/8" net width in lieu of the standard 72".

FRAME SIZING OPTIONS

SERIES	MAXIMUM OPENING SIZE	JAMB DEPTH AVAILABILITY (profile)		STANDARD PROFILE DIMENSIONS (Variations Available)			CORNERS
		Minimum	Maximum	FACE	STOP	RETURNS	
	Pair	2 STEP JAMBS x 2 STEP HEADS		FACE	STOP	RETURNS	STANDARD
DE16	8'-0" x 10'-0" (2438mm x 3048mm)	4-3/4" (121mm)	14" (356mm)	2" (50mm) on Narrow Side.	5/8" (16mm)	1/2"* (13mm)	Must be welded prior to installation
DE14		5-3/4" (146mm)		2-5/8" (67mm) on Wide Side.			

*except 5-3/4" (146mm) depth, which is 7/16" (11mm)



GENERAL NOTES:

1. Variations in jamb depths available in 1/8" (3mm) increments.
2. Due to the configuration of narrow hinge jambs mating to wider heads, DE Series frames are supplied set-up and welded only.
3. All DE Series frames are supplied standard with masonry wire or weld-in jamb anchors and weld-in base anchors. Anchors are designed for maximum wall/frame engagement and installation flexibility.
4. DE Series Frames are to be installed as part of the wall framing sequence.
5. Depending on environmental and usage conditions, the steel can be either cold rolled or galvanized.

NOTE:

Together with the use of Swing-Clear type hinges, the DE Series Double Egress 2 Step hinge jambs will provide additional cross-corridor width between jambs:

- removes the thickness of the door from the opening, even when at 90°
- changes the Pivot Point of the door
- can increase the clear opening width by 5-1/4" (133mm)



FRAME OPTIONS

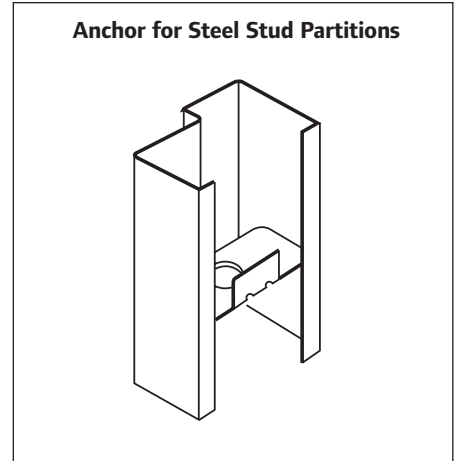
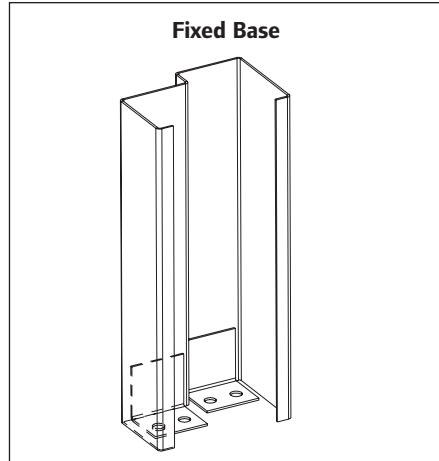
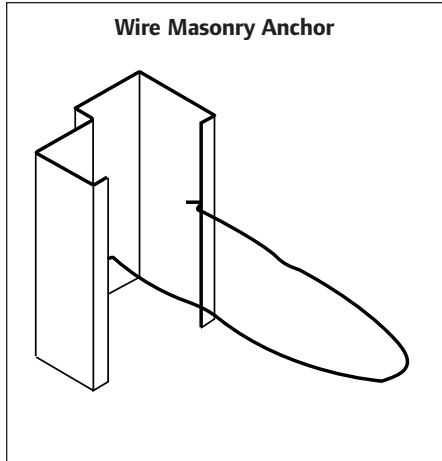
SERIES	FRAME PROFILE	CORNER CONNECTIONS		4" (102mm) HEADS
		KD (Knock-Down)	SUA (Set-Up & Weld)	
DE16	Typically for walls 3-3/4" (95mm) thickness or greater	NOT AVAILABLE FOR KD INSTALLATION Die-mitered corners, must be welded by distributor prior to installation	Available from Steelcraft when specified in accordance with ANSI A250.8-2003 (SD1100)	Available when specified. Must be welded prior to installation
DE14				

NOTE:

1. Hinge Jambs for DE Series Double Egress Frames are single rabbet sections and are a smaller jamb depth than the head.
2. The jamb depth of the hinge jambs is shown in the chart below.
3. **ALWAYS ORDER DE-SERIES FRAMES BY THE FRAME DEPTH OF THE HEAD.** Steelcraft will manufacture the jambs as required.

HEAD				JAMB			
Frame Depth		Throat Opening		Jamb Depth		Throat Opening	
5-3/4"	146mm	4-7/8" ¹	124mm ¹	3-27/32"	98mm	2-31/32"	75mm
6-3/4"	171mm	5-3/4"	146mm	4-11/32"	110mm	3-11/32"	85mm
7-3/4"	197mm	6-3/4"	171mm	4-27/32"	123mm	3-27/32"	98mm
8-3/4"	222mm	7-3/4"	197mm	5-11/32"	136mm	4-11/32"	110mm

¹5-3/4" (146mm) jamb depth frame has 7/16" (11mm) backbends.
All others have 1/2" (13mm) backbends.



Anchoring and Installation Notes:

1. **DE-Series Double Egress Frames** are supplied standard with masonry wire or weld-in jamb anchors and fixed base anchors. Anchors are designed for maximum wall/frame engagement and installation flexibility.
2. **For anchoring applications, refer to section 2.4 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. **Special frame anchorage:** Frame anchor details shown on this sheet are applicable to Double Egress Frames with 2" (50mm) faces. Anchor details will vary with frame profile changes.
5. Installation shall conform to the published Steelcraft installation instructions, SDI 105 *Recommended Installation Instructions for Steel Frames*.
6. 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	Usage Frequency ¹	KD ⁴ Corner	SUA ⁴ Corner	Applications
DE16	Non-Galvannealed ²	Institutional and Commercial	Heavy to Extra Heavy Duty	N/A	✓	Typical Building Conditions
	Galvannealed ³					High Humidity and/or Weather Exposure
DE14	Non-Galvannealed ²	Institutional and Commercial	Extra Heavy to Maximum Duty	N/A	✓	Typical Building Conditions
	Galvannealed ³					High Humidity and/or Weather Exposure

¹ Usage frequency is based on ANSI A250.8-2003

² Commercial quality carbon steel

³ Reinforcements for galvannealed frames are also galvannealed

⁴ Set-up and Welded for installation as a pre-welded unit