

Electronic Hinge Preparations

1 Purpose

It is the intention of this document to furnish users of standard steel frames with practical information regarding an acceptable method for preparing frames for 4-½" electric hinges. This document will allow frame manufacturers to provide frames prior to having knowledge of the specific electric hinge being used.

2 Scope

The information contained herein pertains to frames manufactured in accordance with ANSI A250.8. The preparation as defined herein will accommodate the majority of electric hinges sold. It is the responsibility of the hardware specifier to assure compatible hinges are used.

3 Reference Documents

ANSI A250.6 Recommended Practice for Hardware Reinforcing on Standard Steel Doors and Frames.

ANSI A250.8 SDI-100 Recommended Specifications for Standard Steel Doors and Frames.

4 Location

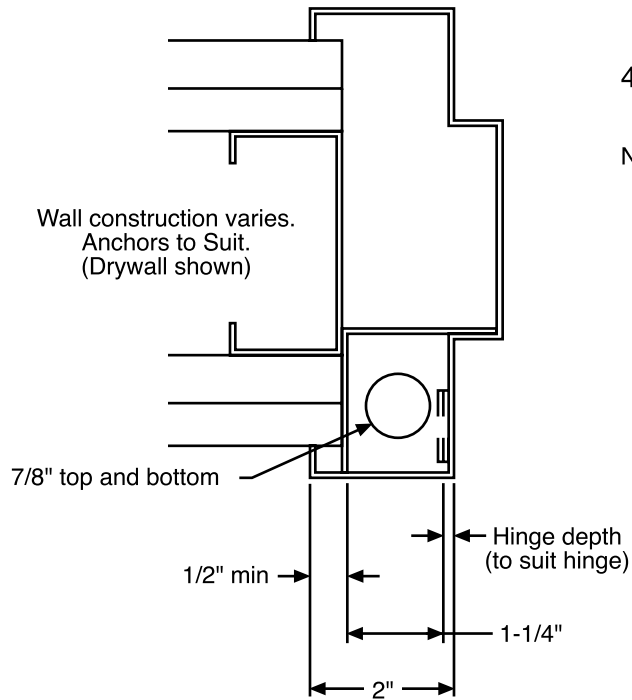
The preparation for electric hinges is intended to be non-load bearing. Therefore it shall be located in the center hinge preparation on frames with 1-½ pair of hinges, and on the second hinge from the bottom on frames with 2 pair of hinges.

5 Hinge Reinforcement

The hinge reinforcement shall comply with ANSI A250.6 and ANSI A250.8, and shall incorporate cutouts as shown in Figure 1.

6 Junction Box

A junction box shall be provided to facilitate wiring and connector installation. In addition, a hole shall be provided at the top and bottom of the junction box to facilitate conduit (see Figure 1). It is the responsibility of the electrical contractor to plug any unused holes.

