



**PEMKO**  
ANTI-BARRICADE  
RESCUE HARDWARE

**PEMKO**  
**ASSA ABLOY**

Experience a safer  
and more open world

# Pemko Anti-Barricade Rescue Hardware

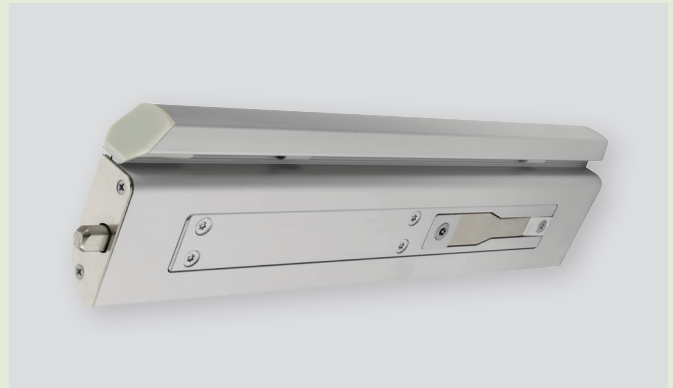
ASSA ABLOY designs and manufactures products to improve safety and mitigate risk in medical, behavioral health, and assisted living environments. Applications include patient rooms, patient bathrooms and cross corridor bathrooms.

Anti-barricade rescue hardware is the optimum solution to provide a safe way to rescue someone in the event the door is barricaded and not able to open. In an emergency the facility staff will be able to swing the door in the opposite direction, minimizing the risk of patients harming themselves.

## *Solutions*



*Pemko Double Swing Pin & Barrel Hinge DSH1000*



*Pemko Emergency Release Stop ERS*



*Pemko Multi-Point Emergency Release Stop ERSMP*

# Applications



MEDICAL FACILITIES



BEHAVIORAL HEALTH FACILITIES



ASSISTED LIVING FACILITIES

## Standards

ANSI/BHMA: A156.26 Grade 1-300 Certified (DSH1000)

ADA Compliance:

- ICC/ANSI A117.1-2009 Barrier Free Requirements (DSH1000)
- ADAAG-2010

CMS Compliance:

- Eliminating additional ligature points ensures compliance for reimbursement through Centers for Medicare and Medicaid Services

Refer to the New York State Office of Mental Health (OMH) Patient Safety Standards for current product compliance.



# Rescue Hardware Operation

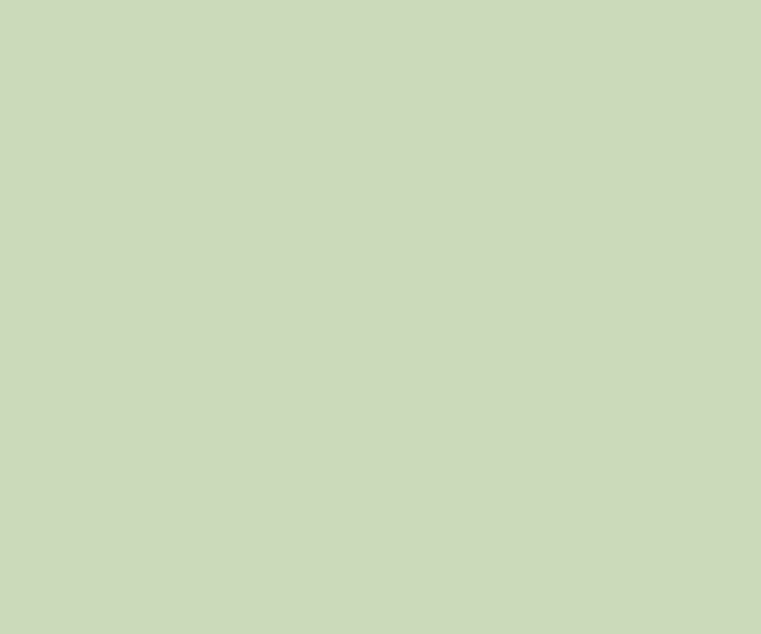


1. Door barricaded by a person or object that prevents the door from opening



2. A key is used to unlock the Emergency Release Stop from the locked position

# Rescue Hardware Operation



**3.** Emergency Release Stop opens to allow the door to swing in the opposite direction



**4.** Door opens outward in the opposite direction to allow quick and easy access to the patient

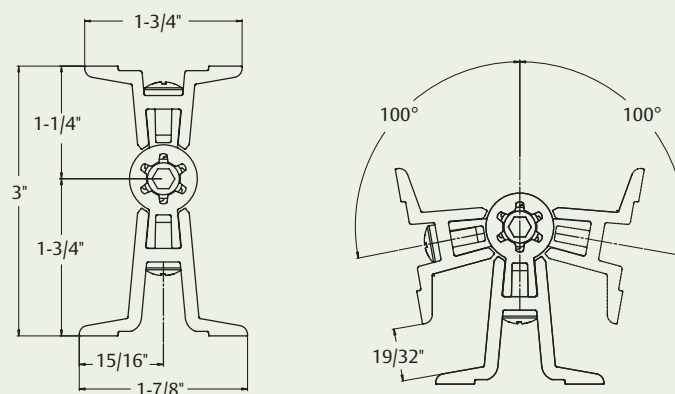
# Double Swing Hinge

ASSA ABLOY double swing hinges allow the door to swing in both directions with ease. The robust design supports heavy doors that may experience abuse.

| Key Feature                           | Benefit                                                                        |
|---------------------------------------|--------------------------------------------------------------------------------|
| Opens 100° in Either Direction        | Suites with Pemko Emergency Release Stop to create an anti-barricade opening   |
| Built-In Stop                         | Prevents finger pinching                                                       |
| Spans Opening Height                  | Eliminates hinge side sight line                                               |
| Security Torx Fasteners               | Prevents removal of hinge                                                      |
| Electrified SER Module                | Provides quick access to concealed wire transfer to power electrified hardware |
| 1/8" Hinge Frame and Door Leaf Offset | Eliminates ligature points across top of hinge                                 |
| Gang Hole Pattern                     | Supports door weight with large grouping of mounting holes at top of hinge     |

## Key Feature Highlight

**Opens 100° in Either Direction:** Door opens 100° in the typical direction. Disengaging the Emergency Release Stop allows the door to open 100° in the opposite direction providing access to the barricaded side of the opening.



