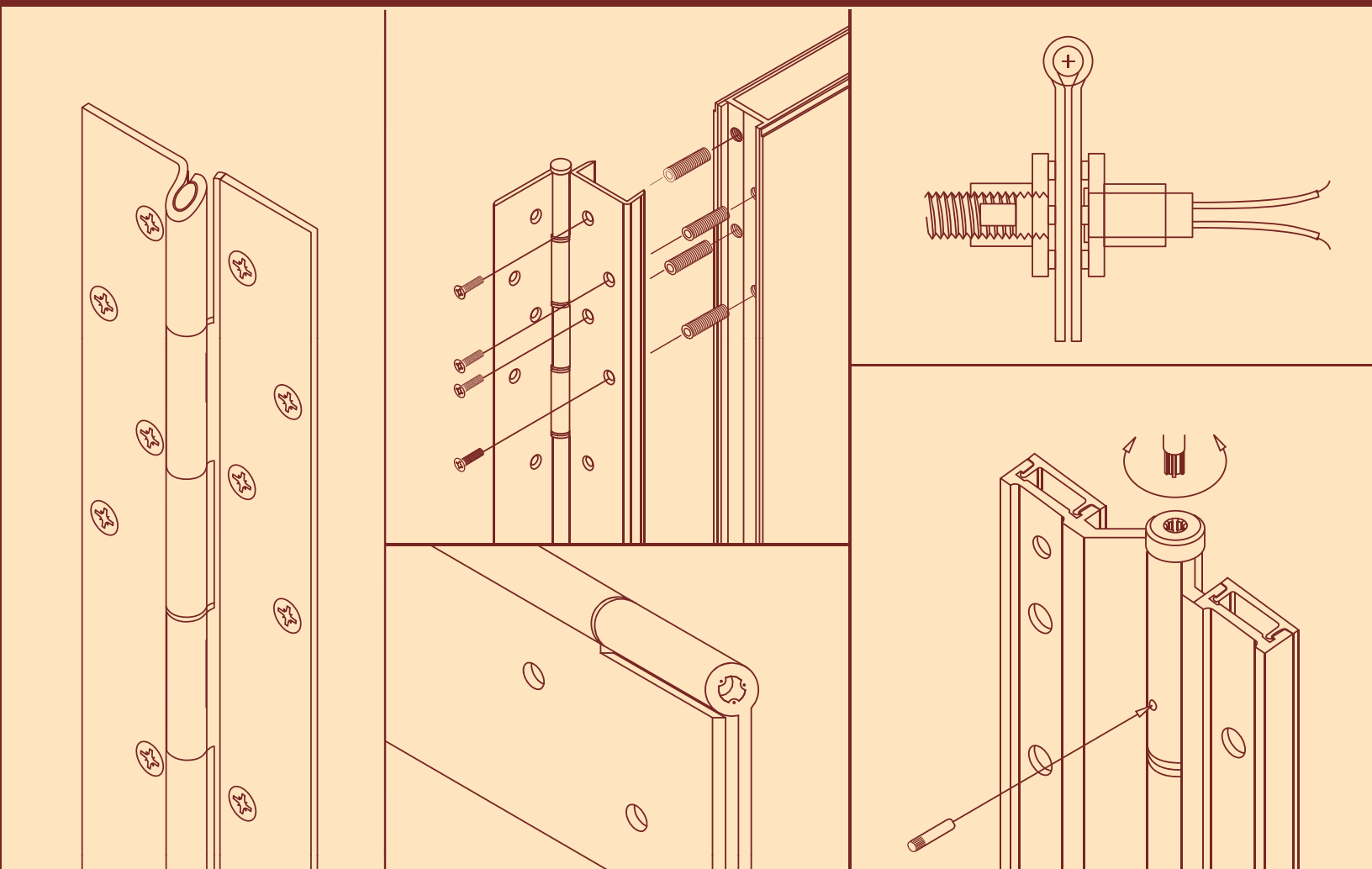


MASTER CATALOG



ARCHITECTURAL HINGES





GENERAL WARRANTY

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

Limited Warranty

Markar Architectural Products Inc. guarantees its products to be free from defects in materials and workmanship for a period as stated for each product line. Our liability, expressed or implied shall be limited to replacement of goods proven defective. No claims will be allowed for damages incurred or work done thereon.

