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GENERAL INFORMATION

All Steelcraft frames, doors and stick systems are routinely prepared for various types and grades of architectural hardware. The preparations for the specified hardware are in accordance with the hardware manufacturer's registered and/or published template information.

This section of the Steelcraft TD Manual is designed to help educate users of how Steelcraft products interface and function with the major architectural hardware products. It is also intended to be a frame and door supplement to the information published by the hardware manufacturer being used and/or specified.

HARDWARE

Architectural hardware items are any device, sensor or auxiliary item attached to a frame or door, which is either specified and/or required for the operation and functionality of the door assembly. The hardware attached to the frame and/or door can be purely mechanical, electrical (wired into the alarm and monitoring systems of the building) or pneumatic. The architect, specification writer and/or the purchaser of the door assembly specifies these hardware items.

HARDWARE PREPARATION TYPES:

There are three (3) major types of hardware preparations to be considered.

- **Mortised hardware:**
  Any hardware device or item (including sensors) attached to the frame or door that requires a cutout and reinforcement be made prior to attaching the hardware item to the door and/or frame.
- **Surface applied and reinforced hardware:**
  Any hardware device or item (including sensors) attached to the frame or door which do not require a cutout be made prior to attaching the hardware item to the frame and/or door, however, the hardware manufacturer or specifier requires a reinforcement be built into the frame or door to support the attached piece of hardware or its function.
- **Surface applied hardware:**
  Any hardware device or item (including sensors) attached to the frame or door which does not require either a cutout or reinforcement to be made prior to attaching the hardware item to the frame and/or door.

HARDWARE CATEGORIES:

The architectural hardware attached to a door assembly, usually falls into one of the following device categories:.

- **Hinging -** These devices perform the functions of suspending and swinging the door in the frame. Hinging systems are usually attached to the door edge and hinge jamb. The most commonly used hinging devices are:

  Butt hinges – mortised to both the door edge and hinge jamb

  Continuous hinges – surface applied and reinforced to the door edge and hinge jamb

  Pivots – mortised to both door edge and hinge jamb.

- **Locking -** These devices perform the functions of holding the door in a closed position by the means of a latch or lock bolt projecting from the door into a strike. The strike is located in either the frame or inactive leaf of a pair of doors. All of these devices are mortised into the door edge and the strike jamb. The most commonly used locking devices are:

  Latches and locks

  Deadlocks

  Exit devices (some are surface applied on the door face)

  Auxiliary locks

- **Closing** – These devices perform the functions of mechanically closing the door once it is opened, and are mainly categorized as:

  Surface closers – surface applied and reinforced on the door face and head of the frame.

  Concealed closers – mortised to both door top channel and head of the frame.

  Floor closers – mortised into the door bottom channel and attached into the floor.

- **Protecting** – These devices are designed to protect the frame and door against foreseen damage from abuse and function. They are mainly surface applied and internally reinforced only when specified. The most commonly used devices in this category are:

  Kick plates

  Push pull plates

  Coordinators

  Holders – may be concealed and reinforced when specified

  Stops – may be concealed and reinforced when specified

- **Weather Sealing** – These devices perform the functions of limiting weather, smoke and sound penetration through the operating clearances around the installed and operable door, frame and hardware assembly. These devices are mainly surface applied. The most commonly used devices in this category are:

  Perimeter weather seals – usually surface attached to the rabbet of the jambs and head

  Door bottoms – mortised into the bottom of the door, or surface applied to the bottom of the door face.

  Astragals – used in double door applications and surface attached to the edge of one of the doors.

ANSI COMPLIANCE

Steelcraft hardware preparations and reinforcements are in accordance with ANSI A250.6-1997. Locations are in accordance with ANSI/DHI A115.

GENERAL INFORMATION

Steelcraft's hardware locations are the same from product to product.

The ANSI A115.1 or ANSI A115.2 (4 7⁄8" [124mm] high) strike preparation is normally supplied on all frames prepared for 1 3⁄4″ (45mm) thick doors. The strike is located at 40 5⁄16"centerline (1024mm) from the bottom of the frame. This strike locations allows the use of either the Mortise (ANSI A115.1) or Cylindrical (ANSI A115.2) locks. The 4 7⁄8″ (124mm) strike also allows the use of mortise exit devices.

The ANSI A115.3 (2 3⁄4″ [70mm] high) strike preparation is normally supplied on frames for 1 3⁄8″ (35mm) thick doors. The strike preparation is also located at 40 5⁄16″ centerline (1024mm) from the bottom of the frame.

LOCATIONS:

Steelcraft's hinge locations are listed on the elevations shown on 8.2.2 and 8.2.3. All openings for 1 3⁄4" (45mm) doors up to and including 7'6" (2286mm) in height have 1 1⁄2 pair of hinges. Openings over 7'6" (2286mm) through 10'0" (3048mm) in height have 2 pair of hinges. Openings over 10'0" (3048mm) have 2 1⁄2 pair of hinges.

Other hardware locations are shown on the chart below.

SPECIFICATION COMPLIANCE

Steelcraft's hardware locations follow the standards established by the Steel Door Institute (SDI) and the Door and Hardware Institute (DHI).

FIRE RATINGS

Fire ratings are not affected by hardware locations. The proper hardware must be used. Refer to the Fire Rated Section of the Steelcraft Spec Manual for hardware requirements.

Hardware	Location on Frame to ℄ of prep	Location on Door to ℄ of prep
ANSI 115.1 mortise lock	40-5⁄16″ (1024mm)	39-3⁄16″ (995mm)
ANSI115.2 cylindrical (bored in) locks	40-5⁄16″ (1024mm)	39-9⁄16″ (1005mm)
ANSI A115.6 preassembled locks	40-5⁄16″ (1024mm)	39-9⁄16″ (1005mm)
Mortise exit devices	**See Note 1**	**See Note 1**
Rim/vertical rod exit devices	**See Note 2**	**See Note 2**
Deadlock	48" (1219mm)	To accommodate strike
Push plate	Not available	44-1⁄4″ (1124mm)
Pull plate	Not available	41-1⁄4″ (1048mm)
Combinations push & pull bars	Not available	41-1⁄4″ (1048mm)
Hospital latches	40-5⁄16″ (1024mm)	39-9⁄16″ (1005mm)
Hospital arm pulls	Not available	44-1⁄4″ (1124mm)
Hinges	**See elevations**	**See elevations**

Notes:
1. Standard location for single doors is to match the ANSI A115.1 strike location of 40-5⁄16″ (1024mm) from the bottom of the frame. Pairs of doors are located per template to insure the devices on both leaves align.
2. Rim and vertical rod exit devices are located per template.
3. Locations on frame are from bottom of frame.
4. Locations on door are from bottom of door (with the standard 3⁄4" undercut).

DOORS AND FRAMES WITH 1-1/2˝ PAIR OF HINGES

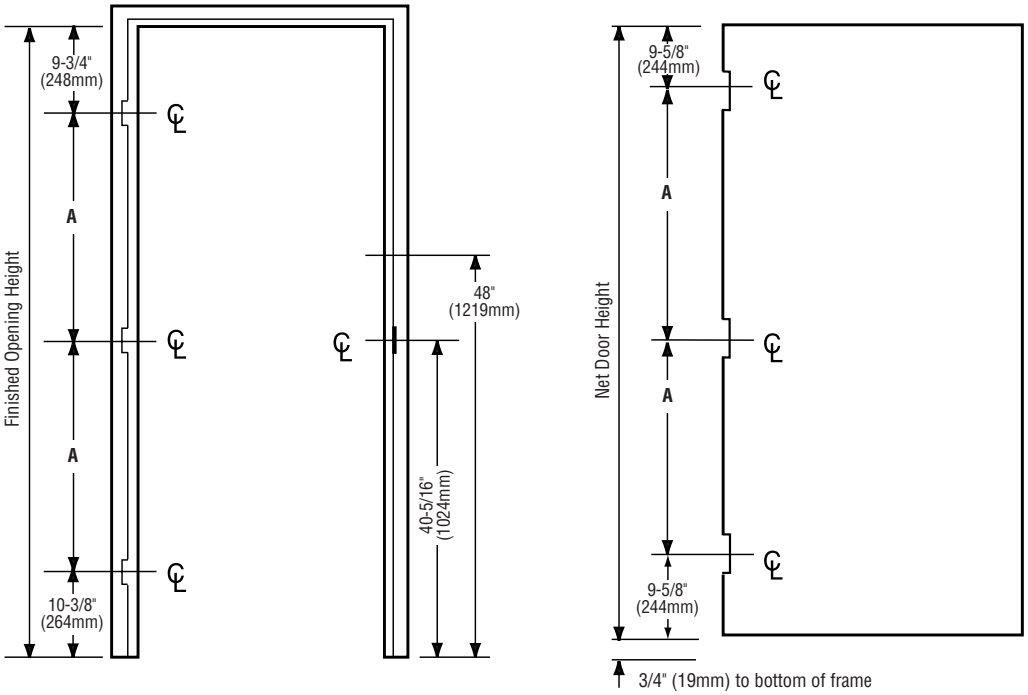


Chart 1

Door Opening Height	Dimension A
6'8" (2032mm)	29 15/16" (760mm)
7'0" (2134mm)	31 15/16" (811mm)
7'2" (2184mm)	32 15/16" (837mm)
7'6" (2286mm)	34 15/16" (887mm)

DOORS AND FRAMES WITH 2 PAIR OF HINGES

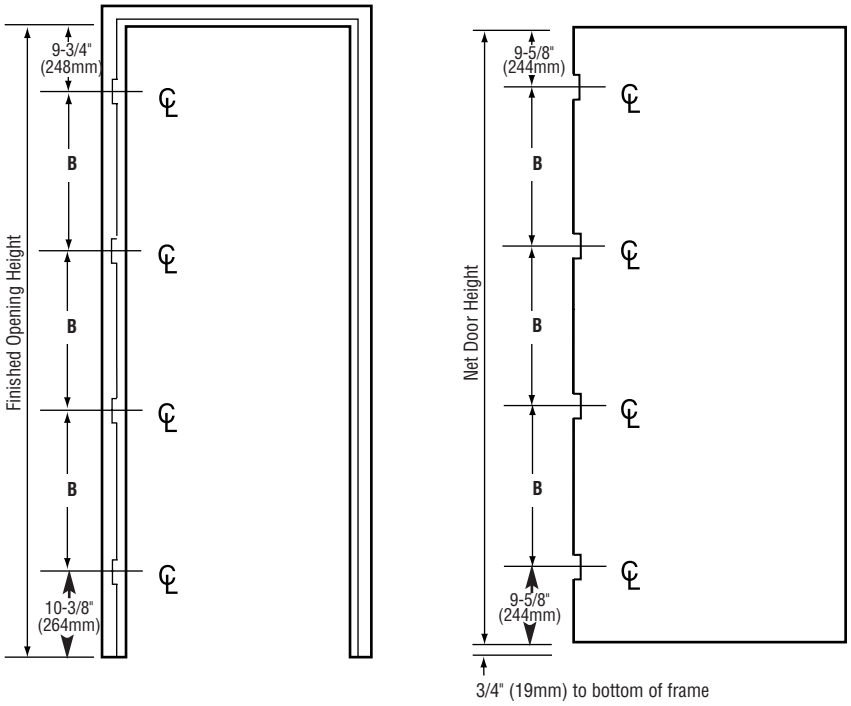


Chart 2

Door Opening Height	Dimension B
6'8" (2032mm)1	19 61/64" (506mm)
7'0" (2134mm)1	21 19/64" (541mm)
7'2" (2184mm)1	21 61/64" (558mm)
7'6" (2286mm)1	23 19/64" (592mm)
7'10" (2388mm)	24 5/8" (625mm)
8'0" (2438mm)	25 19/64" (643mm)
8'6" (2591mm)	27 19/64" (693mm)
8'10" (2692mm)	28 5/8" (727mm)
9'0" (2743mm)	29 19/64" (744mm)
9'6" (2896mm)	31 19/64" (795mm)
9'10" (2997mm)	32 5/8" (829mm)
10'0" (3048mm)	33 19/64" (846mm)

Notes:
1. Steelcraft standard hinge spacing for doors up to and including 7'6" (2286mm) high is 1½ pairs (3 hinges) as shown in Chart 1. Information shown in Chart 2 is for reference when 4 hinges are specified for those door heights.
2. Steelcraft standard for doors over 10'0" (3048mm) is 2 ½ pairs (5 hinges). See Chart 3.
3. For special door heights, dimensions A and B will vary accordingly unless specified differently.

Ingersoll Rand
Security Technologies

DOORS AND FRAMES WITH 2-1/2″ PAIR OF HINGES

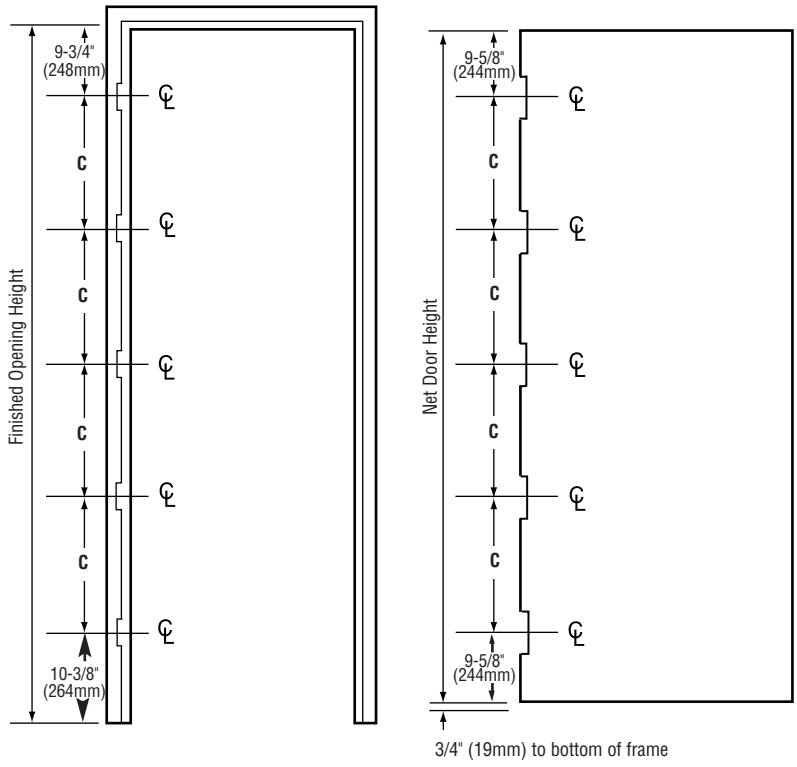
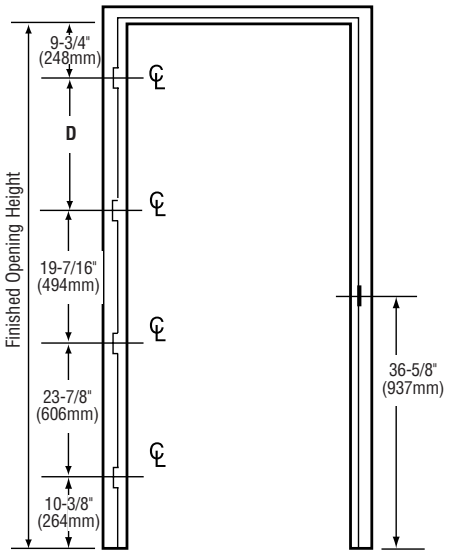


Chart 3

Door Opening Height	Dimension C
10'2" (3099mm)	$25\frac{15}{32}$" (647mm)
10'4" (3150mm)	$25\frac{31}{32}$" (660mm)
10'6" (3200mm)	$26\frac{15}{32}$" (672mm)
10'8" (3251mm)	$26\frac{31}{32}$" (685mm)
10'10" (3302mm)	$27\frac{15}{32}$" (698mm)
11'0" (3353mm)	$27\frac{31}{32}$" (710mm)

DUTCH DOORS AND FRAME



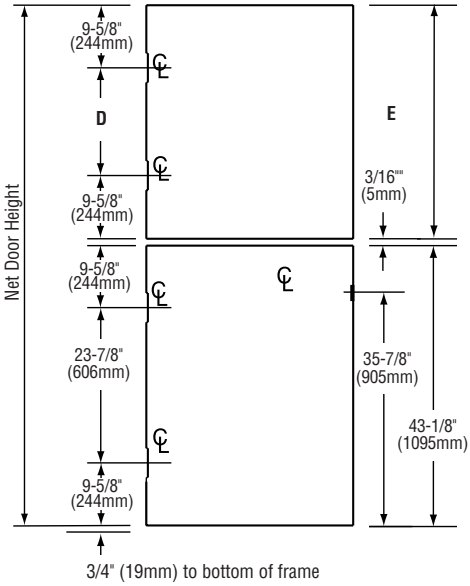


Chart 4

Door Opening Height	Dimension	
	D	E
6'8" (2032mm)	$16\frac{9}{16}$" (421mm)	$35\frac{13}{16}$" (910mm)
7'0" (2134mm)	$20\frac{9}{16}$" (522mm)	$39\frac{13}{16}$" (1011mm)
7'2" (2184mm)	$22\frac{9}{16}$" (573mm)	$41\frac{13}{16}$" (1062mm)

Note: For Fire Rated Hardware requirements, refer to the Fire Rated Section. An additional listed latch is required in the top leaf.