DSH1000

# Double Swing Hinge

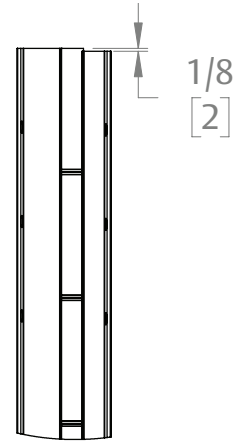
## Key Feature Highlight

1/8" Hinge Frame and Door Leaf Offset: Top of hinge frame leaf is offset from top of door hinge leaf. Top of hinge frame leaf is mounted tightly up against the top of the opening to help eliminate ligature points at top of opening.

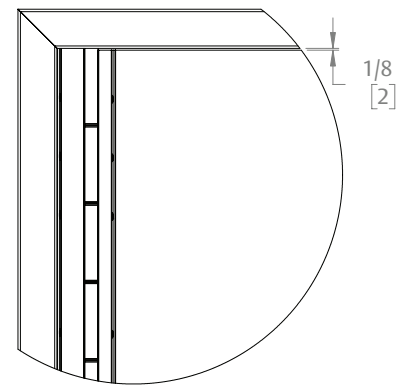
## DSH1000 CONSTRUCTION

| Key Feature                       | Benefit                                                       |
|-----------------------------------|---------------------------------------------------------------|
| Pin & Barrel Design               | Continuous hinge design reduces stress on frame               |
| 6063-T6 Aluminum Alloy/Temper     | Strong, heavy-duty and durable grade aluminum                 |
| 1/4" Diameter Stainless Steel Rod | Large diameter rod supports large and heavy doors             |
| UHMW-PE Medical Bearings          | High quality bearing improves life and overall hinge function |

*Supports door weights up to 600 lbs*



*DSH1000*



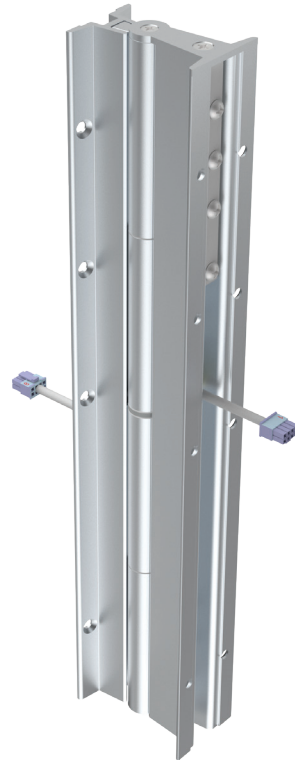
*DSH1000 - In Opening*

*Note: Order form recommended, refer to [Pemko How to Order Guide for Pemko and Markar Hinges](#)*

# Double Swing Hinge with Serviceable Electrical Module (SER)

Removable electrified SER module with Molex connectors with Electrolynx® for quick and easy access to wires without removing door from frame

- Supplied with cable leads
  - 48" (door)
  - 180" (frame)
- Top mounted – Standard Location
  - Custom location available upon request (top of hinge to centerline of prep)
- Capable of carrying 6 amps continuous or 16 amps-in-rush at 24 volts for 820 milliseconds



## ELECTRICAL MODIFICATIONS

Serviceable/Removable (SER) Module - 4 Wire      SER4

Serviceable/Removable (SER) Module - 8 Wire      SER8

Serviceable/Removable (SER) Module - 12 Wire      SER12

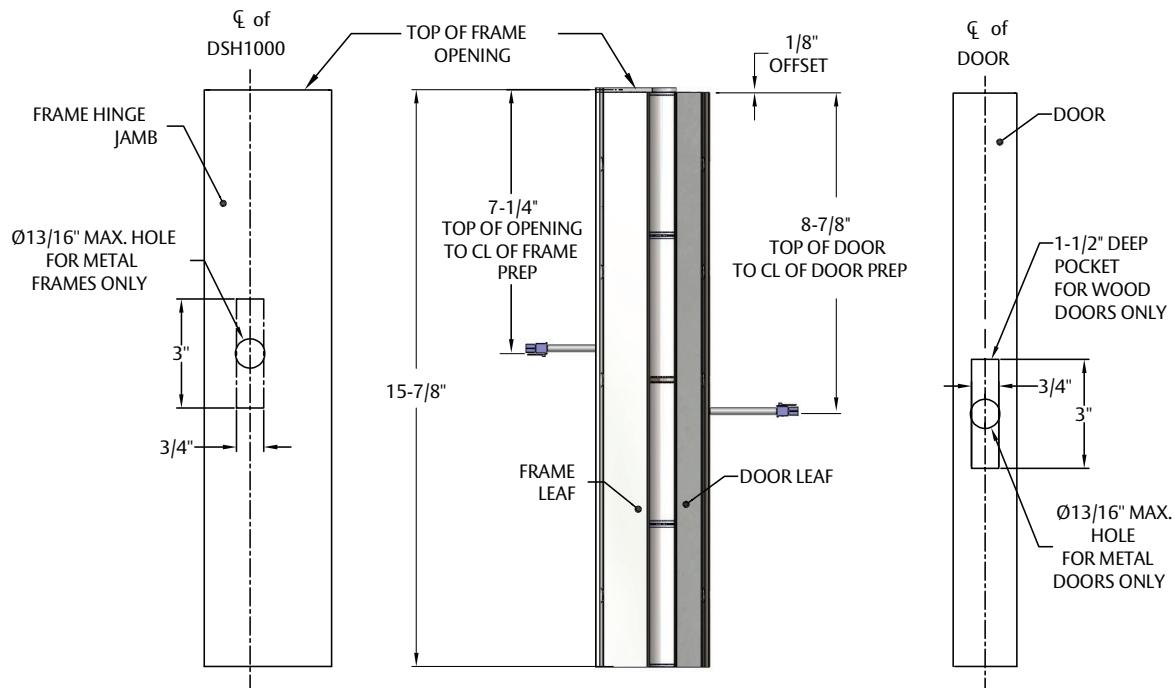
*DSH1000SER*

**BHMA**  
CERTIFIED

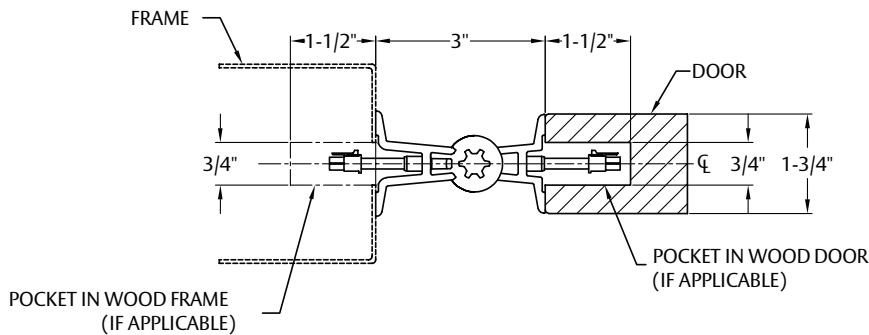
# Double Swing Hinge with Serviceable Electrical Module (SER)