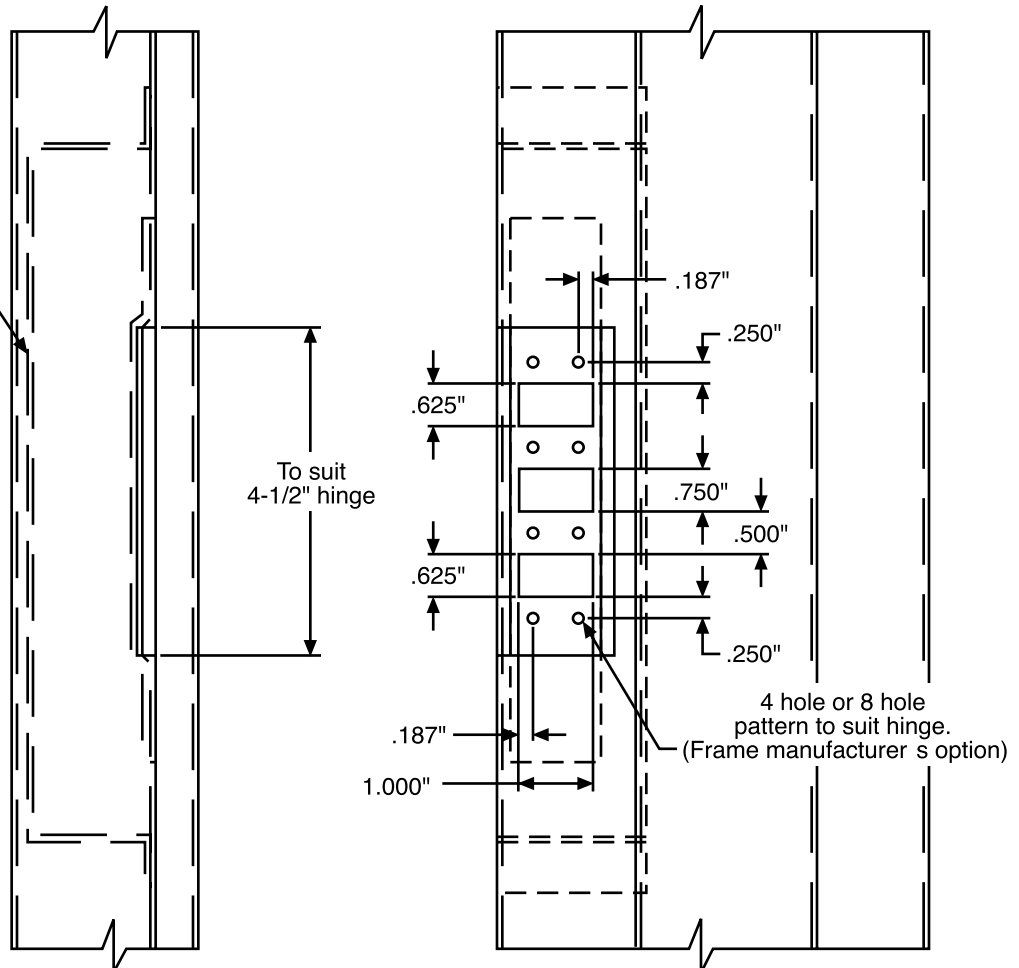


4-1/2" Electric hinge prep. on standard frame.

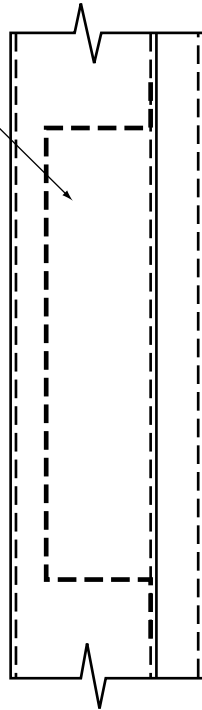
Not to be used in load-bearing hinge location.

20 ga. minimum junction box welded to frame.

Note: Junction box to facilitate wiring and connector installation.