This limited warranty specifically excludes the conditions as stated for each product line.

This limited warranty is in lieu of all other warranties expressed or implied, and excludes any warranty of fitness or merchantability. No agent, representative, dealer or employee of Markar Architectural Products, Inc. has the authority to increase or alter the terms and conditions of this limited warranty.



Terms and Conditions

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
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Payment	2% 15 days, net 30. Payable in U.S. funds.
Invoices	Minimum invoice amount is \$100 net . Please call within 15 days of receipt of shipment to resolve any invoicing discrepancies.
Returned Goods	Defects or errors for which we are responsible will be corrected promptly. Defective merchandise will be credited or replaced in accordance with our LIMITED WARRANTY upon inspection by Markar Architectural Products, Inc. Written authorization must be obtained from the factory and the goods returned to us prepaid. Merchandise that can be restocked for resale may be returned subject to a minimum 35% restocking charge if returned within 90 days of receipt. <i>Merchandise returned 90-120 days from receipt is subject to a 50% restocking charge. No credit is allowed on items held longer than 120 days.</i> Markar Architectural Products, Inc. shall not be liable for loss or damage resulting from delay or inability to deliver goods due to circumstances beyond our control (e.g. labor actions, fire, flood, storms, etc.)
Cancellation Policy	Orders that require modifications and special materials or are non-stock items are subject to cancellation charges based on manufacturing and material expenses incurred.
Freight Policy	All shipments are F.O.B. Pomona, California. Parts and accessories not shipping with hinges are subject to a shipping and handling charge.
Shop Drawings	The fee for shop drawings is \$100.00 per standard opening. This fee will be credited at the time the job becomes an order and is approved for fabrication.
Detail	No order is entered into production until all details including both standard and custom hinges have been received and approved.
Policy on Changes	After shop drawings have been approved and production begins, there will be a \$50.00 minimum charge – up to the entire cost of the hinges(s) – for any changes.
Proposed Ship Date	These dates are subject to change. Failure to provide all pertinent information within 48 hours of submitting a purchase order will cause a delay in processing the order.
Other	This price list supersedes all previous price lists. Prices are subject to change without notice.



ASSA ABLOY

The Markar™ Advantage

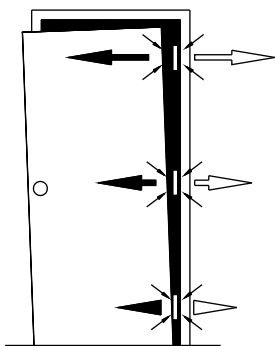
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Why Continuous?

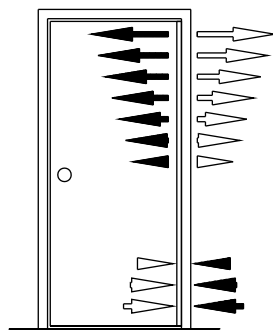
Most commonly, hinge failure begins when doors are opened past stop device limits. The resulting kickback shock to the hinges can surpass 1000 lbs. of force. Subsequent racking eventually loosens screws, distorts hinge leaves, pulls open knuckles, damages bearings or creates other serious damage to your standard butt hinge as well as the door frame your assembly hangs within.

While Markar's Continuous Hinges provide the solution by distributing shock forces evenly so wear and tear to the frame and door is reduced significantly, you would have to agree that the continuous hinge contributes benefits far beyond durability. Security is enhanced by preventing insertion of devices between the door and frame making it the perfect product in reducing vandalism. The continuous design also allows for easy alignment of electrical transfers and monitoring switches giving the installer a no-hassle guarantee when installing these products. While the continuous hinge plays the main roll in distributing shock, creating a secure opening, and giving the installer the ease of prepping hardware, it also aids in stopping air infiltration by creating a complete seal from top to bottom of the door at the hinge stile.