DOOR HARDWARE NOMENCLATURE OPTIONS:

Steelcraft ordering nomenclature is described in the General Section of this manual on page 1.9. The following information deals only with the nomenclature for ordering hardware preparations in Steelcraft doors. In addition to the guide shown on page 1.9, the following is a detailed list of hardware ordering codes which will be additional suffixes to the top line Steelcraft ordering nomenclature.

Note: the last character in the top line nomenclature is the code for active lock as described below

Top line door ordering nomenclature: L 18 UL 4 30 70 F R		**61L = Active lock code options – refer to options below**
Secondary nomenclature code examples:	161-60	= Deadlock code options – refer to options on page 8.3.2
	ASA	= Inactive leaf code options – refer to options on page 8.3.3
	CLOSER	= Closer code options – refer to options on page 8.3.4
	5″	= Hinge code options – refer to options on page 8.3.4

DOOR LOCK PREPARATION DESIGNATIONS

CODE	PREPARATION DESCRIPTION
160	Bored/Cyl Knobset (1″ X 2 1/4″ front with 2 3/8″ backset) per ANSI A115.2
160-4	Bored/Cyl Knobset (1″ X 2 1/4″ front with 2 3/4″ backset) per ANSI A115.2
160ED	Edge cutout only - (1″ X 2 1/4″ front) - per ANSI A115.2
161	Bored/Cyl Knobset (1 1/8″ X 2 1/4″ front with 2 3/4″ backset) per ANSI A115.2
161ED	Edge cutout only - (1 1/8″ X 2 1/4″ front) - per ANSI A115.2
161EDR	Edge cutout only - (1 1/8″ X 2 1/4″ front) - per ANSI A115.2 with RPD reinforcements
161EDV	Edge cutout only - (1 1/8″ X 2 1/4″ front) - per ANSI A115.2 with VRPD reinforcements
161R	Bored/Cyl Knobset (1 1/8″ X 2 1/4″ front with 2 3/4″ backset) per ANSI A115.2 with RPD reinforcements
161V	Bored/Cyl Knobset (1 1/8″ X 2 1/4″ front with 2 3/4″ backset) per ANSI A115.2 with VRPD reinforcements
61L	Bored/Cyl 2 3/4″ backset for universal Leverset (1 1/8″ X 2 1/4″ front with 2 3/4″ backset) per ANSI A115.2 (3 1/2″ minimum rose)
86	Mortise lock (1 1/4″ X 8″ front with 2 3/4″ backset) per ANSI A115.1
86ED	Edge cutout only - (1 1/4″ X 8″ front) Mortise lock per ANSI A115.1
86EDR	Edge cutout only - (1 1/4″ X 8″ front) Mortise lock per ANSI A115.1 with RPD reinforcements
86EDV	Edge cutout only - (1 1/4″ X 8″ front) Mortise lock per ANSI A115.1) with VRPD reinforcements
86R	Mortise lock for escutcheon trim (1 1/4″ X 8″ front with 2 3/4″ backset) per ANSI A115.1 with RPD reinforcements
86V	Mortise lock for escutcheon trim (1 1/4″ X 8″ front with 2 3/4″ backset) per ANSI A115.1 with VRPD reinforcements
RPD	Internal Reinforced for surface Rim Panic Device
VRPD	Internal Reinforced for surface Vertical Rod Device
BLANK	Blank without prep or reinforcement. Must also be used to designate devices like deadlock only. Active lock is "BLANK"
PP	Internal Reinforcements for Push / Pull plates
SPCL	Special active lock prep per hardware manufacturer's template. Must also be used to designate devices like Concealed Vertical Rods, Mag Locks, etc
UNIT	Unit lock prep

DOOR LOCK PREPARATION DESIGNATIONS USING CATALOG CODES

CODE	PREPARATION DESCRIPTION
L7F	Schlage mortise lock – Refer to Steelcraft lock ordering catalog # 652
R7A	Von Duprin Rim exit device – Refer to Steelcraft lock ordering catalog # 541
M4R	Von Duprin Mortise exit device – Refer to Steelcraft lock ordering catalog # 556
SV2EW	Von Duprin Vertical Rod exit device – Refer to Steelcraft lock ordering catalog # 705

DOOR HARDWARE NOMENCLATURE - DEADLOCK OPTIONS:

Top line door ordering nomenclature: L 18 UL 4 30 70 F R 61L = Active lock code options – refer to options on page 8.3.1

Secondary nomenclature code examples:

161-60 = Deadlock Code Options – refer to options below

ASA = Inactive leaf code options – refer to options on page 8.3.3

CLOSER = Closer code options – refer to options on page 8.3.4

5″ = Hinge code options – refer to options on page 8.3.4

DOOR DEADLOCK PREPARATION

CODE	PREPARATION DESCRIPTION
160-48	Bored / Cyl (1″ X 2 1/4″ front with 2 3/8″ backset per ANSI A115.2) @ 48″ above bottom of frame
160-60	Bored/Cyl (1″ X 2 1/4" front with 2 3/8″ backset per ANSI A115.2t) @ 60″ above bottom of frame
160-SP	Bored/Cyl (1″ X 2 1/4″ front with 2 3/8″ backset per ANSI A115.2) @ special location
160-4-48	Bored/Cyl (1″ X 2 1/4″ front with 2 3/4″ backset per ANSI A115.2) @ 48″ above bottom of frame
160-4-60	Bored/Cyl (1″ X 2 1/4″ front with 2 3/4″ backset per ANSI A115.2) @ 60″ above bottom of frame
160-4-SP	Bored/Cyl (1″ X 2 1/4″ front with 2 3/4″ backset per ANSI A115.2) @ special location
161-48	Bored/Cyl (1 1/8″ X 2 1/4" front with 2 3/4" backset per ANSI A115.2) @ 48″ above bottom of frame
161-60	Bored/Cyl (1 1/8″ X 2 1/4″ front with 2 3/4″ backset per ANSI A115.2) @ 60″ above bottom of frame
161-SP	Bored/Cyl (1 1/8″ X 2 1/4″ front with 2 3/4″ backset per ANSI A115.2) @ special location
161ED-48	Edge cutout only - (1 1/8″ X 2 1/4″ front per ANSI A115.2) - @ 48″ above bottom of frame
161ED-60	Edge cutout only - (1 1/8″ X 2 1/4″ front per ANSI A115.2) - @ 60″ above bottom of frame
161ED-SP	Edge cutout only - (1 1/8″ X 2 1/4″ front per ANSI A115.2) - @ special location
86-48	Mortise lock (1 1/4″ X 8″ front with 2 3/4″ backset) per ANSI A115.1 @ 48″ above bottom of frame
86-60	Mortise lock (1 1/4" X 8" front with 2 3/4" backset) per ANSI A115.1 @ 60″ above bottom of frame
86-SP	Mortise lock (1 1/4" X 8" front with 2 3/4" backset) per ANSI A115.1 @ special location
86ED-48	Edge cutout only - (1 1/4″ X 8″ front) Mortise lock per ANSI A115.1 @ 48″ above bottom of frame
86ED-60	Edge cutout only - (1 1/4″ X 8″ front) Mortise lock per ANSI A115.1 @ 60″ above bottom of frame
86ED-SPL	Edge cutout only - (1 1/4″ X 8″ front) Mortise lock per ANSI A115.13 @ special location
PP	additional push/pull reinforcements
SPCL	Special Deadlock prep per hardware manufacturer's template. Must also be used to designate deadlocks not conforming to ANSI A115.1 or 2.

DOOR LOCK PREPARATION DESIGNATIONS USING CATALOG CODES

CODE	PREPARATION DESCRIPTION
D7J	Schlage Deadlock – Refer to Steelcraft Deadlock ordering catalog # 535

DOOR HARDWARE NOMENCLATURE - INACTIVE LEAF OPTIONS:

Top line door ordering nomenclature: L 18 UL 4 30 70 F R 61L = Active lock code options – refer to options on page 8.3.1

Secondary nomenclature code examples: 161-60 = Deadlock Code Options – refer to options on page 8.3.2

ASA **= Inactive Leaf Code Options – refer to options below**

CLOSER = Closer code options – refer to options on page 8.3.4

5″ = Hinge code options – refer to options on page 8.3.4

DOOR INACTIVE LEAF STRIKE PREPARATION

CODE	PREPARATION DESCRIPTION
ASA	4 7/8″ ASA with lip @ standard location per ANSI A115.2
ASA-48	4 7/8″ ASA with lip per ANSI A115.2 @ 48″ above bottom of frame
ASA-60	4 7/8″ ASA with lip per ANSI A115.2 @ 60″ above bottom of frame
ASAR	4 7/8″ ASA with lip per ANSI A115.2and RPD reinforcements
ASA-SP	4 7/8″ ASA with lip per ANSI A115.2@ special location
ASAV	4 7/8″ ASA with lip per ANSI A115.2 and VRPD reinforcements
BLANK	No preparation or reinforcement
CYL	2 3/4″ with lip per ANSI A115.2@ standard location
CYL-48	2 3/4″ with lip per ANSI A115.2 located @ 48″ above bottom of frame
CYL-60	2 3/4″ with lip per ANSI A115.2located @ 60″ above bottom of frame
CYLR	2 3/4″ with lip per ANSI A115.2and RPD reinforcements
CYL-SP	2 3/4″ with lip per ANSI A115.2@ special location
CYLV	2 3/4″ with lip per ANSI A115.2 and VRPD reinforcements
RPD	Internal reinforced for surface Rim Panic Device
SPCL	Strike prep per template
VRPD	Internal Reinforced for surface Vertical Rod Device

DOOR LOCK STRIKE PREPARATION DESIGNATIONS USING CATALOG CODES

Example: Schlage #10-055 strike in inactive leaf

CODE	PREPARATION DESCRIPTION
DA3 (60″ location)	Refer to Steelcraft Deadlock ordering catalog # 535 (page 15)
NA3 (48″ location)	Refer to Steelcraft Deadlock ordering catalog # 535 (page 15)

DOOR HARDWARE NOMENCLATURE - CLOSER AND HINGE OPTIONS:

Top line door ordering nomenclature: L 18 UL 4 30 70 F R 61L = Active lock code options – refer to options on page 8.3.1

Secondary nomenclature code examples: 161-60 = Deadlock Code Options – refer to options on page 8.3.2

ASA = Inactive leaf code options – refer to options on page 8.3.3

CLOSER = Closer Code Options – refer to options below

5" = Hinge Code Options – refer to options below

DOOR CLOSER PREPARATIONS

CODE	PREPARATION DESCRIPTION
CLOSER	Closer reinforced @ hinge side on both faces
OMIT CLOSER	No closer reinforcement (labeled doors with spring hinges)
FULL WIDTH	Closer reinforced. full width both faces
FULL WIDTH T/B	Closer reinforced full width both faces top & bottom of door
TOP / BOTTOM	Closer reinforced @ hinge side both faces and at top and bottom of door
12 GAGE CLOSER	Closer reinforced @ hinge side both faces
SPCL	Special or concealed prep per template

DOOR HINGE PREPARATIONS

CODE	PREPARATION DESCRIPTION
4 1/2 STD HINGE	4 1/2″ template hinge prep for standard duty (.134 wt) hinge
4 1/2 UNIVERSAL	4 1/2″ universal hinge prep for standard/heavy duty (.134/.180 wt) hinge - field converted
4 1/2 OMIT HOLES	4 1/2″ hinge prep without attaching holes
4" HINGES	4″ template hinge prep for standard duty (.134 wt) hinge
5" UNIVERSAL	5″ template hinge prep for standard duty (.134 wt) hinge
BLANK HINGE	No prep or reinforcement
BLANK HINGE W/EDGE REINF FOR CONTINUOUS HINGE.	With internal edge reinforcement no edge preparations - Steelcraft's standard door width (WITH STANDARD 3/16" UNDERSIZE) Note: When ordering, downsize nominal door width accordingly.
BLANK HINGE W/FACE REINF FOR CONTINUOUS HINGE	With internal face reinforcement no edge preparations - Steelcraft's standard door width (WITH STANDARD 3/16" UNDERSIZE) Note - when ordering, downsize nominal door width accordingly.
SPCL	Prep per template
SURFACE BUTT HINGE REINF	Internally reinforced for surface hinge per template
CONTINUOUS HINGE PER MANUFACTURERS' PART NUMBER (UNDERSIZED PER TEMPLATE)	Reinforcement and door sizing per hinge manufacture's templates

FRAME HARDWARE NOMENCLATURE - STRIKES IN STRIKE JAMBS:

Top line door ordering nomenclature: F16 UL 4 5-3/4 70 SJ R **ASA = Strike code options– refer to options below**

Secondary nomenclature code examples PA/RA = Reinforced for parallel and regular arm – refer to options on page 8.3.6 & 8.3.7

5″ = Hinge Code Options – refer to options on page 8.3.8

FRAME STRIKE PREPARATION

CODE	PREPARATION DESCRIPTION
ASA	4 7/8″ ASA with lip located @ standard location per ANSI A115.2
ASA-48	4 7/8″ ASA with lip per ANSI A115.2 located @ 48″ above bottom of frame
ASA-60	4 7/8″ ASA with lip per ANSI A115.2 located @ 60″ above bottom of frame
ASA-SP	4 7/8″ ASA with lip per ANSI A115.2 located @ special location above bottom of frame
BLANK	No preparation or reinforcement
CYL	2 3/4″ with lip per ANSI A115.2 located @ standard location
CYL-48	2 3/4″ CYL with lip per ANSI A115.2 located @ 48″ above bottom of frame
CYL-60	2 3/4″ CYL with lip per ANSI A115.2 located @ 60″ above bottom of frame
CYL-SP	2 3/4″ CYL with lip per ANSI A115.2 located @ special location above bottom of frame
RPD	Reinforced in the soffit for surface Rim Panic Device
SPCL	Strike prep per template
SB FACE	Internally reinforced for surface bolt on face
SB SOFFIT	Internally reinforced for surface bolt in soffit
SPCL	Special flush bolt reinforcement per manufacturer's template (pairs or double doors)
UNIVERSAL	Universal Flush bolt strike per ANSI A115.4

COMMON FRAME STRIKE PREPARATION USING CATALOG CODES

CODE	PREPARATION DESCRIPTION
S27	3 1/2″ Deadlock strike located @ 60″ above bottom of frame
S38	2 3/4″ Deadlock strike located @ 60″ above bottom of frame
S40	3 1/2″ Deadlock strike located @ 48″ above bottom of frame
S41	3″ Deadlock strike located @ 48″ above bottom of frame
S43	2 3/4″ Deadlock strike located @ 48″ above bottom of frame
S91	3″ Deadlock strike located @ 60″ above bottom of frame

FRAME HARDWARE NOMENCLATURE - CLOSER PREPS IN SINGLE DOOR FRAMES:

Top line door ordering nomenclature: F16 UL 4 5-3/4 30 HD

Secondary nomenclature code examples **PA/RA = Reinforced for parallel and regular arm– refer to options below**