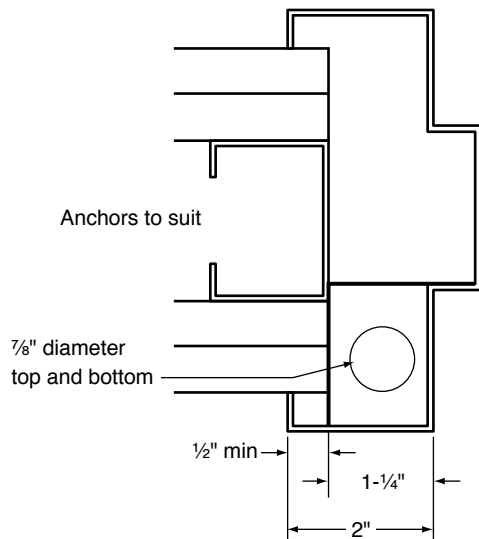
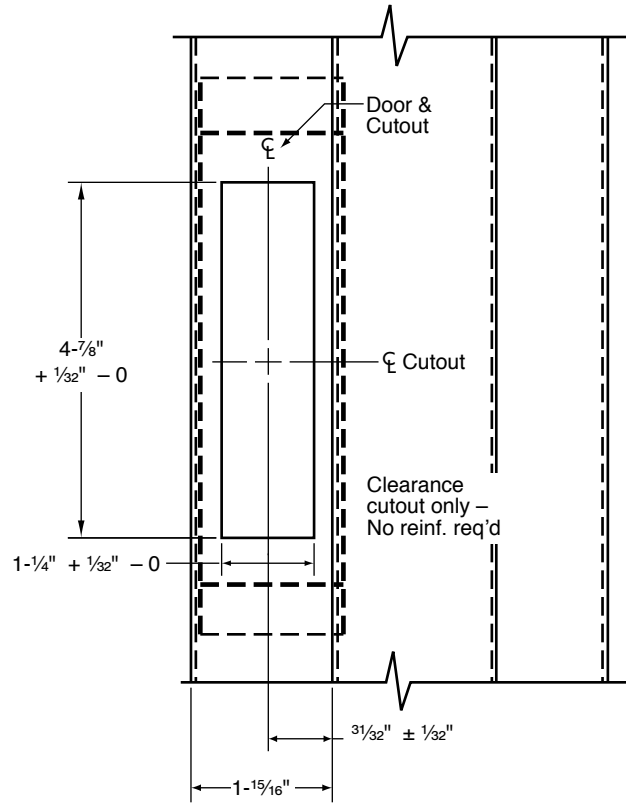


20 Ga. junction box welded to frame



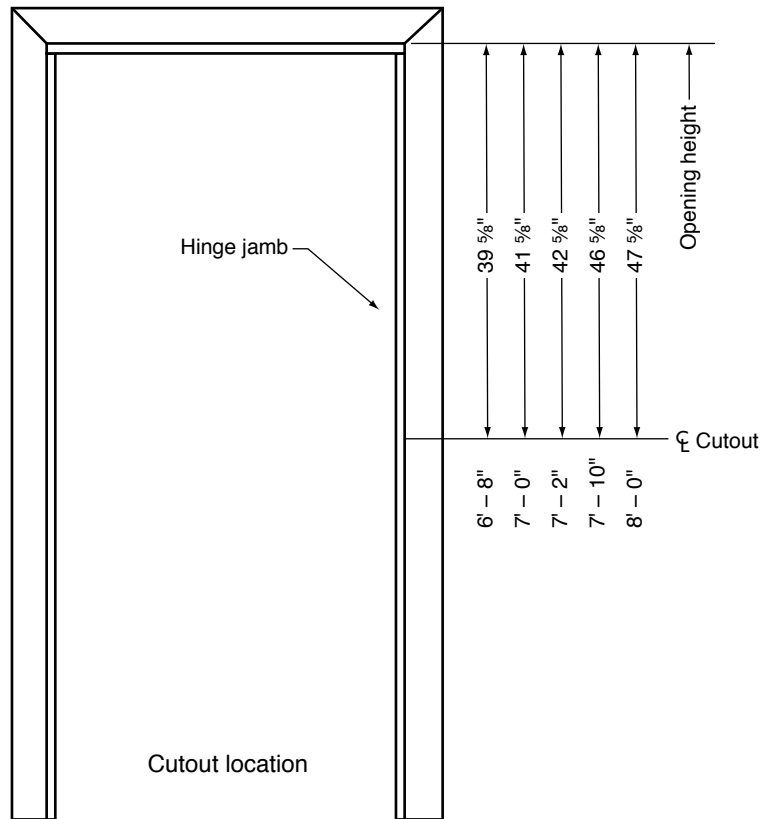
NOTE:

Box configuration must provide access to facilitate wiring and connector installation.