Markar manufactures pin and barrel hinges as well as spring loaded toilet partition pin and barrel models. There are over 75 different models to choose from offering a variety of configurations, options and materials.



Most door and frame stress is put on the top of conventional Hinge systems.



A Continuous Hinge spreads the stress along the full length of the door and frame.

Special Features...

The Unique Adjusta-Screw Fastener

A Markar fastener available on the Hinge Guard Models permits up to 3/8" width adjustment. Full door length adjustment means doors can be squared accurately and easily in new installations and existing frames can be used in retrofits. Maintenance staff can make future adjustments of the door, by re-positioning the Adjusta-Screw Fasteners.



Fire Rated Continuous Hinges

Markar stainless steel (3500 Series), Stainless steel (300 Series) and carbon steel hinges (200 Series) are available with two labeling options: Underwriters Laboratories Inc. and Warnock Hersey Int'l.

- 20 Minute labeled wood doors
- One and a half hour labeled hollow metal and composite-core wood fire doors
- Three hour labeled hollow metal doors only mounted singly.

Maximum Door Opening:

Single Doors: 4'0" x 10'0"

Pair of Doors: 8'0" x 10'0"

In accordance with Uniform Building Code Standard 7-2 "Fire Test Door Assemblies" & Standard UL 10C for positive pressure.

The Markar 4000 Series Aluminum Hinge is UL rated for 90 minutes and approved for positive pressure.

Modifications and Options:

- Adjustable Monitoring Switch
- Medical Bearings
- Hospital Tip Hinges
- Dutch Door Hinge Preparation
- Custom Hole Patterns
- Special Sheared Leaf
- Wide Throw Hinges
- Raised Barrel (Swaged)
- Edge Guard Hardware Cut-Outs
- Special Length Hinges
- CTP- Current Transfer Preparation
- CE- Current Transfer –Concealed
- ES- Exposed Monitoring Switch
- ETAP – Electrical Transfer Access Prep
- Blank Hinges (Minus Hole Pattern)
- Lead Lined Cover (1/16" LEAD)
- Security Fasteners
- Automatic Door Bottom
- Weld End Pins
- Plug Weld

The following comparison chart will show you the many advantages to using Markar's Pin and Barrel Continuous hinge over any manufactured geared continuous hinge. Although many consider the geared hinge of equal value, you will find its major characteristics fall far short of the superior Markar Pin and Barrel hinge.

Markar Architectural Products, Inc. Continuous Pin and Barrel Hinge

- Maximum capacity supporting weights up to 600 lbs. Up to 900 lbs in 3500 series.
- The 200, 300 and 3500 series hinges are all fire rated out of the package without any additional prep work. Pin and Barrel construction will still function after the fire, creating a safe environment for fire fighters and people in need of emergency exit.
- The Pin and Barrel Hinge is held together with a ¼" stainless steel teflon coated rod-making a strong monolithic free moving assembly. This hinge is flexible in an abused opening do to its high tensile strength and ductility.
- Markar's stainless steel Pin and Barrel hinges create a highly secure opening.
- The Pin and Barrel Hinge works on a split bearing assembly, once again creating a monolithic free moving assembly. This allows closers and other door hardware to function as designed.
- All Markar hinges come standard with a templated hole pattern. A drill jig can be provided for prepping of frames on large and small jobs saving time and money during infield installation.
- End Pins
- Superior corrosion resistance in stainless steel models.

Continuous Geared Hinge

- Geared hinge will carry a maximum of 250 lb. light duty and 400 lb heavy duty.
- Geared hinges will fully melt during a fire. The only thing holding a door in the upright position would be fire pins that are an additional prep to the hinge, door and frame. Intumescent material is also being introduced as a form of pinning the door in an opening during a fire making an unsafe environment for both fire fighters and all others during an emergency exit of the building.
- The geared hinge assembly is held together with an aluminum cap. Any abuse or buckling of the hinge assembly will cause loosening of the cap and non-alignment of gears causing premature failure.
- Damage of the geared hinge and tampering of the opening is much easier.
- The geared hinge rides on a single plastic bearing. The aluminum and plastic bearing create a surface of intense friction and over a short period of time the door assembly will often sag and drop to the floor.
- Only one other supplier claims a templated hole pattern on its continuous hinges.
- No end caps, allowing grit and weather to enter gears causing premature failure.
- After time, the aluminum's oxide coating can break down and become subject to corrosion.