## DSH1000 SER Prep

(standard location shown below)



### TOP VIEW



# How to Order Double Swing Hinge

## DSH1000

### Two ways to order

1. Purchase order with Hinge Model, Length, Finish, and completed Markar/Pemko DSH\_ x ERS\_ order form (recommended)
2. Purchase order with Hinge Model, Length, Finish, Electrical Modification, Location Top to Centerline, Fasteners, Frame Height, Door Undercut

### Information Required with Order Form or Purchase Order

| Model   | Length <sup>1</sup> | Finish                        | Electrical Modification | Location Top to Centerline <sup>2</sup> | Fasteners                 | Frame Height | Door Undercut |
|---------|---------------------|-------------------------------|-------------------------|-----------------------------------------|---------------------------|--------------|---------------|
| DSH1000 | 84"                 | C: BHMA 628<br>Clear Anodized | "Blank" :<br>None       |                                         | "Blank":<br>Metal x Metal |              |               |
|         | 120"                |                               | SER8                    |                                         | WW:<br>Wood x Wood        |              |               |
|         |                     |                               | SER12                   |                                         |                           |              |               |
|         | 96"                 | CF:<br>Custom Finish          | SER4                    |                                         | MW: Metal x Wood          |              |               |

### Notes:

1. Length will be determined from frame height and undercut dimensions
2. Provide location or indicate "standard location". Standard location is top of hinge.

### Examples:

- DSH1000-84C x 84" Frame x 1/4" Undercut
- DSH1000-96C x SER12 x Standard Location x 95.5" Frame x 3/8" Undercut
- DSH1000-84C with completed order form attached
- DSH1000-96C x SER4 x 42" Top to CL x WW x 94" Frame x 1/4" Undercut

Note: Order form recommended, refer to [Pemko How to Order Guide for Pemko and Markar Hinges.](#)

# Emergency Release Stop

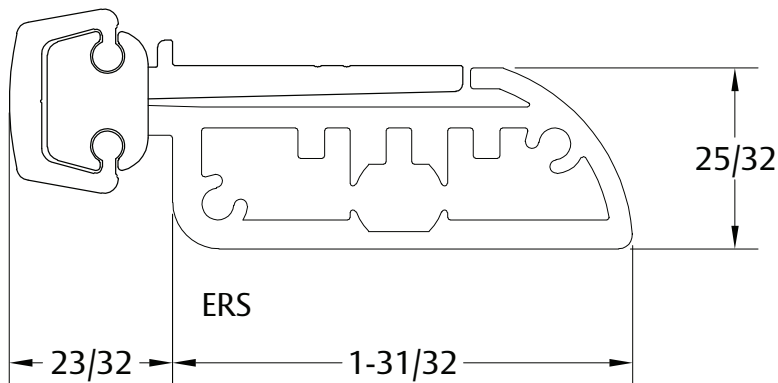
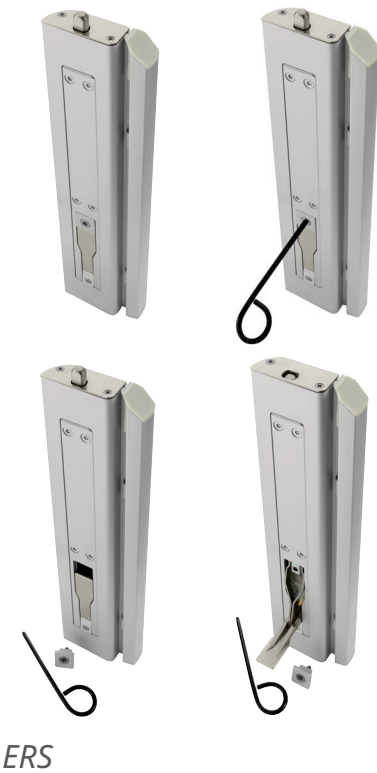
The Pemko Emergency Release Stop is used in combination with the double swing hinge to create a complete Anti-Barricade System.

In an emergency, the stop is discharged to allow the door to swing in the opposite direction. A torx security key is provided to release the stop from the locked position.

**ERS:** Top Flush Bolt locking into frame header

**ERSMP:** Multi-Point Latching into frame rabbet

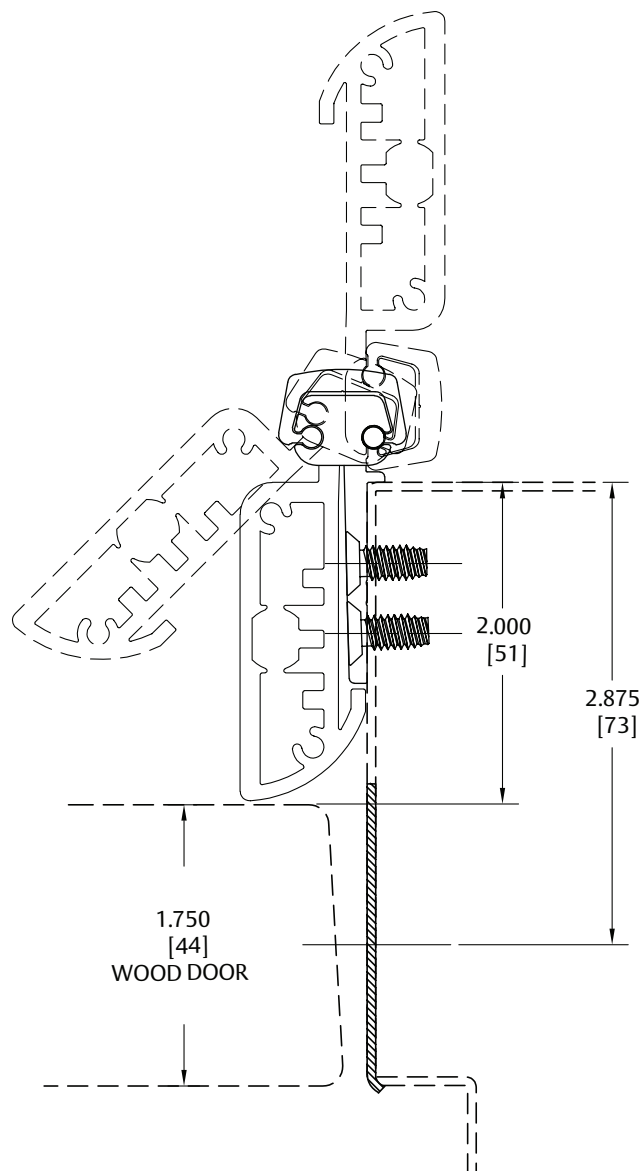
| Key Feature             | Benefit                                                          |
|-------------------------|------------------------------------------------------------------|
| Swing Away Door Stop    | Suites with double swing hinge to create anti-barricade opening  |
| Hospital Tip            | Eliminates ligature point at top of hinge                        |
| Notch Cut-Outs          | Allows ERS to clear a variety of face mounted door hardware trim |
| Security Torx Fasteners | Prevents removal of Emergency Release Stop                       |