NOTE:

Detail does not apply to drywall slip-on type frames



Electrified Continuous Hinge Preparation on Standard Steel Frame

AVAILABLE PUBLICATIONS

Specifications

- ANSI/SDI A250.6** Recommended Practice for Hardware Reinforcings on Standard Steel Doors and Frames
- ANSI/SDI A250.8** SDI 100 Recommended Specifications for Standard Steel Doors & Frames
- SDI-108** Recommended Selection & Usage Guide for Standard Steel Doors
- SDI-109** Hardware for Standard Steel Doors & Frames
- SDI-118** Basic Fire Door Requirements
- SDI-128** Guidelines for Acoustical Performance of Standard Steel Doors & Frames
- SDI-129** Hinge & Strike Spacing

Test Procedures

- ANSI/SDI A250.3** Test Procedure & Acceptance Criteria for Factory Applied Finish Coatings for Steel Doors & Frames
- ANSI/SDI A250.4** Test Procedure & Acceptance Criteria for Physical Endurance for Steel Doors, Frames, Frame Anchors & Hardware Reinforcings
- ANSI/SDI A250.10** Test Procedure & Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors & Frames
- ANSI/SDI A250.13** Testing and Rating of Severe Windstorm Resistant Components for Swinging Door Assemblies
- SDI-113** Standard Practice for Determining the Steady State Thermal Transmittance of Steel Door & Frame Assemblies
- SDI-131** Accelerated Physical Endurance Test Procedure for Steel Doors, Frames and Frame Anchors

Construction Details

- ANSI/SDI A250.11** Recommended Erection Instructions for Steel Frames
- SDI-110** Standard Steel Doors & Frames for Modular Masonry Construction
- SDI-111** Recommended Details for Standard Details Steel Doors, Frames, Accessories and Related Components
- SDI-122** Installation & Troubleshooting Guide for Standard Steel Doors & Frames
- SDI** Drywall Slip-On Frames

Miscellaneous Documents

- ANSI/SDI A250.7** Nomenclature for Standard Steel Doors & Steel Frames
- SDI-106** Recommended Standard Door Type Nomenclature
- SDI-112** Zinc-Coated (Galvanized/Galvannealed) Standard Steel Doors & Frames
- SDI-117** Manufacturing Tolerances for Standard Steel Doors & Frames
- SDI-124** Maintenance of Standard Steel Doors & Frames
- SDI-127** Industry Alert Series (A-L)
- SDI-130** Electrified Hinge Preparations
- SDI** What is The SDI?

AUDIO-VISUAL PROGRAMS ON VHS ALSO AVAILABLE



Standards As Tough As Steel.™

MEMBERS OF THE STEEL DOOR INSTITUTE

AMWELD INTERNATIONAL, LLC
301 South Northpoint Drive, Suite 400
Coppell, TX 75019
(888) 775-2397
www.amweld.com

CECO DOOR PRODUCTS
9159 Telecom Drive
Milan, TN 38358
(731) 686-8345
www.cecodoor.com

CURRIES COMPANY
P.O. Box 1648
Mason City, IA 50402-1648
(641) 423-1334
www.curries.com

DEANSTEEL MANUFACTURING CO.
111 Merchant Street
San Antonio, TX 78204-1496
(210) 226-8271
www.deansteel.com

DOOR COMPONENTS INC.
7980 Redwood Avenue
Fontana, CA 92336-1638
(909) 770-5700
www.doorcomponents.com

MESKER DOOR, INC.
3440 Stanwood Boulevard
Huntsville, AL 35811-9021
(256) 851-6670
www.meskerdoor.com

METAL PRODUCTS, INC.
319 North Hills Road
Corbin, KY 40701
(606) 523-0173
www.metalproductsinc.com

PIONEER INDUSTRIES, INC.
171 South Newman Street
Hackensack, NJ 07601
(201) 933-1900
www.pioneerindustries.com

REPUBLIC
155 Republic Drive
McKenzie, TN 38201-0580
(731) 352-3383
www.republicdoor.com

SECURITY METAL PRODUCTS CORP.
5700 Hannum Avenue, Suite 250
Culver City, CA 90230
(310) 641-6690
www.secmet.com

STEELCRAFT
Ingersoll Rand Security Technologies
9017 Blue Ash Road
Cincinnati, OH 45242
(513) 745-6400
www.steelcraft.com

STEEL DOOR INSTITUTE

30200 DETROIT ROAD • CLEVELAND, OHIO 44145

440.899.0010 • FAX 440.892.1404

www.steeldoor.org