5″ = Hinge Code Options – refer to page 8.3.8

FRAME CLOSER PREPARATIONS

CODE	PREPARATION DESCRIPTION
CB	Corner bracket reinforced - Single door frame
CS	Closer sleeve reinforced - Single door frame
CS C/L IN HEAD	Closer sleeve reinforced located @ center of the double door opening
CS FULL WIDTH	Closer sleeve reinforced full width of head
OMIT CLOSER	No closer reinforcement - used on labeled frames with spring hinges
PA	Reinforced in soffit for parallel arm application - Single door frame
PA C/L IN HEAD	Reinforced in soffit for coordinator application - located @ center of the double door opening
PA FULL WIDTH	Reinforced in soffit for coordinator application - reinforced full width of head
PA/RA	Reinforced in soffit and face for both parallel and regular arm application - Single door frame
PA/RA FULL	Reinforced in soffit and face for both parallel and regular arm application - reinforced full width of head
RA	Reinforced in face for regular arm application - Single door frame
RA C/L IN HEAD	Reinforced in face for regular arm application - located @ center of the double door opening
RA FULL WIDTH	Reinforced in face for regular arm application - reinforced full width of head
SPCL	Special closer reinforcement per manufacturer's templates. Designation also used for Concealed Closers, Holders & Stops
TJ	Reinforced for top jamb closer application - Single door frame
TJ C/L IN HEAD	Reinforced for top jamb closer application - located @ center of the double door opening
TJ FULL WIDTH	Reinforced for top jamb closer application - reinforced full width of head
TJ/PA	Reinforced for both top jamb and parallel arm closer application - Single door frame
TJ/PA C/L HEAD	Reinforced for both top jamb and parallel arm closer application - located @ center of the double door opening
TJ/PA FULL	Reinforced for both top jamb and parallel arm closer application - reinforced full width of head
TJ/RA	Reinforced for both top jamb and regular arm closer application - Single door frame
TJ/RA C/L HEAD	Reinforced for both top jamb and regular arm closer application - located @ center of the double door opening
TJ/RA FULL	Reinforced for both top jamb and regular arm closer application - reinforced full width of head

DOOR HARDWARE NOMENCLATURE - CLOSER PREPS IN DOUBLE DOOR FRAMES:

Top line door ordering nomenclature: F16 UL 4 5-3/4 60 HD

Secondary nomenclature code examples **PA/RA =** Reinforced for parallel and regular arm – refer to options below

5″ = Hinge Code Options – refer to page 8.3.8

FRAME CLOSER PREPARATION

CODE	PREPARATION DESCRIPTION
CB ACTIVE SIDE	Corner bracket reinforced - Double door opening, reinforce active only
CB BOTH ENDS	Corner bracket reinforced - Double door opening, reinforce both openings
CS ACTIVE SIDE	Closer sleeve reinforced - Double door opening, reinforce active only
CS BOTH ENDS	Closer sleeve reinforced - Double door opening, reinforce both openings
PA ACTIVE SIDE	Reinforced in soffit for parallel arm application - Double door opening, reinforce active only
PA BOTH ENDS	Reinforced in soffit for parallel arm application - Double door opening, reinforce both openings
PA/RA ACTIVE	Reinforced in soffit and face for both parallel and regular arm application - Double door opening, reinforce active only
PA/RA BOTH ENDS	Reinforced in soffit and face for both parallel and regular arm application - Double door opening, reinforce both openings
PA/RA C/L HEAD	Reinforced in soffit and face for both parallel and regular arm application - located @ center of the double door opening
RA ACTIVE SIDE	Reinforced in face for regular arm application - Double door opening, reinforce active only
RA BOTH ENDS	Reinforced in face for regular arm application - Double door opening, reinforce both openings
TJ ACTIVE SIDE	Reinforced for top jamb closer application - Double door opening, reinforce active only
TJ BOTH ENDS	Reinforced for top jamb closer application - Double door opening, reinforce both openings
TJ/PA ACTIVE	Reinforced for both top jamb and parallel arm closer application - Double door opening, reinforce active only
TJ/PA BOTH ENDS	Reinforced for both top jamb and parallel arm closer application - Double door opening, reinforce both openings
TJ/RA ACTIVE	Reinforced for both top jamb and regular arm closer application - Double door opening, reinforce active only
TJ/RA BOTH ENDS	Reinforced for both top jamb and regular arm closer application - Double door opening, reinforce both openings

FRAME HARDWARE NOMENCLATURE - HINGE PREPS IN DOOR FRAMES:

Top line door ordering nomenclature: F16 UL 4 5-3/4 70 HJ

Secondary nomenclature code examples PA/RA = Reinforced for parallel and regular arm – refer to options on page 8.3.6 & 8.3.7

5" UNIVERSAL = Hinge Code Options – refer to options below

FRAME HINGE PREPARATIONS

CODE	PREPARATION DESCRIPTION
3 1/2 STD WT	3 1/2″ template hinge prep for standard duty (.123 wt) hinge for 1 3/8" door frames
4 1/2 HVY WT	4 1/2″ template hinge prep for heavy duty (.180 wt) hinge
4 1/2 STD WT	4 1/2″ template hinge prep for standard duty (.134 wt) hinge
4 1/2 UNIV FULL	4 1/2″ universal hinge prep for standard/heavy duty (.134 /.180 wt) hinge - field converted. Reinforced full width of jamb
4 1/2 UNIVERSAL	4 1/2″ universal hinge prep for standard/heavy duty (.134 /.180 wt) hinge - field converted
4 STD WT	4″ template hinge prep for standard duty (.130 wt) hinge
5 UNIV FULL	5″ universal hinge prep for standard/heavy duty (.145 /.190 wt) hinge - field converted. Reinforced full width of jamb
5″ UNIVERSAL	5″ universal hinge prep for standard/heavy duty (.145 /.190 wt) hinge - field converted
5″ HVY WT	5″ hinge prep for heavy duty (.190 wt) hinge
5″ STD WT	5″ hinge prep for standard duty (.145 wt) hinge
BLANK HINGE	No preparation or reinforcement
CONT FACE REINF	Continuous Hinge, surface mounted to the frame face - internally reinforced on face
CONT FACE W/O	Continuous Hinge, surface mounted to the frame face - not internally reinforced
CONT RABT REINF	Continuous Hinge, mounted to the frame rabbet - internally reinforced on rabbet
CONT RABT W/O	Continuous Hinge, surface mounted to the frame rabbet - not internally reinforced
CONT SPECIAL	Continuous Hinge, located and reinforced per manufacturer's template
FULL SURFACE	Reinforced for butt type hinge per size and template specified
SPCL	Hinge prep per template

FRAME HARDWARE NOMENCLATURE -MISCELLANEOUS PREPS IN DOOR FRAMES:

Top line door ordering nomenclature: F16 UL 4 5-3/4 60 HD

Secondary nomenclature code examples ASA = Inactive leaf code options– refer to options on page 1.3

5" UNIVERSAL = Hinge Code Options – refer to options on page 1.8

FACE MOUNTED = Center reinforced for Cam action coordinator

FRAME COORDINATOR PREPARATION

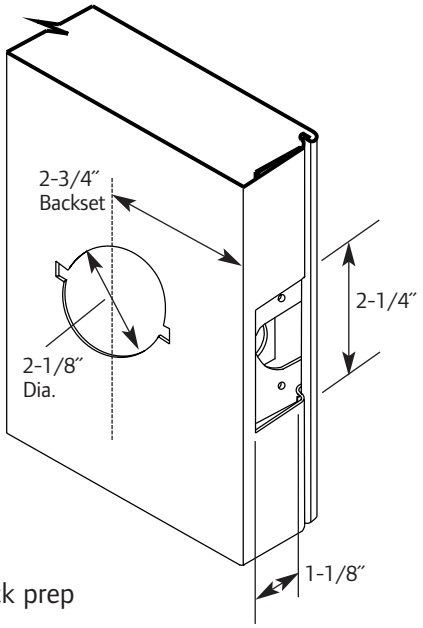
CODE	PREPARATION DESCRIPTION
FACE MOUNTED	Coordinator (Cam action) reinforcement - face reinforced at center of frame head
SOFFIT MOUNTED	Coordinator (Soffit mounted) reinforcement - soffit reinforced full frame width
SPCL	Coordinator - reinforced per template

FRAME REMOVABLE MULLION PREPARATIONS

CODE	PREPARATION DESCRIPTION
DBL RABBET HM MULL PREP	Removable mullion preparation for double rabbeted hollow metal mullion
REM HDWE MULL REINF ONLY	Removable mullion reinforcement for double rabbeted hollow metal mullion
SGL RABBET HM MULL PREP	Removable mullion preparation for single rabbeted hollow metal mullion

161 Lock Prep

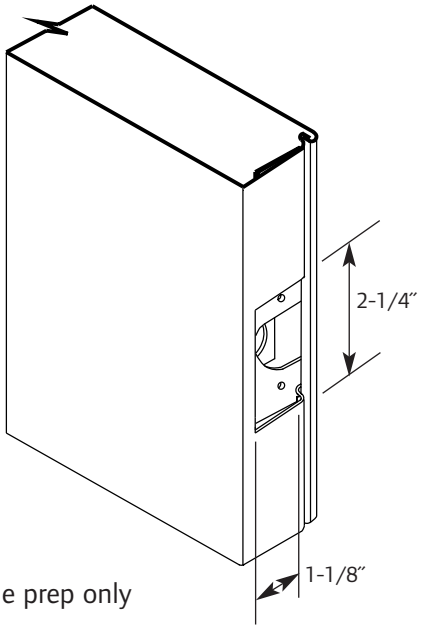
- For Bored/Cylindrical locksets conforming to ANSI A115.2
- KNOB trim or deadlock applications



161 for full lock prep

Prep options:

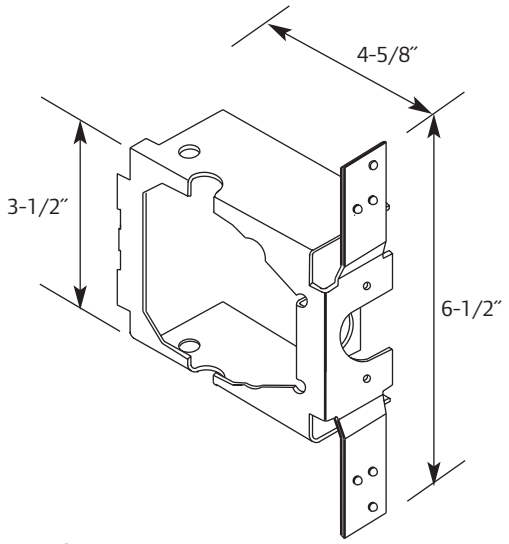
161-48 = 48″ above bottom of frame
161-60 = 60″ above bottom of frame
161-SPL = special location
161R = with RPD reinforcements
161V = with VRPD reinforcement



161ED for edge prep only

Prep options:

161ED-48 = 48″ above bottom of frame
161ED-60 = 60″ above bottom of frame
161ED-SPL = special location
161EDR = with RPD reinforcements
161EDV = with VRPD reinforcement

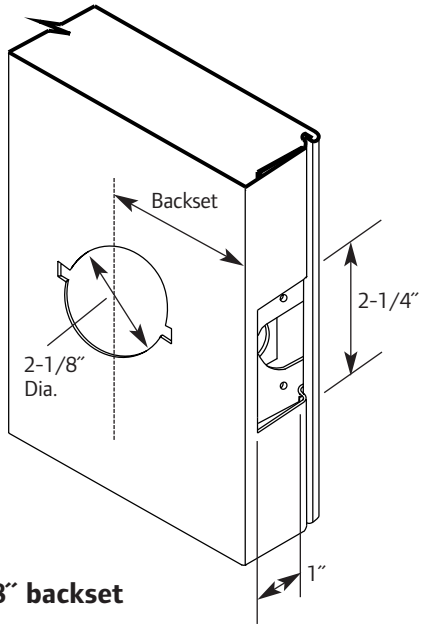


Lock Reinforcement Detail

- 16 gage
- Projection welded to door edge
- Extruded and tapped holes for lock front attachment

160 & 160-4 Lock Prep

- For Bored/Cylindrical locksets conforming to ANSI A115.2
- KNOB trim or deadlock applications

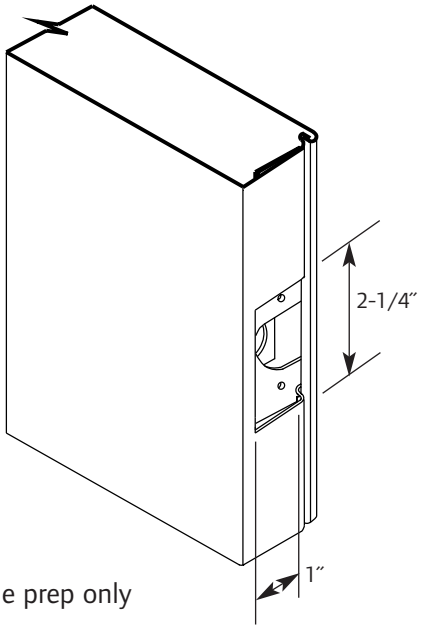


160 for 2-3/8″ backset

Prep options:
160-48 = 48″ above bottom of frame
160-60 = 60″ above bottom of frame
160-SPL = special location

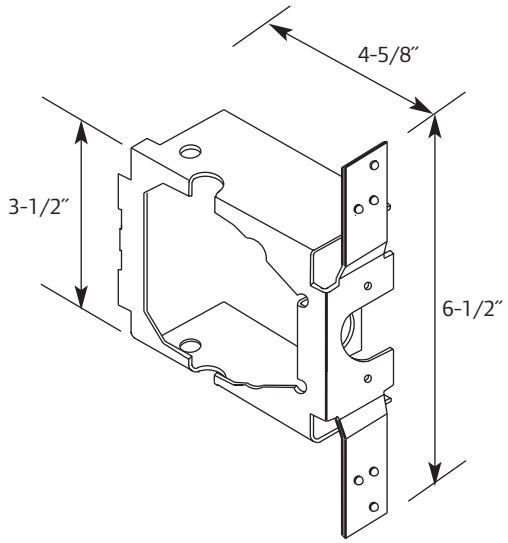
160-4 for 2-3/4″ backset

Prep options:
160-4-48 = 48″ above bottom of frame
160-4-60 = 60″ above bottom of frame
160-SPL = special location



160ED for edge prep only

Prep options:
160ED-48 = 48″ above bottom of frame
160ED-60 = 60″ above bottom of frame
160ED-SPL = special location

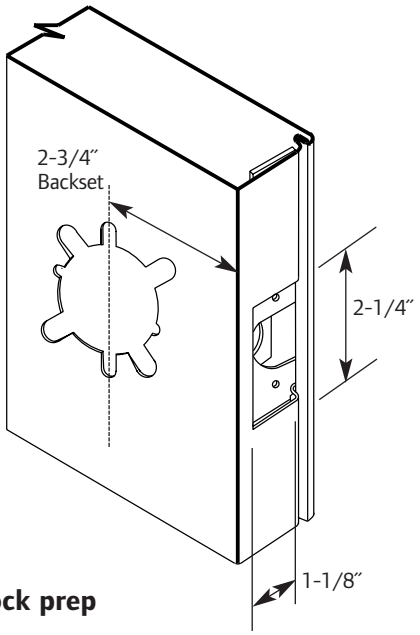


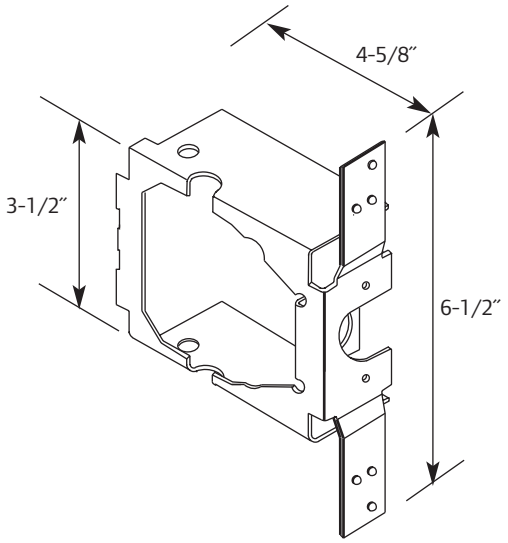
Lock Reinforcement Detail

- 16 gage
- Projection welded to door edge
- Extruded and tapped holes for lock front attachment

61L Lock Prep

- For Bored/Cylindrical locksets conforming to ANSI A115.18
- LEVER trim or deadlock applications





61L for full lock prep

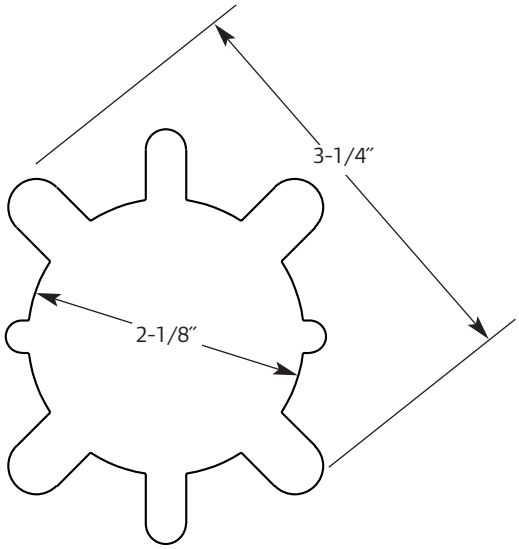
Prep options:

61L-48 = 48″ above bottom of frame
61L-60 = 60″ above bottom of frame
61L-SPL = special location
61LR = with RPD reinforcements
61LV = with VRPD reinforcement

Note – for locks installed in this prep must include Rose (trim) with minimum 3-1/2″ diameters.