# Emergency Release Stop

## ERS & ERSMP CONSTRUCTION

| Key Feature                   | Benefit                                               |
|-------------------------------|-------------------------------------------------------|
| Geared Hinge Design           | Distributes load stress uniformly along length of ERS |
| 6063-T6 Aluminum Alloy/Temper | Strong, heavy-duty, durable grade aluminum            |
| Polymer Thrust Bearing        | Eliminates premature wear and supports more weight    |
| ERS Notch                     | Allows for easier access to clear the lock trim       |
| Torx Key                      | Unlocks the ERS to swing away                         |



# Emergency Release Stop

## How to Order Emergency Release Stop

### Two ways to order

1. Purchase order with ERS Model, Length, Finish, and completed Markar/Pemko DSH\_ x ERS\_ order form (recommended)
2. Purchase order with ERS Model, Length, Finish, Hospital Tips, Handing, Lock Hardware & Trim, Frame Height, Door Undercut  
Top to Centerline, Fasteners, Frame Height, Door Undercut

### Information Required with Order Form or Purchase Order

| Model | Profile                 | Length <sup>1</sup> | Finish                           | Handing | Locking Hardware & Trim & Location Top to Centerline <sup>7</sup> | Frame Height | Door Undercut |
|-------|-------------------------|---------------------|----------------------------------|---------|-------------------------------------------------------------------|--------------|---------------|
| ERS   | "Blank" :<br>Flush Bolt | 84"                 | C: BHMA<br>628 Clear<br>Anodized |         |                                                                   |              |               |
|       | MP:<br>Multi-Point      | 96"                 | CF:<br>Custom<br>Finish          |         |                                                                   |              |               |
|       |                         | 120"                |                                  |         |                                                                   |              |               |

### Notes:

1. Length will be determined from frame height and undercut dimensions.
2. Notch type is specified by factory based on locking hardware and trim.
3. ERSMP only available with one size notch (NBP).
4. Lock hardware trim over 7" in length requires a non-standard notch (NPXXL only); additional charges will apply.
5. Locking hardware and trim and location top to centerline are required.

### Examples:

ERS84C x HT x RH x 83-7/8" Frame x 3/8" Undercut

ERSMP96C x HT x LH x NOTCH x Lock Hardware & Trim x 95" Frame x 1/4" Undercut

ERS120C with completed order form attached

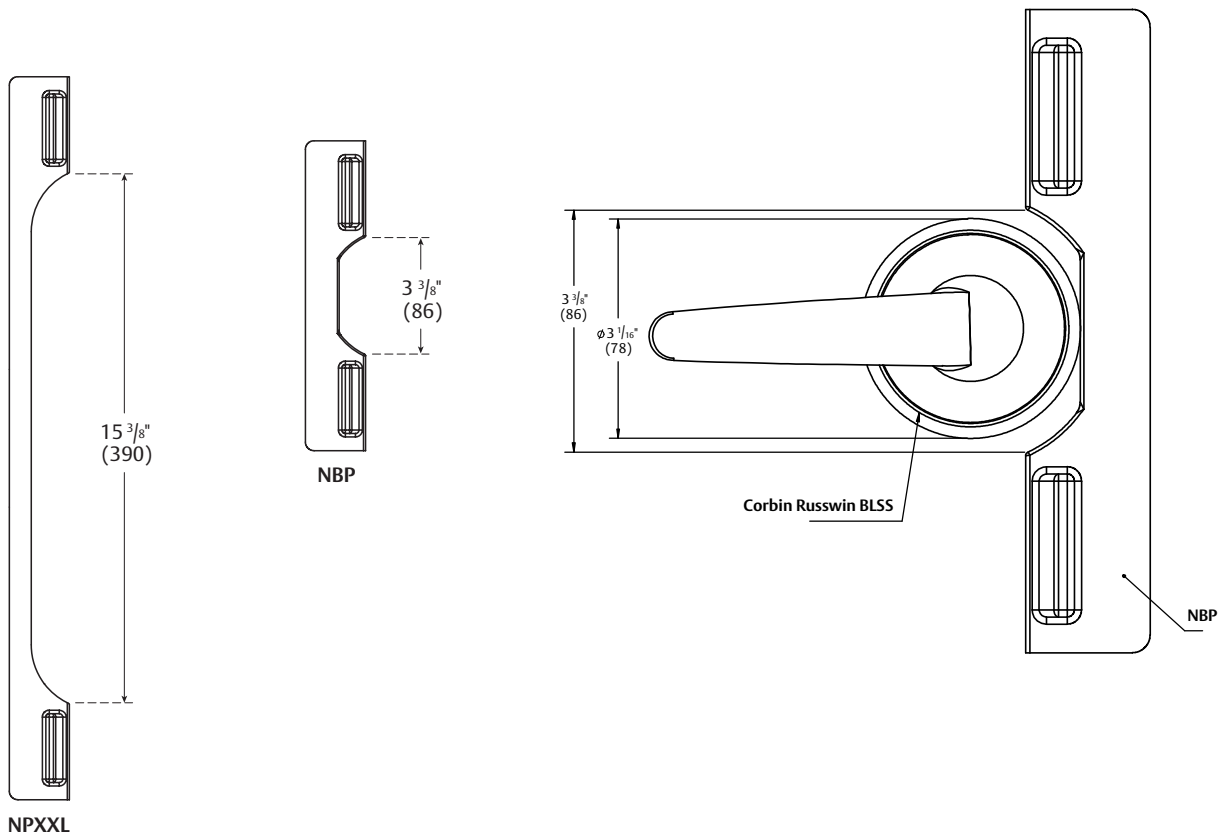
Note: Order form recommended, refer to [Pemko How to Order Guide for Pemko and Markar Hinges](#).