**ASSA ABLOY**

Hinge Finishes

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Standard Powder Coat Finishes

No minimum quantity.
 Closest US Standard & BHMA Finishes

MP-PC-1	Dark Bronze	690
MP-PC-2	Eggshell White	714
MP-PC-3	Semi-Gloss Black	693
MP-PC-4	Aluminum	689
MP-PC-5	Sun Gold	706
MP-PC-6	Light Copper	691
MP-PC-7	Polished Brass	605

MP-PC-7 available only on 100 & 300 series hinges
**Note: The MP-PC-7 will have an additional charge for two-step polishing process.*

Custom Powder Coat Finishes

Over 84 colors available. All RAL# Powdercoat available.
 Sample color chip must accompany order.

- Priced at time of order.

Special Finishes

Polished Aluminum	US26	672
Polished Stainless	US32	629

Kynar Paint With Color Approval

**Note: Additional setup charge will apply for less than 20 hinges.*








U.S. Standard & B.H.M.A. Finish Codes

US3	310	gold anodized
US9	311	light bronze anodized
	312	medium bronze anodized
US20A	313	dark bronze anodized
US19	315	black anodized
USP	600	primed for paint
US2G	603	zinc plated
US28	628	clear anodized
US32	629	bright stainless steel
US32D	630	satin stainless steel
US26	672	bright polished aluminum
US28	689	aluminum paint
US20A	690	dark bronze paint
US10	691	light bronze paint
US19	693	black paint
US4	706	gold paint
	714	white paint

Special Anodized Finishes

Gold Anodized	US3	310
Light Bronze Anodized	US9	311
Medium Bronze Anodized		312
Black Anodized	US19	315

Sample Finishes

	MP-PC-1	Dark Bronze	690
	MP-PC-2	Eggshell White	714
	MP-PC-3	Semi-Gloss Black	693
	MP-PC-4	Aluminum	689
	MP-PC-5	Sun Gold	706
	MP-PC-6	Light Copper	691
	MP-PC-7	Polished Brass	605

Hinge Prefixes

EG	Edge Guard
FM	Edge Mount
FS	Full Surface
HG	Hinge/Guard
HM	Half Mortise
HS	Half Surface
SC	Swing Clear

Hinge Series

This series number indicates the type of hinge and base material used:

100	Aluminum barrel hinges with stainless pin
200	Carbon steel barrel hinges with stainless pin
300	Stainless steel barrel hinges with stainless pin
400	Spring loaded aluminum toilet partition hinges
500	Stainless steel toilet partition hinges
800	Aluminum toilet partition hinges
900	Spring loaded stainless steel toilet partition hinges
1100	Aluminum barrel hinges with stainless steel pin
1900	Reinforcing pivots
3500	12 Gauge stainless steel pin and barrel security hinges

Hinge Models

The last two digits of the model number indicate the application:

00	edge mount (formerly full mortise)
01	full surface, 1/8" offset
02	full surface, flush
03	half surface, 1/8" offset
04	half mortise, 1/8" offset
05	edge mount hinge/guard
06	half mortise hinge/guard
07	double hinge/guard
08	edge guard
09	full surface, swing clear
10	swing clear hinge/guard
11	edge mount, self aligning

Other numbers are used for specific applications

Option Suffixes

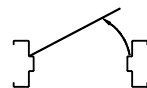
AMS	Adjustable Monitoring Switch
CE	Concealed Current Transfer
CTP	Current Transfer Preparation
DD	Dutch Door
ETAP	Electrical Transfer Access Prep
EPT	Electric Power Transfer
ES	Exposed Monitoring Switch
HT	Hospital Tip
LL	Lead Lined
MB	Medical Bearings
PC	Powder Coated
RB	Raised Barrel
WT	Wide Throw

Standard Hinge Length Conversion Chart

A 6'8" door opening = an actual length of 78.75"
A 7'0" door opening = an actual length of 83.125"
A 7'2" door opening = an actual length of 85.00"
A 8'0" door opening = an actual length of 95.00"
A 10'0" door opening = an actual length of 118.75"

Custom hinge length will be evaluated at the time of request to ensure proper pin to knuckle alignment. Some custom length requests may be adjusted to ensure a proper hinge assembly.