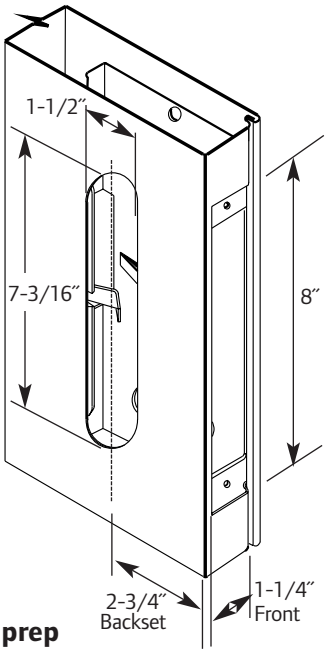
Lock Reinforcement Detail

- 16 gage
- Projection welded to door edge
- Extruded and tapped holes for lock front attachment



86 Lock Prep

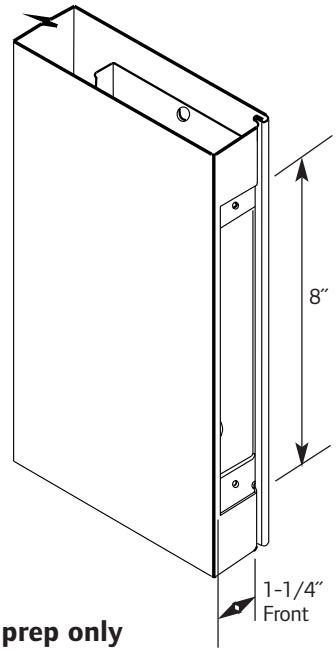
- For Mortise locksets conforming to ANSI A115.1
- Preparation for full escutcheon trim



86 for full lock prep

Prep options:

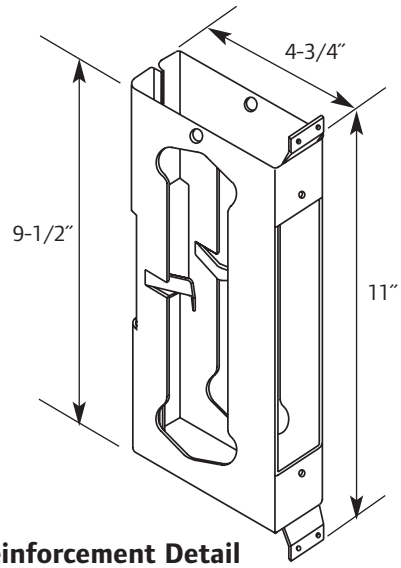
86-48 = 48″ above bottom of frame
86-60 = 60″ above bottom of frame
86-SPL = special location
86R = with RPD reinforcements
86RV = with VRPD reinforcement



86ED for edge prep only

Prep options:

86ED-48 = 48″ above bottom of frame
86ED-60 = 60″ above bottom of frame
86ED-SPL = special location
86DR = with RPD reinforcements
86EDV = with VRPD reinforcement



Lock Reinforcement Detail

- 14 gage
- Projection welded to door edge
- Extruded and tapped holes for lock front attachment

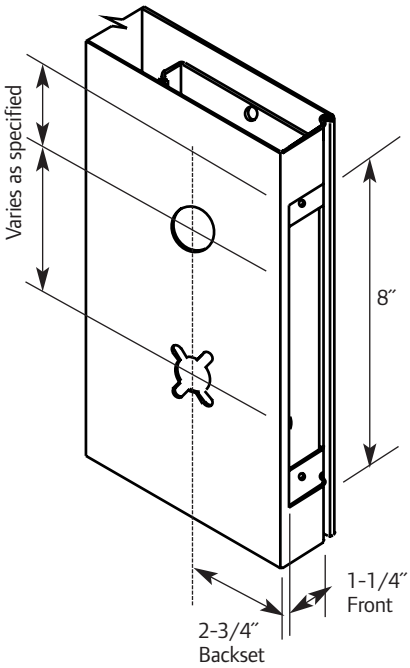
86 Lock Prep for commercial and institutional applications

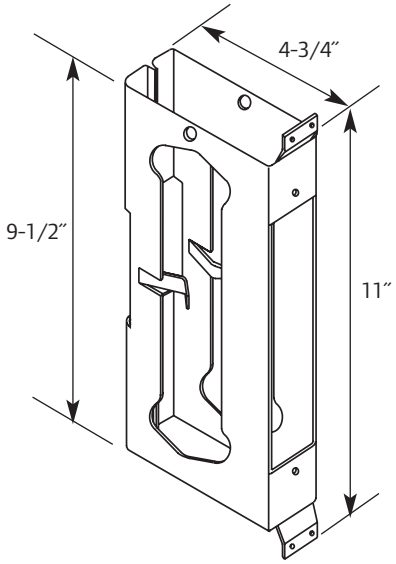
7C6 Lock Prep

- For Mortise locksets conforming to ANSI A115.1
- Preparation for sectional trim per Steelcraft hardware catalogs
- Nomenclature varies with lock catalogue requirements

Special Lock Prep

- Nomenclature "SPECIAL" designates templated hardware prep is required. Lock number and template number must be specified





7C6 - for Schlage L9050, L9453, L9456, L9473, L9485 (RH/LH)

- **7C6** = Refer to Steelcraft Hardware Catalogs for all prep designations

SPECIAL

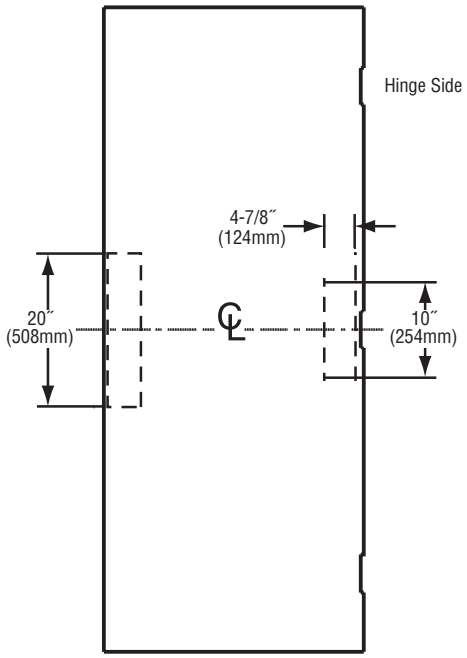
- Designation for sectional trim when ordered by manufacturers template numbers

Lock Reinforcement Detail

- 14 gage
- Projection welded to door edge
- Extruded and tapped holes for lock front attachment

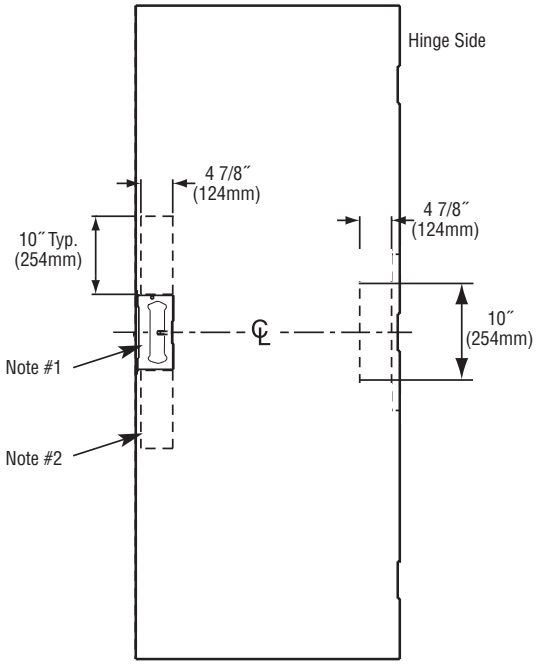
RIM Panic Prep

• For surface Rim Panic Devices



RPD
for Rim Panic Reinforcements only

Door Reinforcements



RPD variations

Rim Panic reinforcements on hinge side with Standard lock prep and reinforcement

Full lock prep options:

86R = 86 lock prep for full escutcheon trim

61LR = 61L lock prep for lever trim

160R = 160 lock prep for knob trim

161R = 161 lock prep for knob trim

Edge only lock prep options:

86EDR = 86 lock prep with edge prep only

161EDR = 161 lock prep with edge prep only

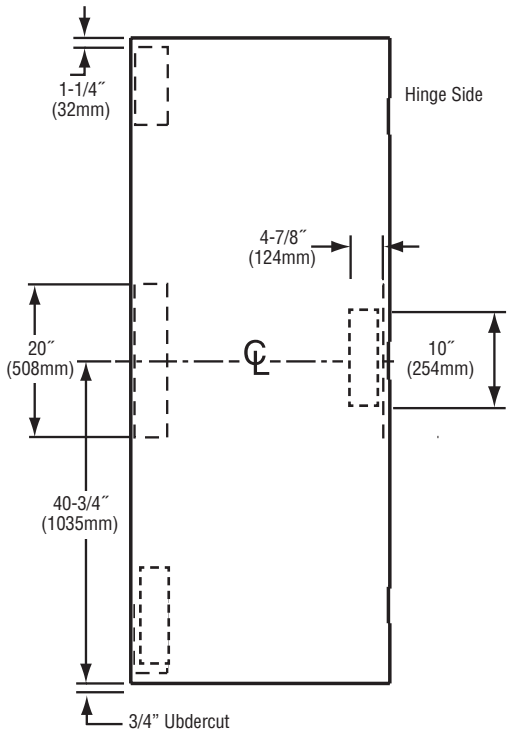
160EDR = 160 lock prep with edge prep only

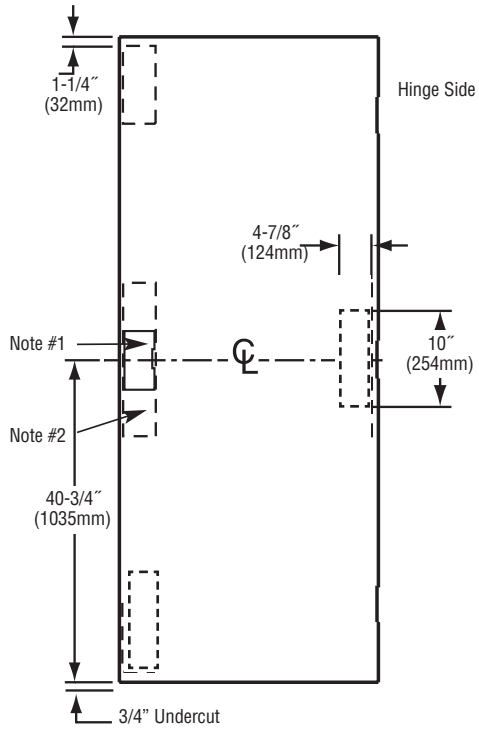
Notes:

1. RPD variation preps include the primary (standard) lock prep as specified.
2. Primary lock ordering codes suffixed with the letter "R" (i.e. 86R, 86EDR) include additional exit reinforcements above and below the primary reinforcements

Vertical Rod Prep

• For surface Vertical Rod Panic Devices





VRPD

for Vertical Rod Panic Reinforcements only

Prep options are not available

VRPD variations

Vertical Rod Panic reinforcements on hinge side with standard lock prep and reinforcement

Full lock prep options:

86V = 86 lock prep for full escutcheon trim

61LV = 61L lock prep for lever trim

160V = 160 lock prep for knob trim

161V = 161 lock prep for knob trim

Edge only lock prep options:

86EDV = 86 lock prep with edge prep only

161EDV = 161 lock prep with edge prep only

160EDV = 160 lock prep with edge prep only

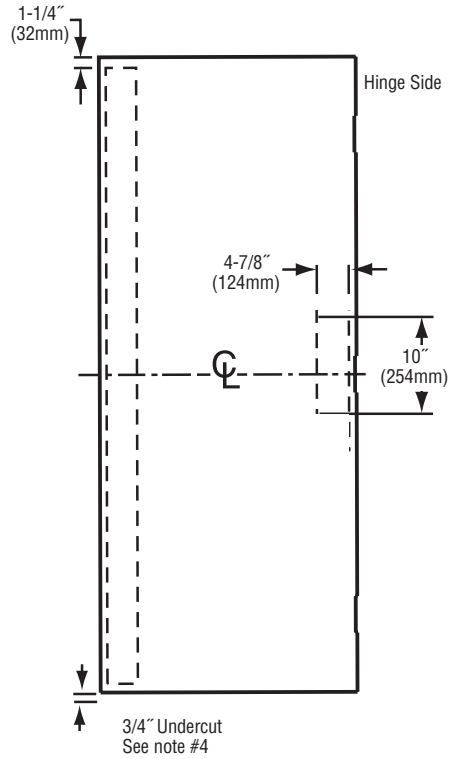
Notes:

1. VRPD variation preps include the primary (standard) lock prep as specified.
2. Primary lock ordering codes suffixed with the letter "V" (i.e. 86V, 86EDV) include additional exit reinforcements above and below the primary reinforcements
3. Prep is located to accommodate Steelcraft's standard 3/4″ undercut. **If special undercuts are required, it must be specified and prep location will be adjusted accordingly.**

SPECIAL

Concealed Vertical Rod Exit Device prep

• Preparation concealed vertical rod devices

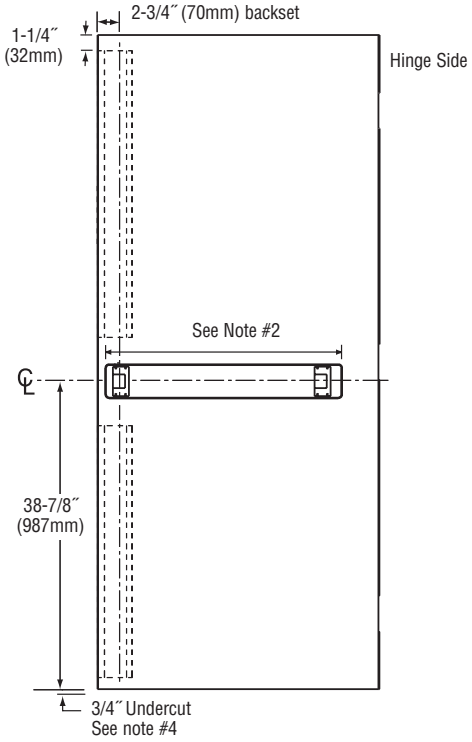


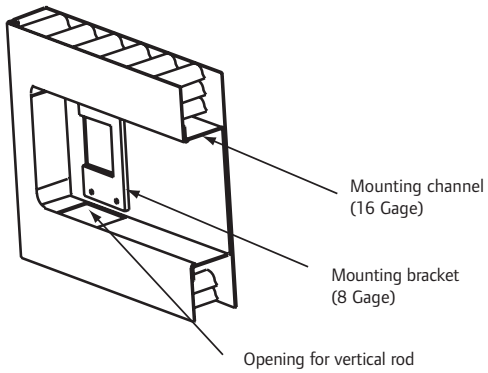
Notes:

1. Concealed vertical rod preps are always ordered as "SPECIAL", per manufacturer's templates.
2. Illustrated above are the typical internal reinforcing channels for L, B, CE and T-Series doors.
3. Top and bottom channel preparations vary per manufacturer's templates.
4. Prep is located to accommodate Steelcraft's standard 3/4" undercut. **If special undercuts are required, it must be specified and prep location will be adjusted accordingly.**