# Emergency Release Stop Notches

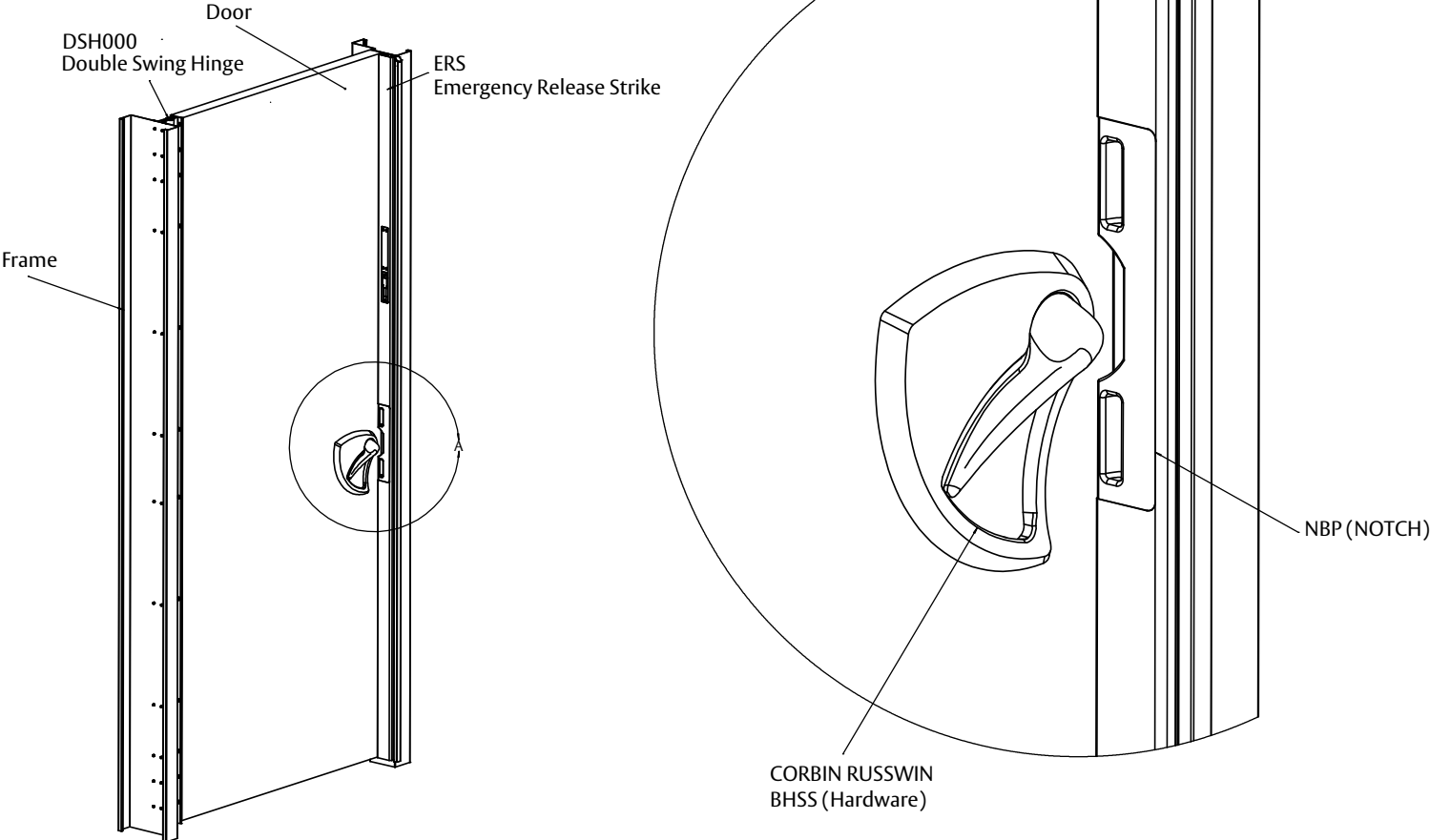
When the ERS/ERSMP stop is released from the locked position, the stop rotates out of the opening. To allow the stop to rotate freely from obstruction, a notch is required to clear the hardware trim on the door face. The ERS notches are designed to clear a variety of door hardware trim.

**ERS:** NPXXL and NBP

**ERSMP:** NBP only



# Emergency Release Stop Notches



# Emergency Release Stop Frame Preparation

Frame preparation to accept the locking mechanism of the ERS and ERSMP.

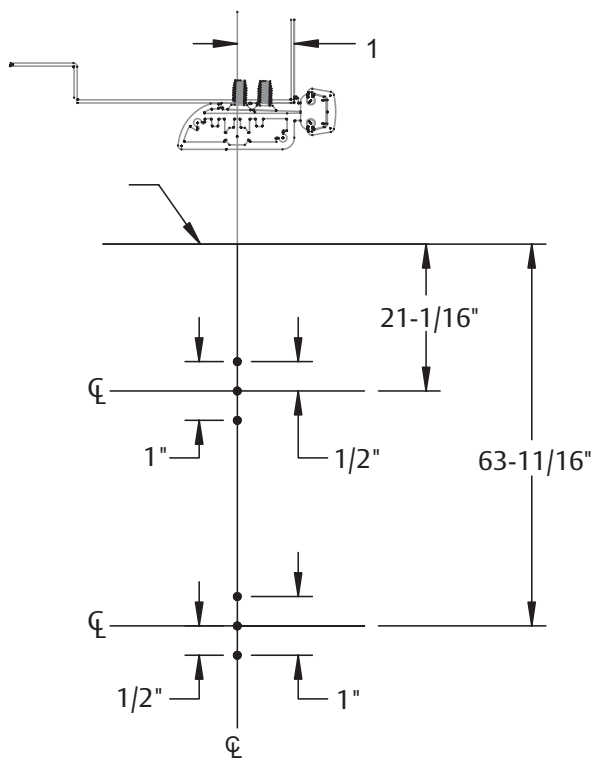
**ERS Frame Preparation:** 3/8" hole in header (recommend to prep in field)