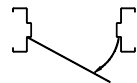
Specify handing on all custom hinge lengths.



LEFT HAND



RIGHT HAND



LEFT HAND
REVERSE

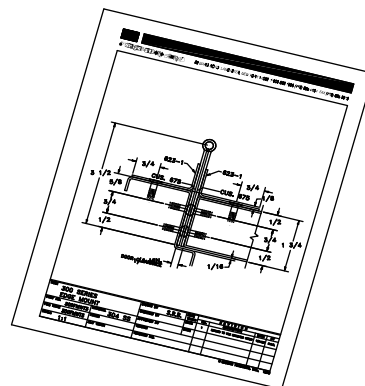


RIGHT HAND
REVERSE

Custom Design

Markar's engineering department will assist you in developing custom applications to solve any of your unique door hinging problems. Together with the customer, we will go through an official sign-off process to assure custom hinges fit your exact needs.

There will be a custom drawing approval fee of \$100.00 per opening. A credit for this fee will be issued after approval for fabrication and placement of purchase order.



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Continuous Hinge Modifications

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Special Length

Please specify handing on all custom hinge lengths

For hinges 40" to 83 1/8" in length

For hinges 83 3/16" to 95" in length

For hinges 95 1/16" to 118 3/4" in length

For hinges 118 13/16" to 192" in length (Spliced over 118 3/4")

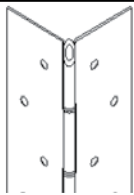
Some custom lengths may require two cuts due to location of screw holes

Hospital Tip

Available on all models except spring-loaded toilet partition hinges, FS 321 and FM 327

Suffix hinge **"-HT"**

Helps provide a safe, clean environment



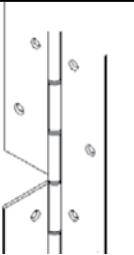
Dutch Door Prep

Available on all hinge models

Suffix hinge **"-DD"**

Continuous frame leaf with two-piece door leaf

Indicate handing, clearances, door and frame heights, and materials when ordering



Wide Throw

Only available on 300 series hinges

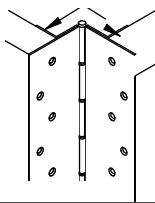
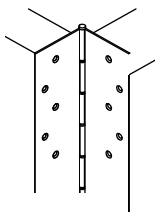
Suffix hinge **"-WT"**

Specify distance from pin centerline to heel edge of hinge when ordering

Reinforcement may be required on extreme wide throw applications

These conditions will be determined through a drawing approval process

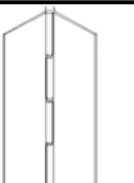
Cost will be determined at time of approval



Blank

Holes omitted for special applications, such as welded installation

Not available on adjustable models



Welded End Pins and Plug Weld

◆ Welded End Pins (Not available on Aluminum or Powder Coated Hinges)

◆ Plug Welding Hole Prep

◆ Automatic Door Bottom Cut

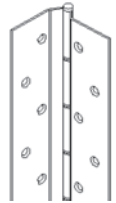
Raised Barrel (Swaged)

Available on all edge mount and half surface models except on **Aluminum hinges**

Required on models FS-201, FS-202, FS-301 & FS-302 in order to open 180°

Suffix hinge **"-RB"**

For cased open or center pivot doors



Standard Edge Guard Cut-Outs

- ◆ 4 7/8 ASA strike
- ◆ 161 latch
- ◆ 86 mortise
- ◆ manual flush bolt
- ◆ automatic flush bolt
- 161 strike



Security Studs

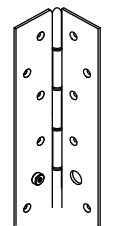
Stainless steel security studs mounted to the frame leaf