SPECIAL

VON DUPRIN INPACT™ (94/9547) CONCEALED VERTICAL ROD INTEGRAL EXIT DEVICE



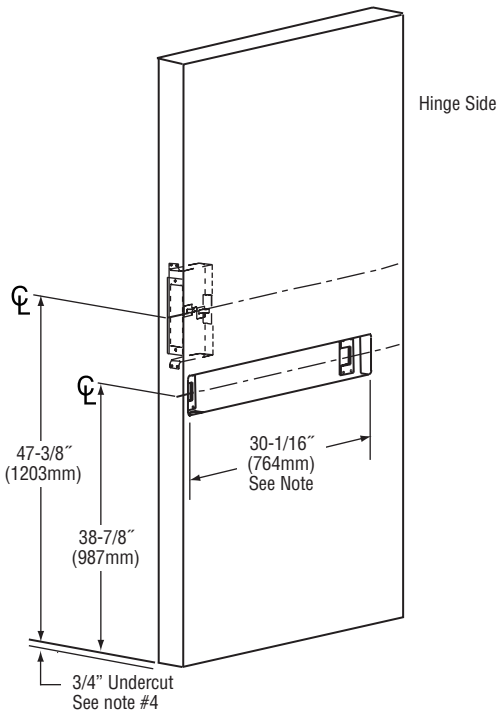


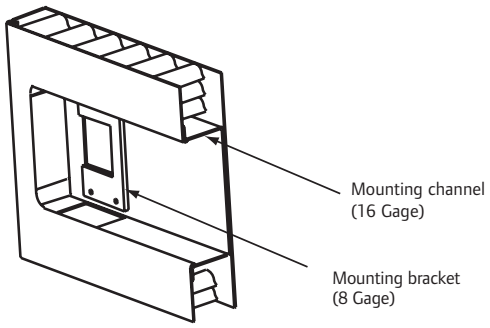
Notes:

1. Minimum nominal door width is 2′ 6″
2. Cross bar (prep) width:
   - 24 1/16″ for doors under 2′ 10″ in nominal door width.
   - 30 1/16″ for doors 2′ 10″ and over in nominal door width
3. Illustrated above are the typical internal reinforcing channels for L and T-Series doors.
4. Prep is located to accommodate Steelcraft's standard 3/4″ undercut. **If special undercuts are required, it must be specified and prep location will be adjusted accordingly.**

SPECIAL

VON DUPRIN INPACT™ (94/9575) MORTISE LOCK DEVICE



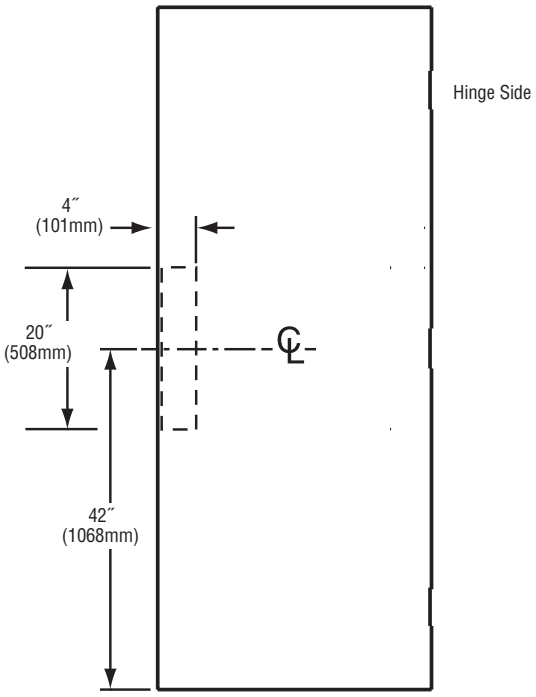


Notes:

1. Minimum nominal door width is 2′ 6″
2. Cross bar (prep) width:
   - 24 1/16″ for doors under 2′ 10″ in nominal door width.
   - 30 1/16″ for door 2′ 10″ and over in nominal door width
3. Illustrated above are the typical internal reinforcing channels for L and T-Series doors.
4. Prep is located to accommodate Steelcraft's standard 3/4″ undercut. **If special undercuts are required, it must be specified and prep location will be adjusted accordingly.**
5. Prep requires special strike location in frames.

PP Prep

• For Push/Pull plate trim

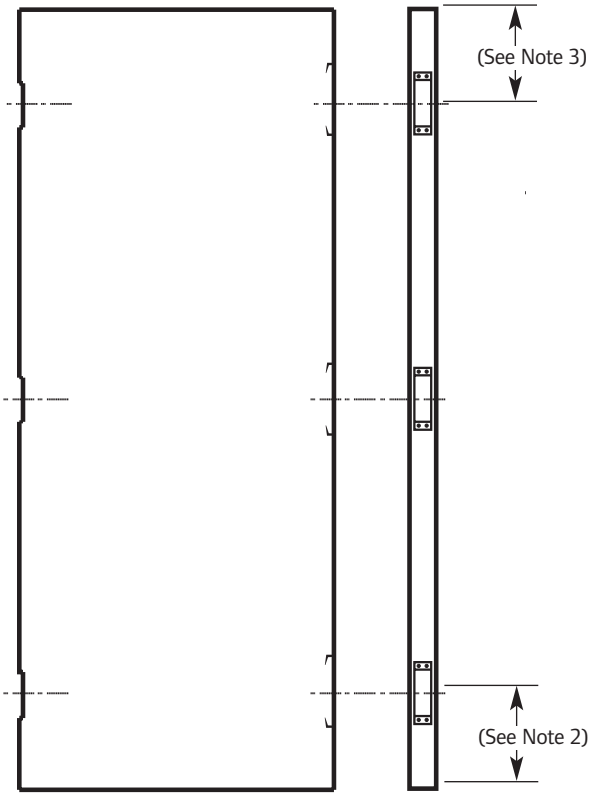


Notes:

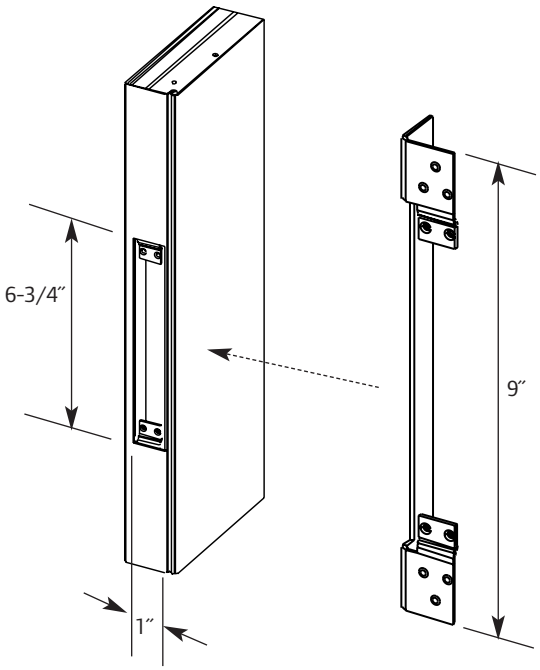
1. Push Pull reinforcements are 14 gage steel.
2. Both faces are reinforced as shown.

FLUSHBOLT - WITHOUT ASTRAGAL (Example: Wide Inactive Leaf)

- **Door leaf ordered as a separate inactive leaf not as a pair**
- Preparation for flushbolts and strikes in inactive leaves
- For Flush Bolts (Manual or Automatic) conforming to ANSI A115.4



Flushbolt Elevation Detail



Flushbolt Prep Detail

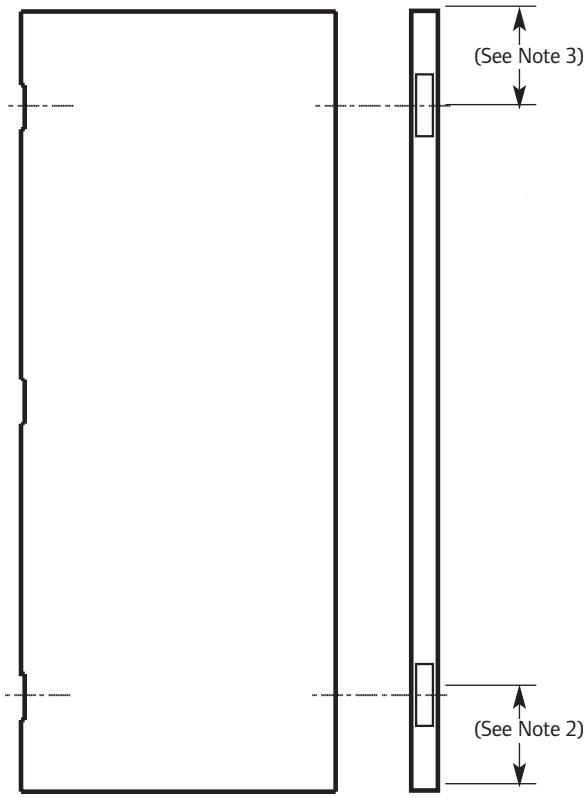
- 16 gage reinforcement

Notes:

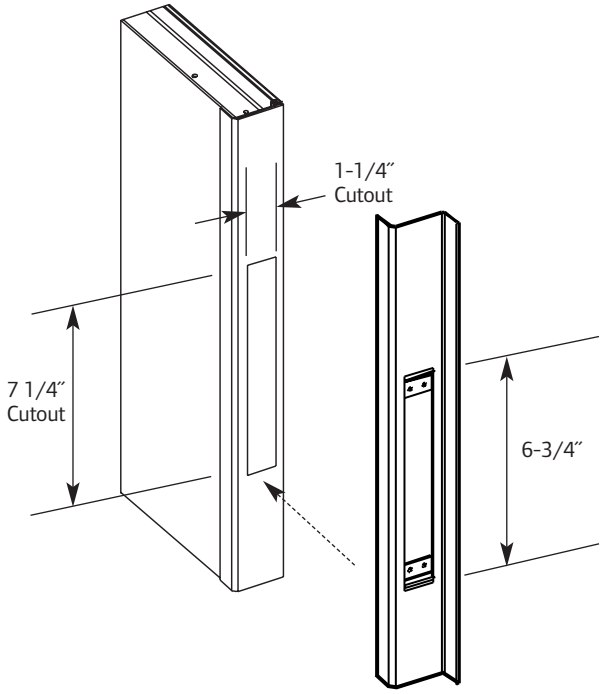
1. Prep is for fully mortised Flush Bolts (manual or auto)
2. Center line of bottom prep is located 12″ above the bottom edge of the door, unless otherwise specified.
3. Top prep location varies as specified. Standard location options are 12″, 18″, 24″, 30″ or 36″ from the top edge of the door.

FLUSHBOLT - WITH ASTRAGAL

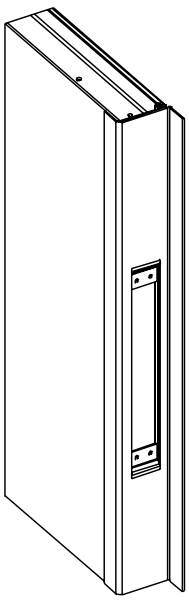
- **Door leaf ordered as a separate inactive leaf not as a pair**
- Preparation for flushbolts and strikes in the inactive leaf and Astragal
- For Flush Bolts (Manual or Automatic) conforming to ANSI A115.4



Flushbolt Elevation Detail



Astragal attachment Detail



Final Assembly Detail

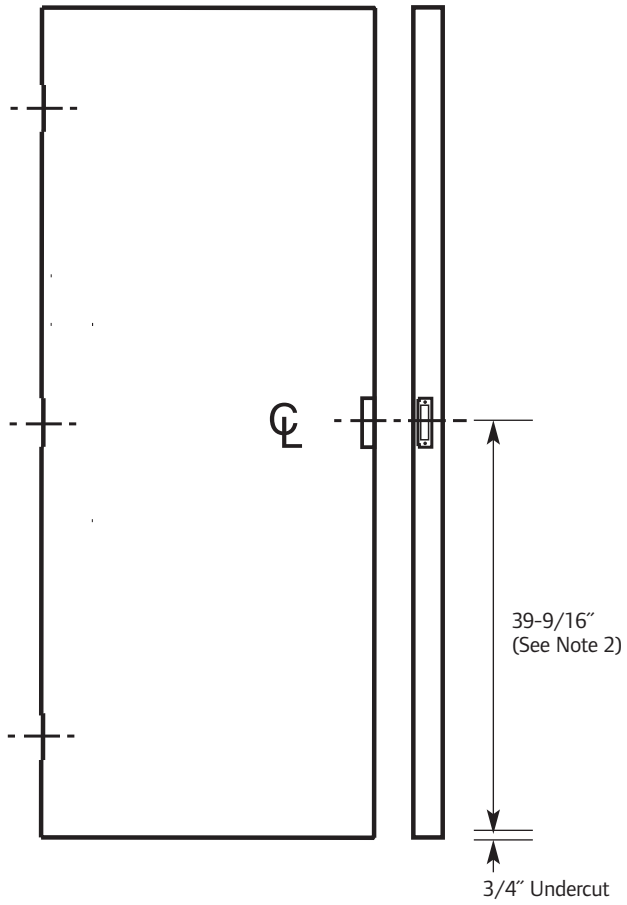
Notes:

1. "Z" Astragal is required. Prep is for fully mortised Flush Bolts (manual or auto).
   - Cut outs on the edge of the door are for clearance only.
   - Astragals are shipped loose for field attachment.
   - Attaching tabs for flushbolts attachment are included on the astragal.
2. Center line of bottom prep is located 12″ above the bottom edge of the door, unless otherwise specified
3. Top prep location varies as specified. Standard location options are 12″, 18″, 24″, 30″ or 36″ from the top edge of the door.

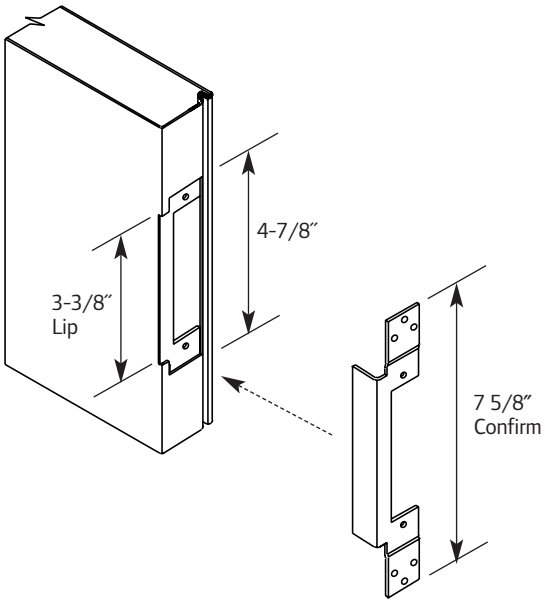
Details are subject to change without prior notice.

ASA PREP – WITHOUT ASTRAGAL

- For 4 7/8″ lip strike
- Preparation for full inactive leaf without astragal



Elevation Detail with ASA Strike



ASA Strike Prep Detail

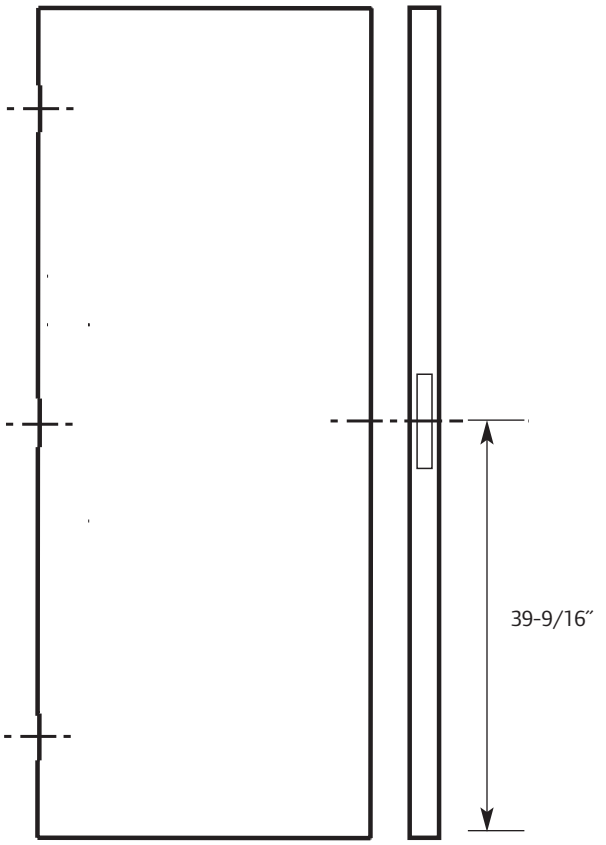
- 16 gage reinforcement

Notes:

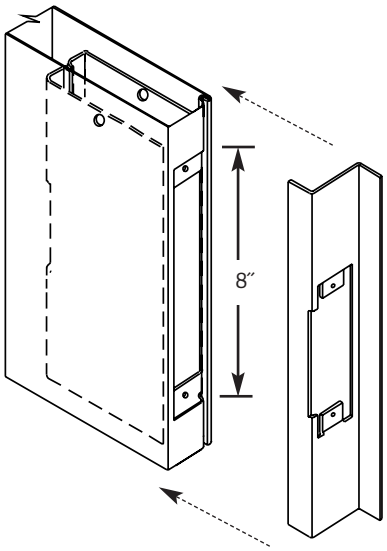
1. Prep is for fully mortised 4 7/8″ ASA strike, commonly used on a wide inactive leaf.
2. Prep is located to accommodate Steelcraft's standard 3/4″ undercut. **If special undercuts are required, it must be specified and prep location will be adjusted accordingly.**