**ERSMP Frame Preparation:** Factory or In-field prepping

## If field prepping:

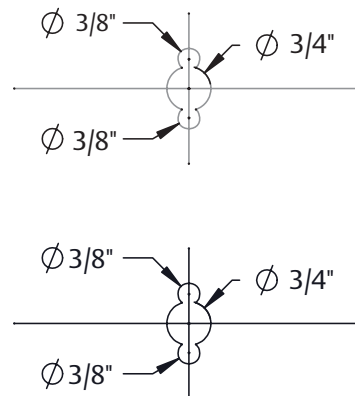
- Using a 1/8" drill bit, drill pilot holes at the six locations shown in "Frame Preparation"
- As shown in the Drill Size diagram below, enlarge each hole using a 3/8" drill bit
- Enlarge the two center holes, using a 3/4" drill bit
- Each of the two preps should resemble the two preps shown in the Drill Size diagram

## Template is for ERSMP only



**Frame Preparation**

TOP OF DOOR OPENING



**Drill Size**

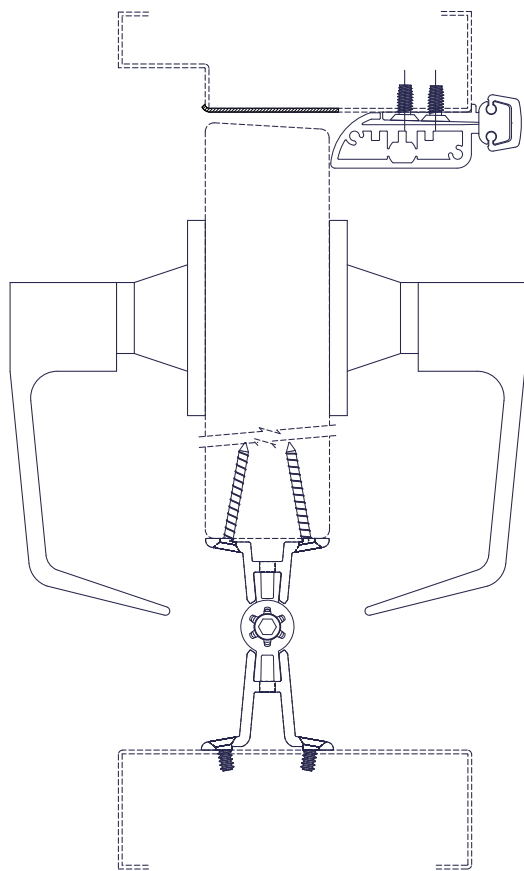
# Door Handing

The Emergency Release Stop will match the handing of the door. When the hinge is on the left and the door opens inward, the ERS will be left hand. When the hinge is on the right and the door opens inward, the ERS will be right hand.

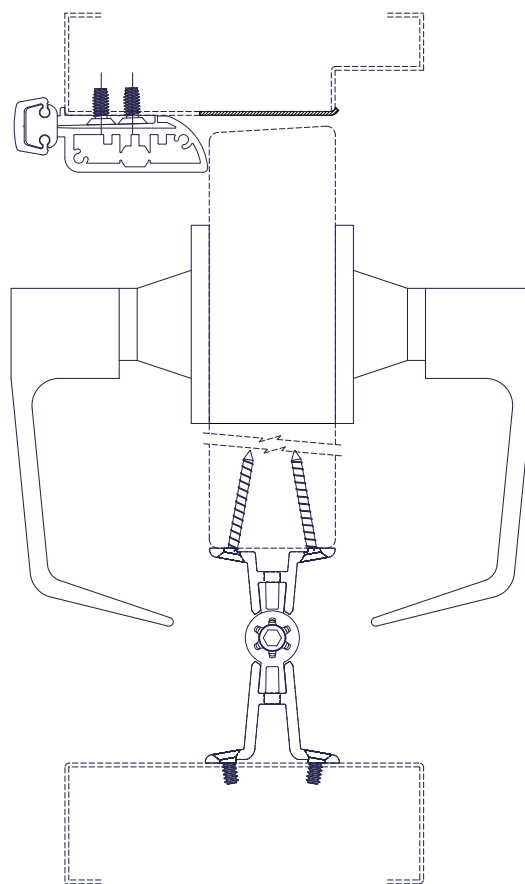
**DSH1000:** Non-handed

**ERS & ERSMP:** Handed with hospital tip on top only

**LEFT HAND**  
Hinges on Left  
Opens Inward



**RIGHT HAND**  
Hinges on Right  
Opens Inward



# Hinge Clearance and Door Edges

## Hinge Clearance

Hinge clearance used to calculate door width ordering size

DSH1000: 3" hinge clearance

Lock-side: 1/8" minimum clearance

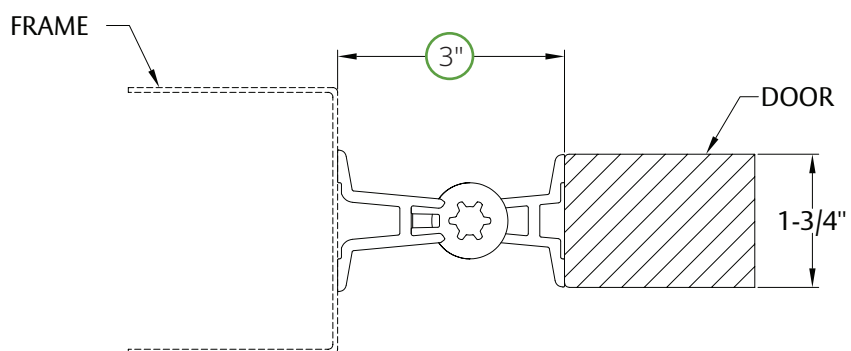
Net door width = Opening width - 3 1/8"