Door leaf is drilled to accommodate studs

Three studs installed on hinges up to 7'2"

Four studs installed on hinges over 7'2"

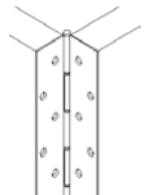
Door and frame must be specially prepared to accommodate security studs



Sheared Leaf

Used for narrow door thickness', unevenly rabbeted frames or other special applications

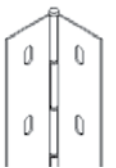
Specify distance from pin centerline to heel edge of hinge when ordering



Custom Hole Pattern

Any hole shape or pattern other than Markar's standard templated hole pattern

Indicate desired pattern and include dimensioned diagrams when ordering



Custom Design

Markar's engineering department will assist you in developing custom applications to solve any of your unique door hinging problems. Together with the customer, we will go through an official sign-off process to assure custom hinges fit your exact needs

Lead Lined Cover

Only available on surface mounted

Hinges. Suffix hinge **"-LL"**

Used for x-ray room doors and other locations where radiation leakage could be a problem

Lead lined astragal for EGT



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Continuous Hinge Modifications

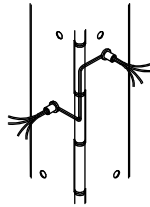
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CE Concealed Current Transfer

For 100 series

CE-4: Qty (4) 28ga wires

CE-8: Qty (8) 28ga wires



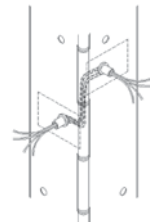
Available for all edge mount models. Please consult factory for all other applications.

CE Concealed Current Transfer

For 300, 3500, and 200 series Edge mount only

CE-4D: Qty (4) 28ga wires

CE-8D: Qty (8) 28ga wires



EL ElectroLYNX™ Current Transfer

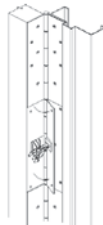
EL-8 For 300, 3500, and 200 series edge mount only. 28 gauge wires - with ElectroLYNX™ connectors (8 wire).

EL-12 For 300, 3500, and 200 series edge mount only. 28 gauge wires - with ElectroLYNX™ connectors (12 wire).

Note: Not available on raised barrel applications.

MP-ETAP Electrical Transfer Access Prep

Cutout prep for the CE, AMS, CT, & ES. Modifications that allows easy one person access to wiring between the hinge and door



Security Fasteners

Specify Torx or Torx-Pin security fasteners in lieu of standard fasteners

Contact factory for compatible models



Medical Bearings

- ◆ Self lubricating with high resistance to wear
- ◆ Uniquely designed to provide clean and quiet hinge operation
- ◆ Exceeds ANSI/BHMA Grade 1 requirements
- ◆ Supports doors weighing up to 600 lbs.
- ◆ 25 year warranty

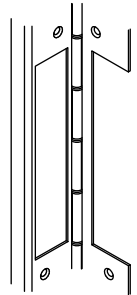


CTP Current Transfer Prep

Centerline of hinge is standard location

Hinge leaf cutout to accommodate Markar's AR- EPT Electric Power Transfer or Von Duprin Power Transfer

Please provide location and handing for all locations



EPT Electric Power Transfer

AR-EPT 4612-1

Allows 90° swing

AR-EPT-4612-2

Allows 180° swing for mortise

AR-EPT-4612-SC

Allows 90° swing clear

CTP prep charge is additional

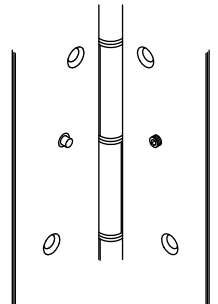
See template, page 74, for power transfer.