ASA PREP – WITH ASTRAGAL

- For 4 7/8″ lip strike
- Preparation for full inactive leaf with astragal



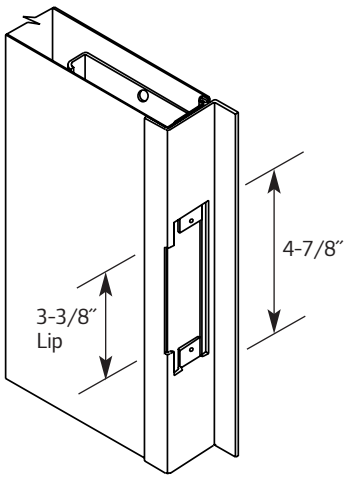
Strike Prep Elevation Detail



Astragal attachment Detail

Notes:

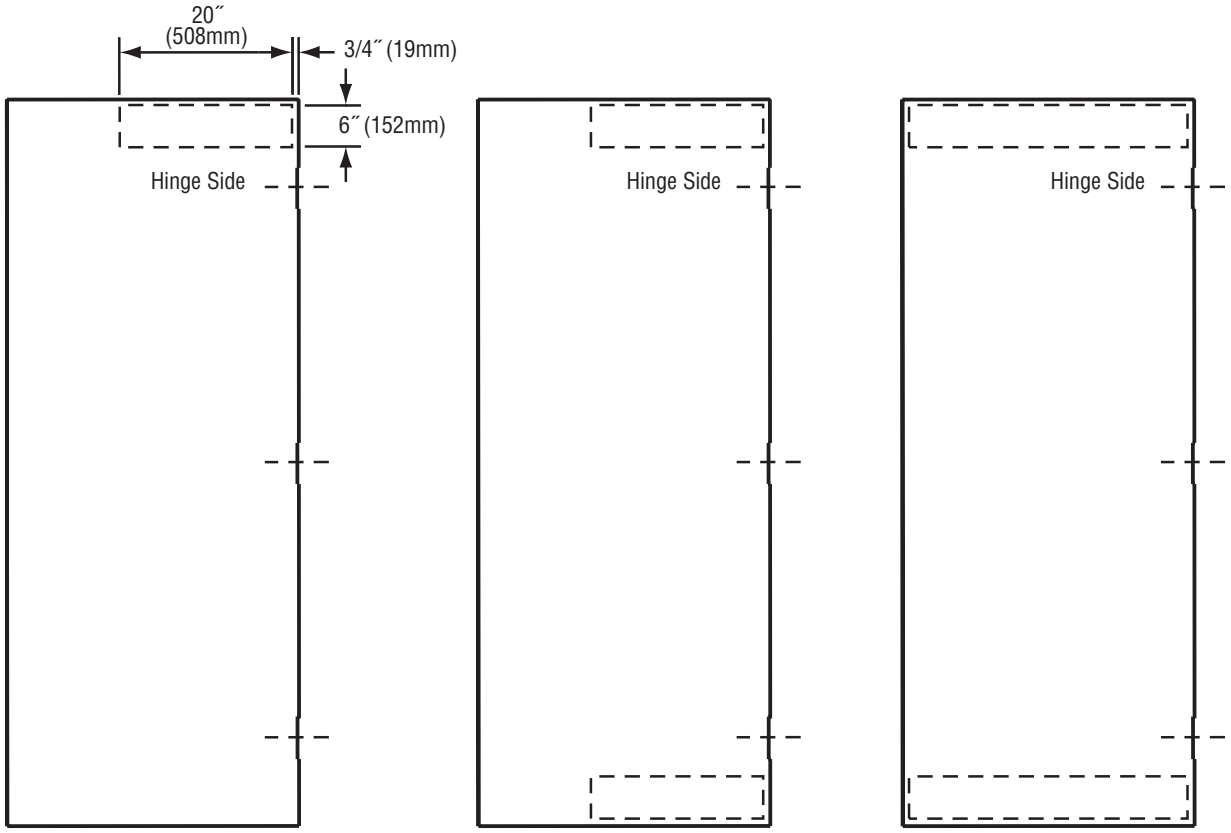
1. "Z" Astragal is required. Prep is for fully mortised 4 7/8″ ASA strike.
   - Cut outs on the edge of the door are for clearance only.
   - Astragals are shipped loose for field attachment.
   - Attaching tabs for strike attachment are included on the astragal.
2. Center line of bottom prep is located 39 9/16″ above the bottom edge of the door, unless otherwise specified
3. Prep is located to accommodate Steelcraft's standard 3/4″ undercut. **If special undercuts are required, it must be specified and prep location will be adjusted accordingly.**



Final Assembly Detail

CLOSER PREP

- For Surface Closers
- Internally reinforced on both faces



Standard | **Top & Bottom** | **Full Width**
Top & Bottom Shown

CLOSER for surface closers

Prep options:

- **SPECIAL** = special size reinforcement

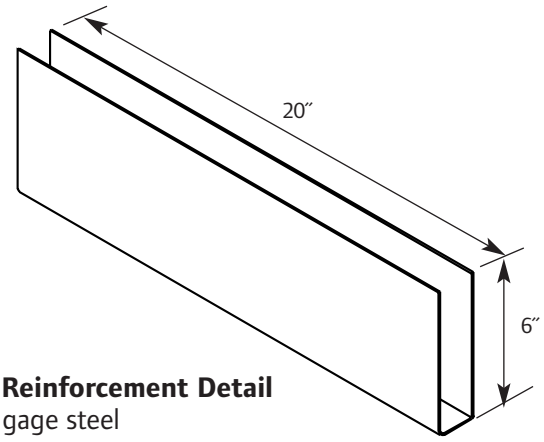
CLOSER

Prep options:

- **TOP/BOTTOM** = standard reinforcement at top and bottom
- **FULL WIDTH** = 14 gage reinforcement full door width
- **FULL WIDTH TB** = 14 gage reinforcement full door width **at top and bottom**

Notes:

1. All surface closer reinforcements are 14 gage unless otherwise specified.
2. Reinforcement heights are as follows:
   - 6″ = all door designs except doors with G, LG or FG glass lights
   - 4-7/8″ = doors with G, LG or FG glass lights

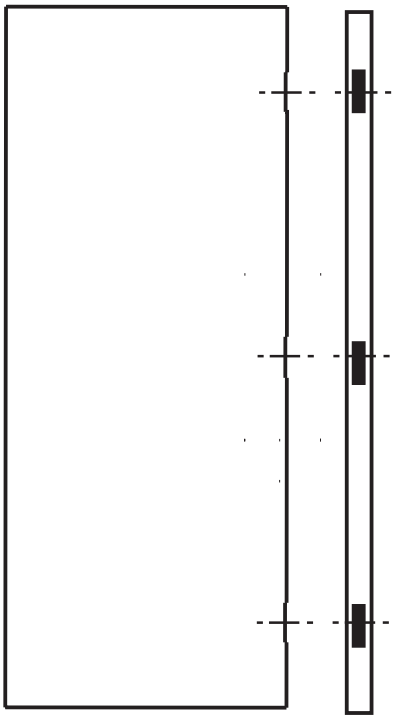


Closer Reinforcement Detail

- 14 gage steel

HINGE PREP

- For templated mortise hinges
- Internally reinforced with 7 gage (.187″)

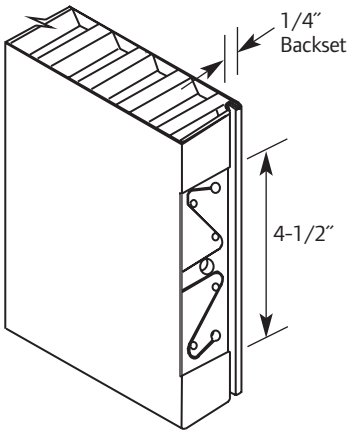


Standard Hinge Prep Elevation Detail

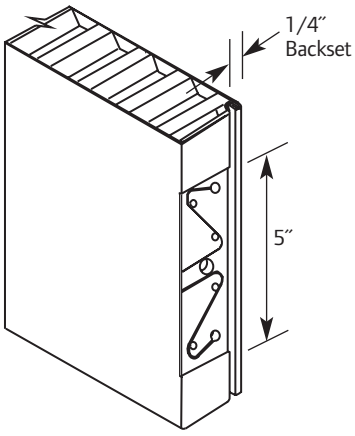
Hinge options:

When no hinge prep is specified door is prepped for 4-1/2″ universal hinges:

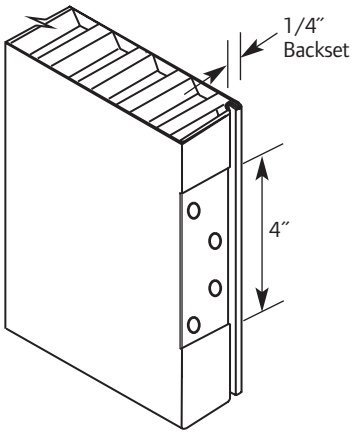
- **5″ HINGE** = 5″ Universal hinge – see below
- **4″ HINGE** = 4″ standard duty template hinge
  Note - L20 & CE 20 Series only
- **SPECIAL** = Special hinge prep per template
- **BLANK HINGE** = No hinge preps, standard door width



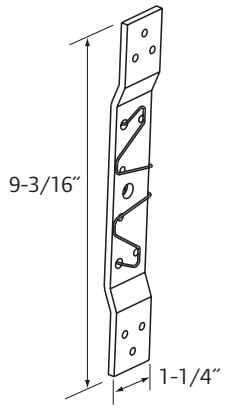
4-1/2″ Universal Hinge Detail



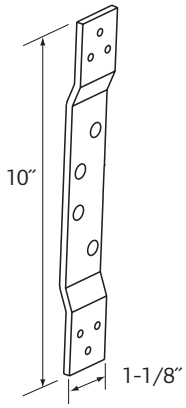
5″ Universal Hinge Detail



4″ Hinge Detail
L20 & CE 20-Series Only



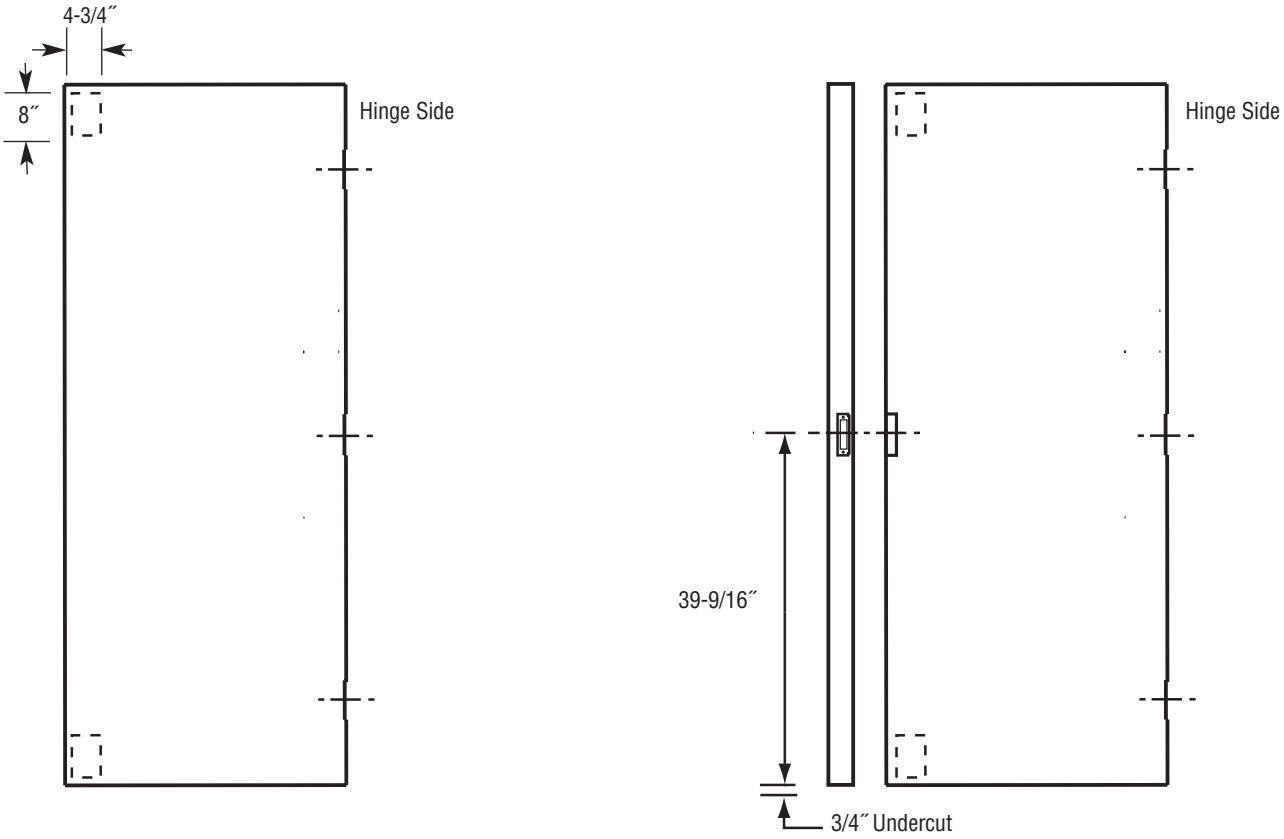
4-1/2″ & 5″
Universal Hinge Detail
7 Gage Reinforcement .187″ thick



4″ Hinge Detail
Reinforcement .125″ thick

INACTIVE LEAF - SURFACE BOLTS WITHOUT ASTRAGAL

- **Door leaf ordered as a separate inactive leaf not as a pair**
- Surface Bolt reinforcements in inactive leafs



INACTIVE LEAF WITHOUT ASTRAGAL

Note – option does not have a strike preparation on the edge

Notes:

1. Details above, address inactive leafs when ordered as individual leafs.
2. When ordering double doors as pairs specify the primary lock and auxiliary locks on the active leaf. Primary Strike designations for the inactive leaf are not required, however strikes for auxiliary locks must be specified.
3. Surface bolt reinforcement data:
   - Reinforcements are 14 gage steel
   - Both faces are reinforced at the top and bottom on the lock edge

INACTIVE LEAF WITHOUT ASTRAGAL ASA

Prep options:

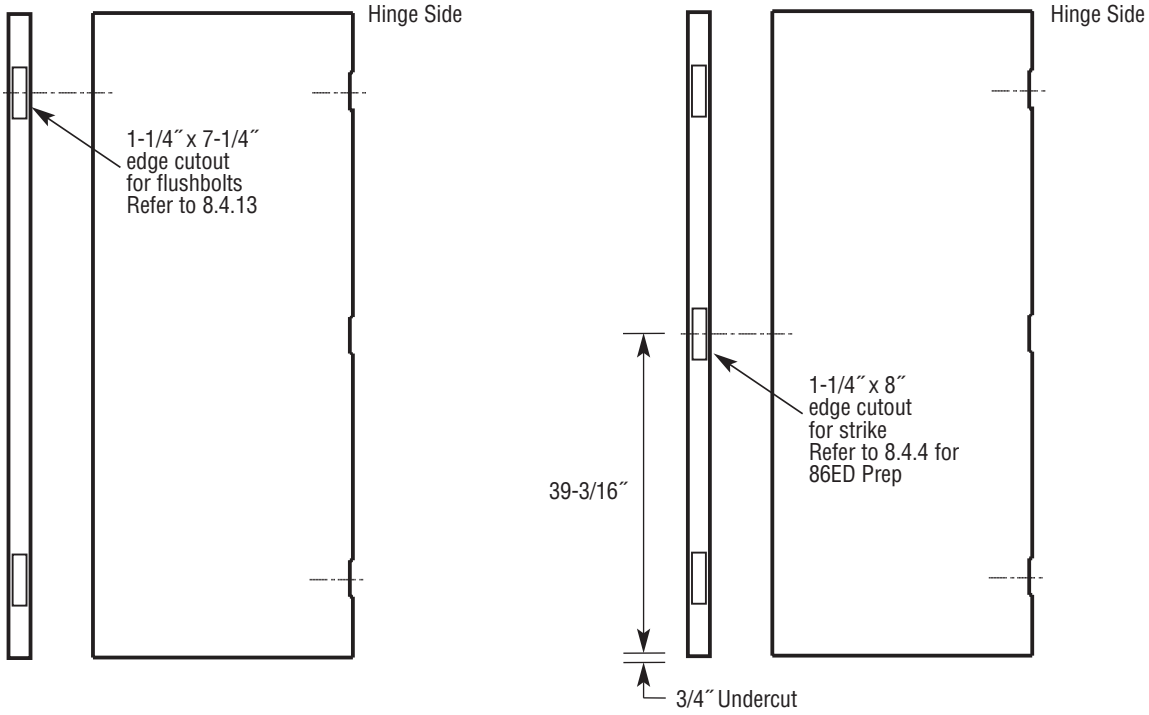
Strike for primary lock:
ASA = 4-7/8″ strike @ 40 5/16 above bottom of frame
CYL = 2-3/4″ strike @ 40 5/16 above bottom of frame
BLANK = no prep but deadlock above
SPECIAL = Special strike per manufacturer's template

Strike for deadlock lock:
ASA-48 = 4-7/8″ strike @ 48″ above bottom of frame
ASA-60 = 4-7/8″ strike 60″ above bottom of frame
CYL-48 = 2-3/4″ strike @ 48″ above bottom of frame
CYL-60 = 2-3/4″ strike 60″ above bottom of frame
SPECIAL-48 = 48″ above bottom of frame
SPECIAL-60 = 60″ above bottom of frame

Strike for both primary lock and deadlock lock:
Specify nomenclature coded for both locks
Example:
ASA X ASA-60 = primary strike @ 40-5/16″
and deadlock strike @ 60″ above bottom of the frame

INACTIVE LEAF - FLUSH BOLTS WITH ASTRAGAL

- **Door leaf ordered as a separate inactive leaf not as a pair**
- Cutouts for flushbolts in inactive leafs
- For Flush Bolts (Manual or Automatic) conforming to ANSI A115.4



INACTIVE LEAF WITH ASTRAGAL

Note – option does not have a strike preparation on the edge

Notes:

1. Astragals are shipped loose for field attachment.
2. Attaching tabs for flush bolts and strikes are included on the astragal. Cut outs on the edge of the door are for clearance only.
3. Details above, address inactive leafs when ordered as individual leafs.
4. When ordering double doors as pairs specify the primary lock and auxiliary locks on the active leaf. Primary Strike designations for the inactive leaf are not required, however strikes for auxiliary locks must be specified.