Example: 36" - 3 1/8" = 32 7/8" net door width

## Door Edges (recommendation)

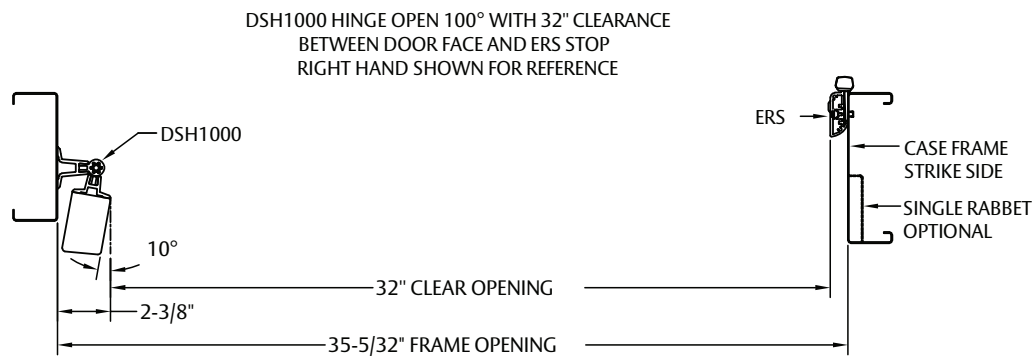
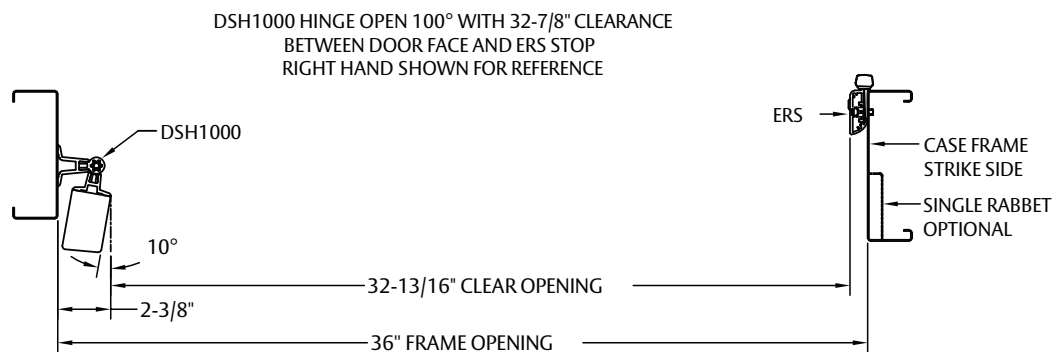
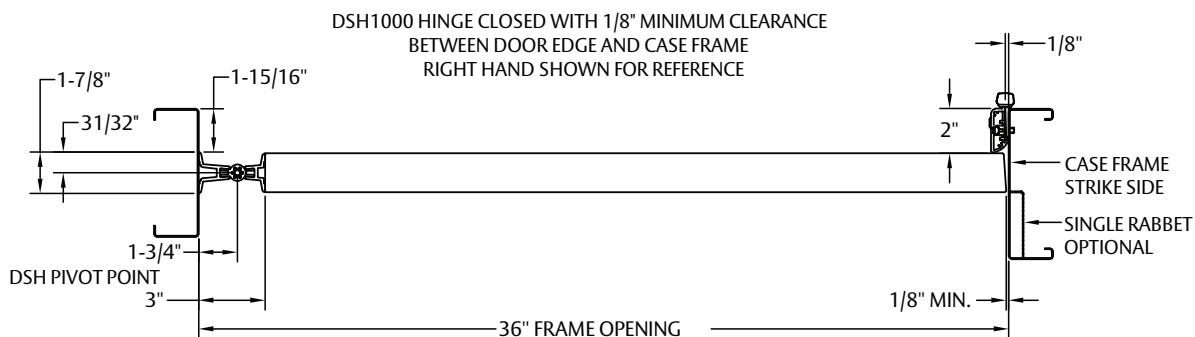
Hinge side: Square edge

Lock-side: Beveled edge



# Clear Opening Widths

## DSH1000

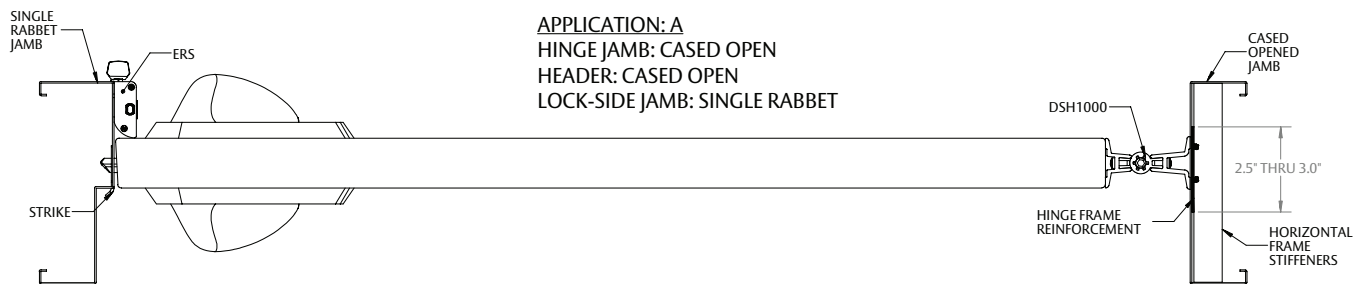


# Frame Applications & Strike

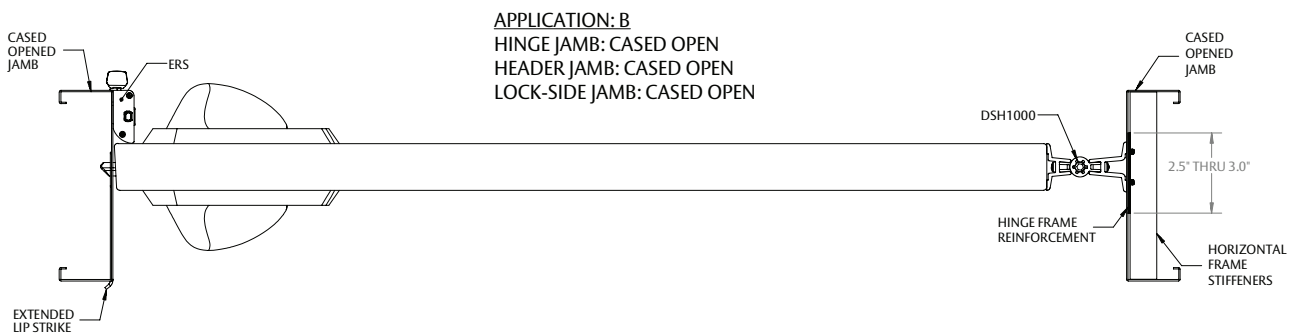
## Frame Applications:

Two types of frame applications are recommended for use with the double swing hinge and emergency release stop.

Application A: Eliminates the need for an extended lip strike  
(strike mounted on soffit)  
Hinge Jamb & Header: Cased open  
Lock-side Jamb: Single rabbet



Application B: Extended lip strike is needed  
Hinge Jamb, Lock-side Jamb & Header: Cased open



## Strike:

Standard hardware strike is used to work with locking hardware

**\*\*\* No Double Lip Strike is needed for the DSH x ERS Anti-Barricade Solution\*\*\***

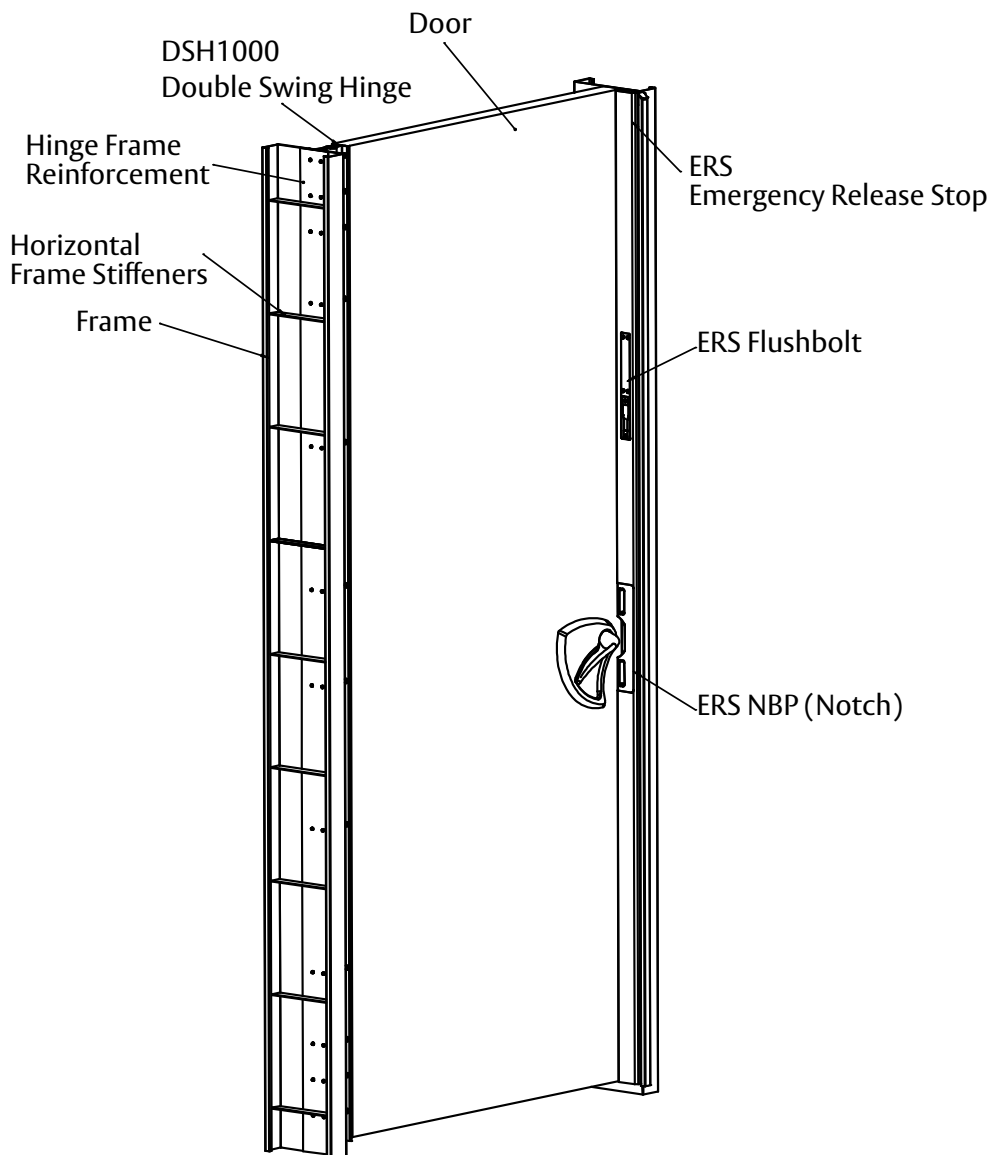
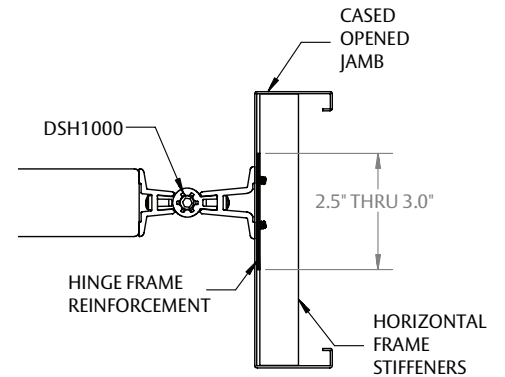
# Frame Reinforcement

## Frame Applications:

Horizontal frame stiffeners are recommended to keep the hinge mounting surface flat when the door and hinge are mounted. Vertical hinge reinforcement is recommended to prevent the hinge mounting screws from pulling out of the frame.

## Note:

Follow the frame manufacturer's instructions for proper frame reinforcement



# Compatible Rockwood Products

ASSA ABLOY offers a variety of ligature-resistant products that are free from sharp edges or potential catch points. These products, like those from Rockwood below, often feature rounded surfaces and low profiles in order to secure rooms in behavioral health environments without presenting potential safety hazards.

## Rockwood 467-RKW and 468-RKW Heavy Duty Door Stops



467-RKW



468-RKW

## Rockwood 406 Convex Wrought Wall Stop, Rockwood 409 Concave Wrought Wall Stop



406



409

## Rockwood 94C Recessed Flush Pull



94C

## Rockwood 592 Roller Latch



592

# Compatible Pemko Products

ASSA ABLOY offers a variety of ligature-resistant products that are free from sharp edges or potential catch points. These products, like those from Pemko below, often feature rounded surfaces and low profiles in order to secure rooms in behavioral health environments without presenting potential safety hazards.

**Pemko P44 Perforated Adhesive Gasket**



*P44*

**Pemko P88 Perforated Adhesive Gasket**



*P88*

**Pemko 290\_V Perimeter Gasket with Vinyl Insert**



*290\_V*

**Pemko 303\_PK Perimeter Gasket with Thermal Plastic Elastomer Insert**



*303\_PK*

**Pemko 303\_V Perimeter Gasket with Vinyl Insert**



*303\_V*

**Pemko 316\_V Perimeter Gasket with Vinyl Insert**



*316\_V*

**Pemko 2891\_V Perimeter Gasket with Vinyl Insert**



*2891\_V*

The ASSA ABLOY Group is the global leader in access solutions.  
Every day, we help billions of people experience a more open world.

ASSA ABLOY Opening Solutions leads the development within door openings and products for access solutions in homes, businesses and institutions. Our offering includes doors, frames, door and window hardware, mechanical and smart locks, access control and service.

**PEMKO**  
**ASSA ABLOY**



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