INACTIVE LEAF WITH ASTRAGAL ASA

Prep options:

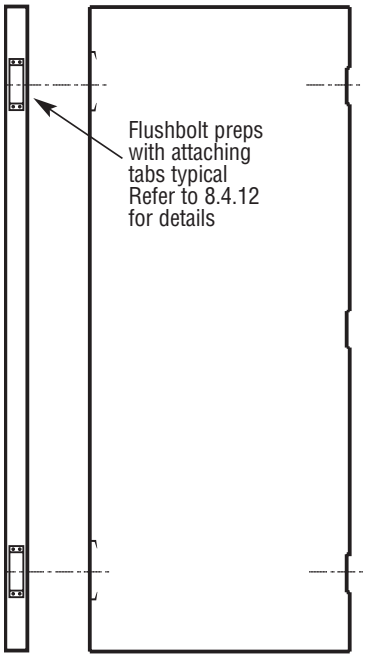
Strike for primary lock:
ASA = 4-7/8″ strike @ 40 5/16 above bottom of frame
CYL = 2-3/4″ strike @ 40 5/16 above bottom of frame
BLANK = no prep but deadlock above
SPECIAL = Special strike per manufacturer's template

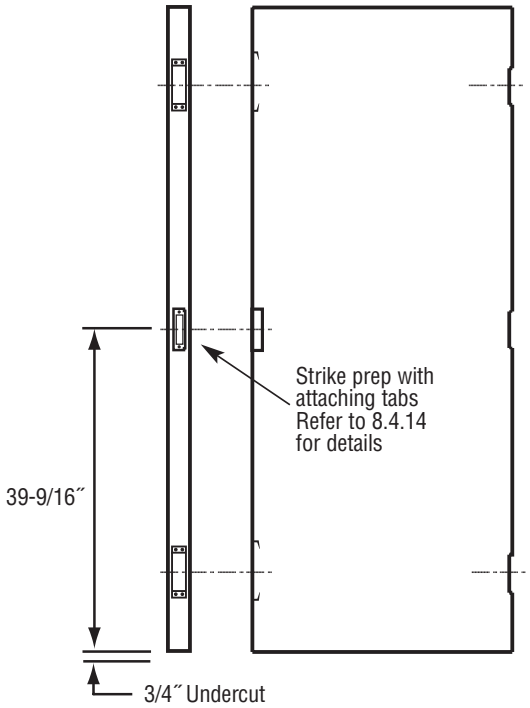
Strike for deadlock lock:
ASA-48 = 4-7/8″ strike @ 48″ above bottom of frame
ASA-60 = 4-7/8″ strike 60″ above bottom of frame
CYL-48 = 2-3/4″ strike @ 48″ above bottom of frame
CYL-60 = 2-3/4″ strike 60″ above bottom of frame
SPECIAL-48 = 48″ above bottom of frame
SPECIAL-60 = 60″ above bottom of frame

Strike for both primary lock and deadlock lock:
Specify nomenclature coded for both locks
Example:
ASA X ASA-60 = primary strike @ 40-5/16″
and deadlock strike @ 60″ above bottom of the frame

INACTIVE LEAF - FLUSH BOLTS WITHOUT ASTRAGAL

- **Door leaf ordered as a separate inactive leaf not as a pair**
- Cutouts for flushbolts in inactive leafs
- For Flush Bolts (Manual or Automatic) conforming to ANSI A115.4





INACTIVE LEAF WITHOUT ASTRAGAL

Note – option does not have a strike preparation on the edge

- For flush bolts without astragal
- Door edge is prepped and reinforced for the flushbolts

Notes:

1. Flushbolt and strike preparations are fully mortised into the in active leaf door edge.
2. Details above, address inactive leafs when ordered as individual leafs.
3. When ordering double doors as pairs specify the primary lock and auxiliary locks on the active leaf. Primary Strike designations for the inactive leaf are not required, however strikes for auxiliary locks must be specified.

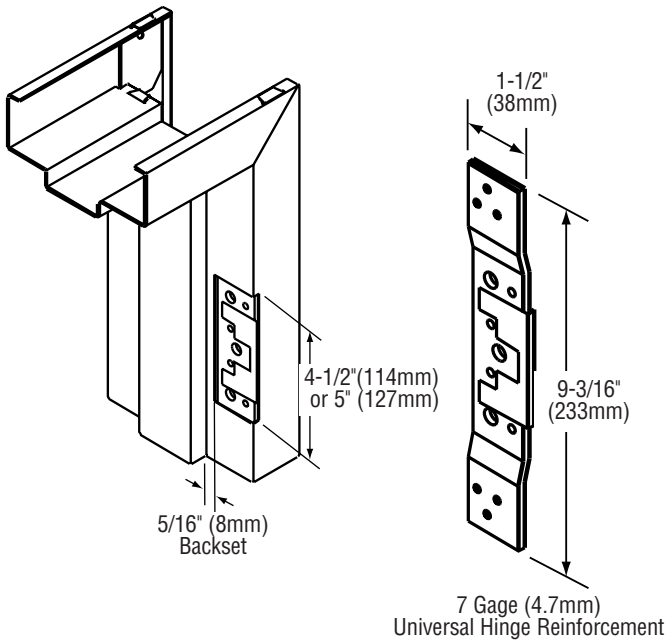
INACTIVE LEAF WITHOUT ASTRAGAL ASA

Prep options:
Strike for primary lock:
ASA = 4-7/8″ strike @ 40 5/16 above bottom of frame
CYL = 2-3/4″ strike @ 40 5/16 above bottom of frame
BLANK = no prep but deadlock above
SPECIAL = Special strike per manufacturer's template

Strike for deadlock lock:
ASA-48 = 4-7/8″ strike @ 48″ above bottom of frame
ASA-60 = 4-7/8″ strike 60″ above bottom of frame
CYL-48 = 2-3/4″ strike @ 48″ above bottom of frame
CYL-60 = 2-3/4″ strike 60″ above bottom of frame
SPECIAL-48 = 48″ above bottom of frame
SPECIAL-60 = 60″ above bottom of frame

Strike for both primary lock and deadlock lock:
Specify nomenclature coded for both locks
Example:
ASA X ASA-60 = primary strike @ 40-5/16″
and deadlock strike @ 60″ above bottom of the frame

HINGE PREP



GENERAL INFORMATION:

Standard 4-1/2″ (114mm) and optional 5″ (127mm) butt hinges are normally used in 1-3/4″ (45mm) doors. Either hinge will support doors up to 4´0″ (1219mm) wide and 10´0″ (3048mm) high (quantity will vary, refer to 8.2.2).

The preparation in the door and frame are described as the "Universal" preparation. This means the preparation will convert from a standard to a heavy weight hinge prep by removing the break-off spacer in the field.

DESCRIPTION:

Both the standard 4-1/2″ (114mm) and the optional 5″ (127mm) hinges come in standard and heavy weight.

- 4-1/2″ (114mm) = Standard .134″ (3mm) Heavy .180″ (5mm)
- 5″ (127mm) = Standard .140″ (4mm) Heavy .190″ (5mm)

Hinges used must be the "TEMPLATED"

REINFORCEMENT:

The reinforcement used in the door and frame are 7 gage (4.7mm) steel and are projection welded to the rabbet of the hinge jamb. The reinforcements include an auxiliary steel spacer. Leave the spacer in place and the standard weight hinge can be used. Remove the spacer and the heavy weight hinge can be used. Refer to the appropriate frame series to insure the patented universal hinge is available.

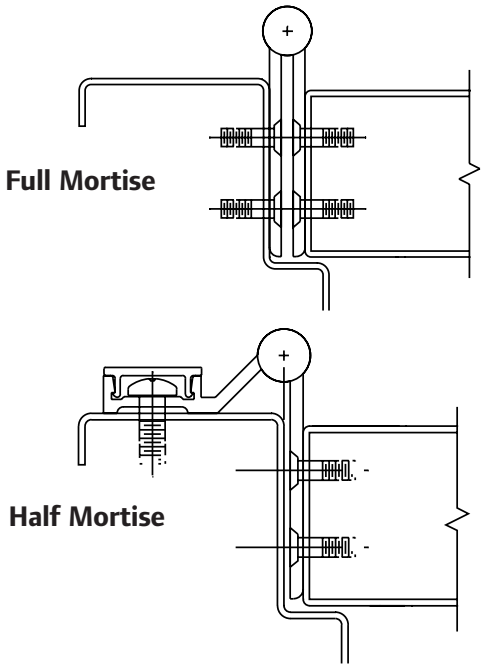
SPECIFICATION COMPLIANCE:

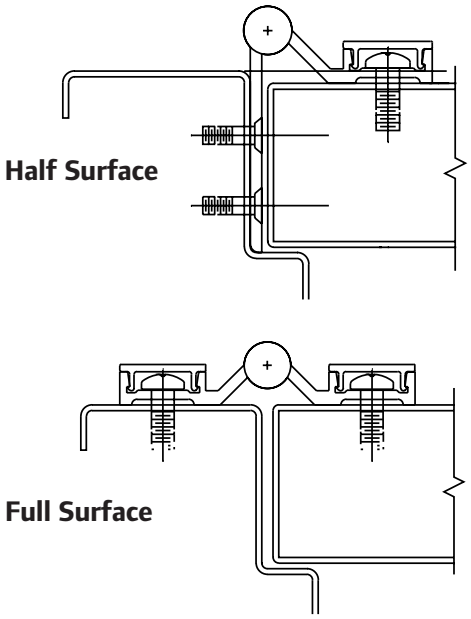
Both the 4-1/2″ (114mm) and 5″ (127mm) hinge preparations meet or exceed the requirements of the Steel Door Institute (SDI).

FIRE RATINGS:

The 4-1/2″ (114mm) or 5″ (127mm) hinge can be used in fire rated products with ratings from 20 minute to 3 hours.

CONTINUOUS HINGE PREP





GENERAL INFORMATION:

Continuous hinges are generally used on large heavy doors. They are also used when an opening is subjected to high frequency usage.

DESCRIPTION:

The type of attachment to the door identifies continuous hinges. The attachment can be

- Full mortise (attached to the door edge and frame rabbet)
- Half surface (attached to the door face and frame rabbet)
- Half mortise (attached to the door edge and frame face)
- Full surface (attached to the door and frame faces)

Attachment to the door and frame can be by sheet metal screws or machine screws. All holes are field drilled or field drilled and tapped. The clearance on the hinge side of the door is adjusted depending on the hinge template.

REINFORCEMENT:

When sheet metal screws are used, a reinforcement in both door and frame is not required. Using the hinge as a template or the template supplied, field drill the proper place on the door and frame for the screws and attach the hinge.

When machine screws are used or when specified additional reinforcement for both the door and frame may be required. The reinforcement is 14 gage steel, welded to the inside of the door or frame as required by the attachment. Using the hinge as a template, or the template supplied, field drill and tap the proper place on the door and frame for the machine screws and attach the hinge.

TEMPLATE:

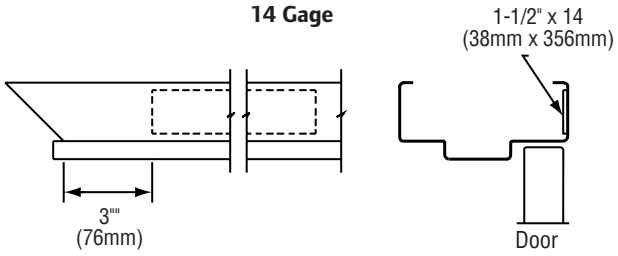
Hinge manufacturer's information should be reviewed carefully to insure the correct attachment and that the hinge is capable of meeting the requirements of your opening.

FIRE RATINGS:

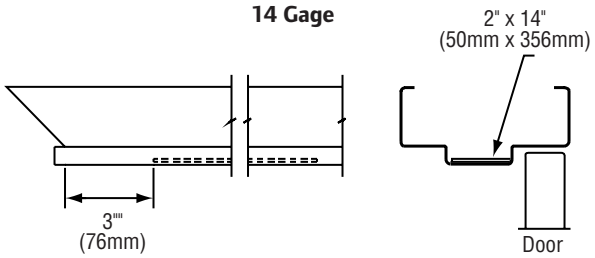
Fire rated continuous hinges are available for openings with ratings from 20 minutes to 3 hours.
Check the hinge manufacturer's information on this requirement.

SURFACE CLOSER PREP

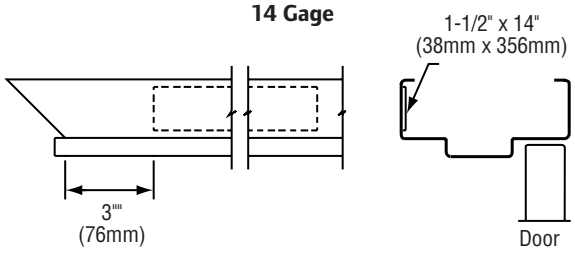
Regular Arm (RA) Closer Reinforcement
14 Gage



Parallel Arm (PA) Closer Reinforcement
14 Gage



Top Jamb (TJ) Closer Reinforcement
14 Gage



GENERAL INFORMATION:

The use of closer reinforcements allows for the surface mounting of a closer or holder on a frame. The extra material that is added to the inside of the frame head provides sufficient material for drilling and taping for the closer or holder mounting screws.

DESCRIPTION:

The reinforcement is welded to the inside face or rabbet of the frame (depends on the closer or holder mounting method). The locations of the reinforcement for each mounting type are as follows:

- **Regular arm closers** are used on interior doors. The closer is mounted on the face of the door on the pull side of the opening. The closer arm is mounted to the face of the head member. Steelcraft identification: **RA.**
- **Parallel arm closers** are used on exterior and interior openings. The closer is mounted on the door face on the push side of the opening. The closer arm is mounted to the 1-9/16″ rabbet or the soffit of the head member. Steelcraft identification: **PA.**
- **Top jamb mounted closers** are used on interior and exterior openings. The closer is mounted on the head of the frame on the non-door head face on the push side of the opening. The closer arm is mounted to the door face. Steelcraft identification: **TJ.**

The location of the individual reinforcement is such that the degree of opening or the size of the closer or holder does not affect the preparation. Reinforcements for surface mounted holders are similar to the PA mounting for a closer. The holder feet are attached to the soffit of the frame head.

REINFORCEMENT:

The reinforcement used in the frame is a 14 gage (1.7mm) steel plate 1-7⁄8″ x 14″ (48mm x 356mm) long.

SPECIFICATION COMPLIANCE:

The closer preparation in both frames and doors meets or exceed the requirements of the Steel Door Institute (SDI) and the Door and Hardware Institute (DHI).

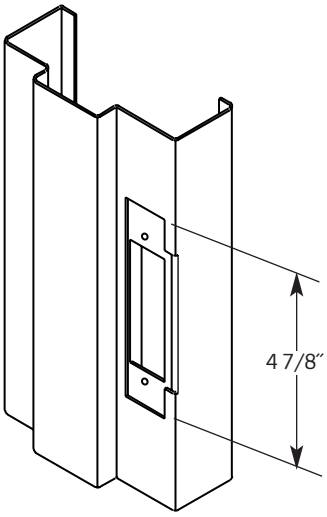
FIRE RATINGS:

Closer reinforcements are required in all fire rated products. If the reinforcement is omitted, a special marking is required (see Fire Rated Section for information).

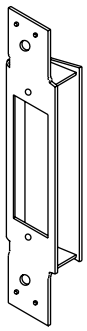
NOTES: 1. Frames are not supplied with the closer or holder.

ASA STRIKE PREP

Typical Preparation



Reinforcement



GENERAL INFORMATION:

The ANSI A115.1 and ANSI A115.2 strikes are designed to function with the ANSI A115.1 and 115.2 locks and mortise exit devices. Some mortise and bored-in deadlocks will function with these strikes.

DESCRIPTION:

ANSI A115.1 and ANSI A115.2 strikes are 4-7/8″ (124mm) high and 11/4″ (32 mm) wide. The centerline of the strike is located 40-5/16″ (1024 mm) from the bottom of the frame. This location will function with the ANSI. A115.1 and A115.2 locks and the mortise exit devices. The location for deadbolts must be adjusted (normally 48″ [1219 mm] from the bottom of the frame) to match the deadlock being used. The centerline of the strike is located 15/16″ (24 mm) from the stop of the strike jamb.

The normal lip on the strike is 1-1/4″ (32 mm). This allows the strike lip to extend beyond the frame face providing a guide for the latch bolt. The lip is omitted on deadlock strikes.

REINFORCEMENT:

The reinforcement used is a specially formed16-gage steel part and is projection welded to the door rabbet of the strike jamb.
The reinforcement includes extruded attaching holes to provide adequate threads for the strike plate screws. The reinforcement includes a dust (mortar) box that is deep enough to receive the 1″ (25 mm) throw latch bolt or deadbolt.

TEMPLATE:

Lock manufacturers template should be reviewed carefully to insure the strike being used will function in the preparation.
Although Steelcraft's preparation meets or exceeds the ANSI standard, some manufacturer's strikes may not fit properly in the cutout or provide enough lip extension.

SPECIFICATION COMPLIANCE:

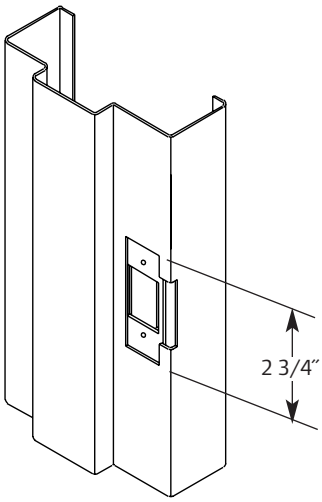
The ANSI A115.1 and ANSI A115.2 strike preparation meets or exceeds the requirements of the Steel Door Institute (SDI) and the Door and Hardware Institute (DHI).

FIRE RATINGS:

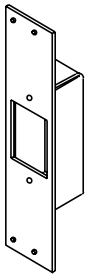
The ANSI A115.1 and ANSI A115.2 strikes can be used in fire rated frames with ratings from 20 minute to 3 hours.

CYL STRIKE PREP

Typical Preparation



Reinforcement



GENERAL INFORMATION:

The ANSI A115.3 strike is designed to function with the ANSI A115.2 and 115.3 locks and bored-in deadlocks.

DESCRIPTION:

ANSI A115.3 strike is 2-3/4″ (70mm) high and 1-1/8″ (28 mm) wide. The centerline of the strike is located 40-5/16″ (1024 mm) from the bottom of the frame. This location will function with the ANSI A115.2 and A115.3 locks. The location must be adjusted (normally 48″ [1219 mm] from the bottom of the frame to match the deadlock being used. The centerline of the strike is located 15/16″ (24 mm) from the stop of the strike jamb

The normal lip on the strike is 1-1/4″ (32 mm). This allows the strike lip to extend beyond the frame face providing a guide for the latch bolt. The lip is omitted on deadlock strikes.

REINFORCEMENT:

The reinforcement used is a 14-gage steel part and is projection welded to the frame rabbet. The reinforcement includes extruded attaching holes to provides adequate threads for the strike plate screws.

The reinforcement includes a dust (mortar) box welded to the reinforcement that is deep enough to receive the 1″ (25 mm) throw latch bolt or deadbolt.

TEMPLATE:

Lock manufacturers template should be reviewed carefully to insure the strike being used will function in the preparation. Although Steelcraft's preparation meets or exceeds the ANSI standard, some manufacturer's strikes may not fit properly in the cutout or provide enough lip extension.

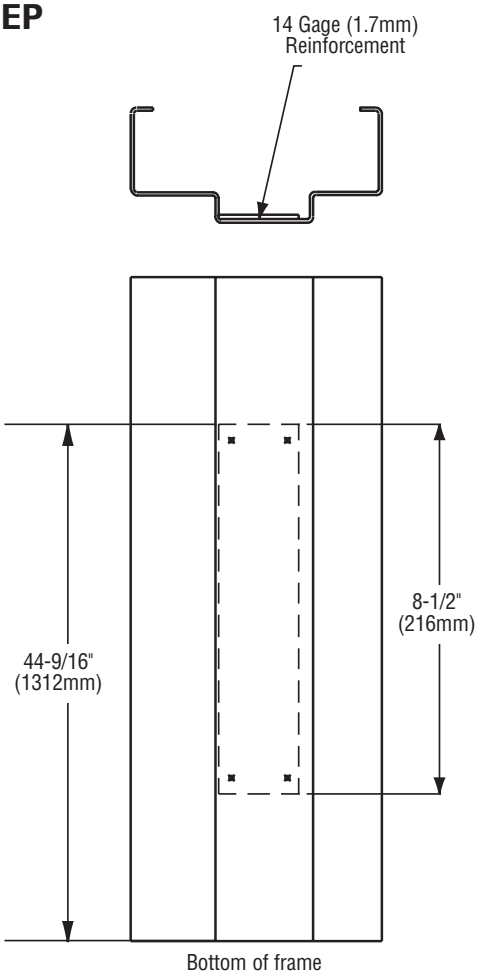
SPECIFICATION COMPLIANCE:

The ANSI A115.3 strike preparation meets or exceeds the requirements of the Steel Door Institute (SDI) and the Door and Hardware Institute (DHI).

FIRE RATINGS:

The ANSI A115.1 and ANSI A115.2 strikes can be used in fire rated frames with ratings from 20 minute to 3 hours.

RPD RIM PANIC STRIKE PREP



GENERAL INFORMATION:

Steelcraft's rim exit device strike preparation is designed to function with all rim exit devices.

DESCRIPTION:

The preparation is designed to accept the surface mounted strike supplied by the exit device manufacturer. The strike jamb is reinforced only and all drilling and tapping is done in the field by others.

The centerline of the preparation is located per the exit device manufacturer's template.

REINFORCEMENT:

The preparation consists of a 14-gage steel plate 8-1⁄2″ (216 mm) long by minimum 2″ (950 mm) wide, welded to the soffit of the strike jamb. A dust (mortar) guard is not provided.

TEMPLATE:

Exit device manufacturer's template should be reviewed.

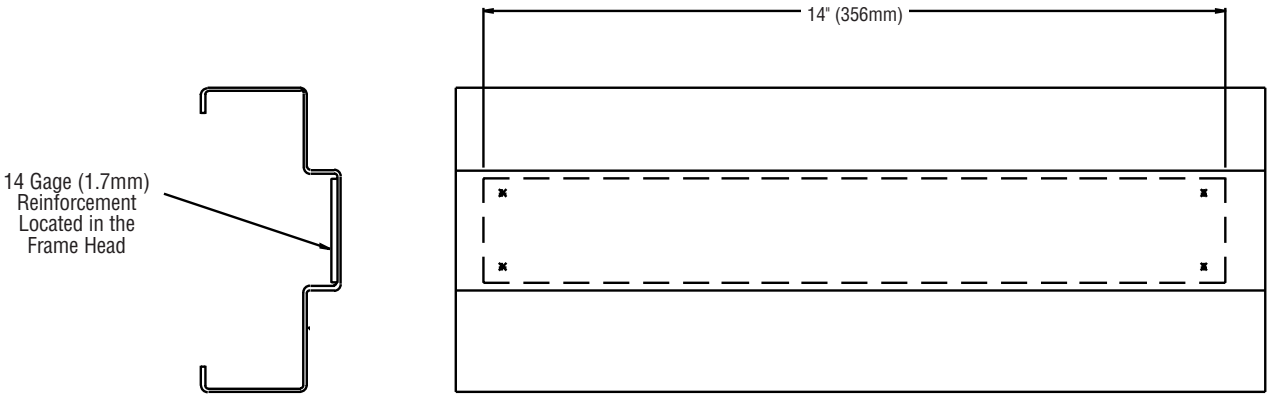
SPECIFICATION COMPLIANCE:

The rim exit device strike preparation meets or exceeds the requirements of the Steel Door Institute (SDI) and the Door and Hardware Institute (DHI).

FIRE RATINGS:

RPD strikes are used in fire rated frames in conjunction with doors equipped with Rim Fire Exit Hardware, in ratings from 20 minute to 3 hours.

SURFACE VERTICAL ROD STRIKE PREP



GENERAL INFORMATION:

Steelcraft's vertical rod exit device strike preparation is designed to function with all vertical rod exit devices.

DESCRIPTION:

The preparation is designed to accept the surface mounted strike supplied by the exit device manufacturer. The head of the frame is reinforced only and all drilling and tapping is done in the field by others. The preparation is located in the soffit area and in the center of the frame head.

REINFORCEMENT:

The preparation consists of a 14-gage steel plate 14″ (356 mm) long by 2″ (50 mm) wide, welded to the soffit of the frame header. The plate is held to the door side of the jamb. A dust (mortar) box is not provided.

TEMPLATE:

Exit device manufacturers template should be reviewed carefully to insure the strike being used will function in the preparation.

SPECIFICATION COMPLIANCE:

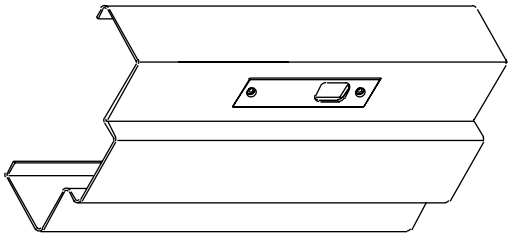
The vertical rod exit device strike preparation meets or exceeds the requirements of the Steel Door Institute (SDI) and the Door and Hardware Institute (DHI).

FIRE RATINGS:

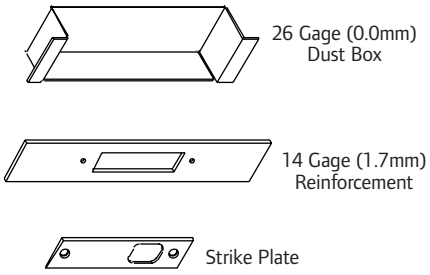
Vertical Rod strikes are used in fire rated frames in conjunction with pairs of doors equipped with Surface Vertical Rod Fire Exit Hardware, in ratings from 20 minute to 3 hours.

UNIVERSAL FLUSH BOLT STRIKE PREP

Universal Flush Bolt Strike Preparation



Lock Reinforcement



GENERAL INFORMATION:

Steelcraft's Universal flush bolt strike preparation is designed to be non-handed. The preparation includes a cutout, reinforcement and strike plate that will function with all ANSI flush bolts.

DESCRIPTION:

The preparation includes a cutout located in the door rabbet of the frame header that is large enough to cover both right hand and left hand active openings. A reinforcing plate that is offset to accept a reversible strike/filler is welded into the door rabbet of the frame header. A prime painted strike/filler plate is supplied installed. To change hands it is necessary to remove the strike/filler plate and reinstall for the other hand using the same strike/filler plate and screws.

REINFORCEMENT:

Reinforcement: The preparation consists of a 14-gage steel plate of such design to function properly with the flush bolt. The reinforcement is drilled and tapped at the factory. The reinforcements are welded to the door rabbet of the frame header.
Strike Plate: Preparation includes a universal prime painted strike plate with attaching screws. A dust (mortar) box is provided.

TEMPLATE:

Flush bolt manufacturer's template should be reviewed carefully to insure the bolt being used will function in the preparation.

SPECIFICATION COMPLIANCE:

The flush bolt strike preparation meets or exceeds the requirements of the Steel Door Institute (SDI) and the Door and Hardware Institute (DHI).

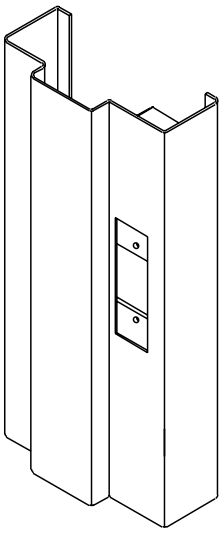
FIRE RATINGS:

Universal Flush Bolt strikes are used in fire rated frames in conjunction with pairs of doors equipped with inactive leaf flush bolts, in ratings from 20 minute to 3 hours.

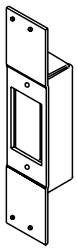
Notes:
1. The flush bolt strike/filler plate is prime painted and installed at the factory for right hand openings.
2. For left hand openings, remove the plate and reinstall as required.

DEAD LOCK STRIKE PREP

Typical Preparation



Reinforcement



14 Gage (1.7mm) Reinforcement

GENERAL INFORMATION:

Deadlock strikes are normally rectangular shaped non-lip type strikes that are designed to work with bored-in or mortise deadlocks. A lip strike can be used if the cutout for the deadbolt is located properly and is the correct size.

DESCRIPTION:

The deadlock strike preparation is a rectangular shaped cutout in the door rabbet of the strike jamb. The centerline of the deadlock strike is located 48″ (1219 mm) from the bottom of the frame and the door preparation adjusted to match the strike.

REINFORCEMENT:

The reinforcement used is a formed 14-gage steel plate that is welded to the door rabbet of the strike jamb. The reinforcement provides adequate threads for the strike plate screws. In addition the reinforcement includes a dust (mortar) box that is deep enough to receive the 1″ (25 mm) throw deadbolt.

TEMPLATE:

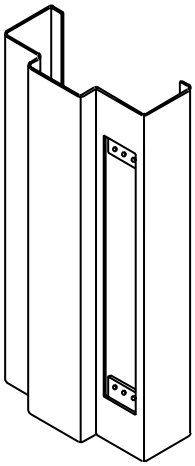
Deadlock strike manufacturer's template should be reviewed carefully for the preparation required in the frame.

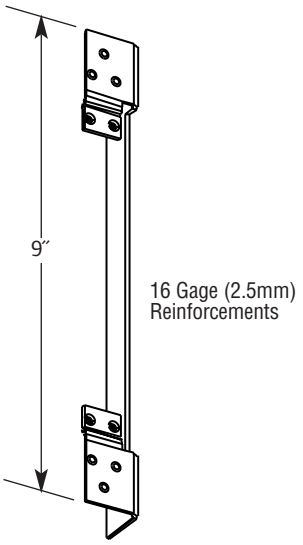
SPECIFICATION COMPLIANCE:

The deadlock strike preparation meets or exceeds the requirements of the Steel Door Institute (SDI) and the Door and Hardware Institute (DHI).

EPT POWER TRANSFER PREP

Typical Frame Preparation





GENERAL INFORMATION:

Power transfers are used to provide wiring to a swinging door for electric locks, exit devices etc.

DESCRIPTION:

Power Transfers are mortised into the door rabbet of the hinge jamb and into the hinge edges of the door.

REINFORCEMENT:

The reinforcements are 16-gage steel plates welded to the jamb. The plate is drilled and tapped for the necessary mounting screws. A dust (mortar) box or junction box is included with this preparation.

FIRE RATINGS:

EPT Power Transfers are considered auxiliary hardware items and can be used on in ratings from 20 minute to 3 hours.