ES Exposed Monitoring Switch

Available in 100, 200, 300, and 3500 series hinges with the prefixes of HG, FM, HS, & HM

Suffix hinge "-ES"

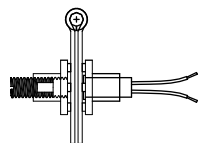
Comes with 3 × 28ga wires



AMS Adjustable Monitoring Switch

Rigid welded assembly gives you the ability to adjust your monitoring switch to work with all applications

Not available on aluminum



Standard Edge Guard

Cut-Outs

- ◆ 4 7/8 ASA strike
- ◆ 161 latch
- ◆ 86 mortise
- ◆ manual flush bolt
- ◆ automatic flush bolt
- ◆ 161 strike



3500 Series Pin & Barrel Type Continuous Stainless Steel Hinges

Continuous hinges shall be full height piano-type hinge providing full height door support.

- Supports weights up to 900 lbs. 4'0" maximum door width
- Material to be 12 gauge (.105) stainless steel
- .25 diameter stainless steel pin
- Each knuckle 2", including split nylon bearing at each separation for a quiet, smooth, self-lubricating operation
- Finish: US32D Satin Stainless Steel (630) Optional Finish: US32 Bright Stainless Steel (629), Scratch-Resistant Powder Coated Paint.
- Hinge pin cap
- Non-handed
- All hinges shall be furnished with manufacturer's recommended hardware pack per specific model application
- Must be able to carry UL label for fire rated doors and frames up to 3 hours
- Hinges shall meet ANSI/BHMA Standard A 156.26 Grade 1
- Hinges shall meet abuse test (ASTM F-1450-A)
- Symmetrically templated hole pattern

Note: 10-Year Warranty on all Continuous Hinges

Note: Fire label for doors and frames should be placed on the header and top rail of fire rated doors and frames

STANDARD FEATURES

Material

Heavy-duty 12 Gauge (.105")
stainless steel

Finishes

US32D Satin Stainless Steel (630)

Abuse Testing

Exceeds ASTM-F-1450-A

Cycle Testing

Grade 1
ANSI/BHMA Standard A156.26

Hospital Tip Standard

Mounting Hardware

12-24 S.S. Phillips F.H.M.S.

Capacity

Supports weights up to 900lbs.
4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

Symmetrically templated
Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin
Long-life split nylon bearings

Fire Rating

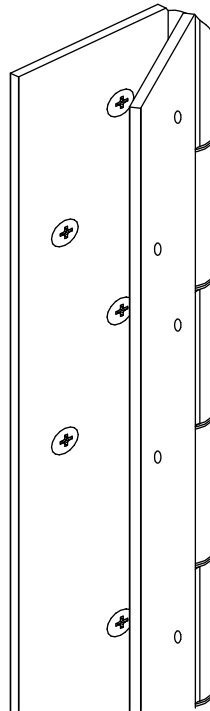
3 hours- hollow metal doors mounted singly
90 minutes- hollow metal and composite
core wood fire doors
20 minutes- wood doors



Classified in accordance with UBC
code standard 7-2 for positive pressure



fire-rated label



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)
Scratch-Resistant Powder Coated Paint

Hole Patterns

Plug weld hole pattern
Custom hole pattern

Mounting Hardware

12-24 S.S. Torx with security pin
Security studs

Other Features

Custom lengths – specify in inches
Dutch door hinges – suffix hinge "DD"
Raised barrel
Special sheared leaf

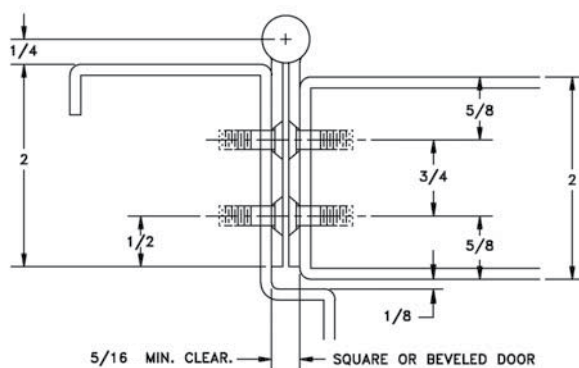
Electrical Modifications

Exposed switch with adjusting screw – suffix
hinge "ES"
Current transfer- 4 or 8, 28 gauge wires-
suffix hinge "CE-4D" or "CE-8D"
Current Transfer Prep - suffix hinge "CTP"

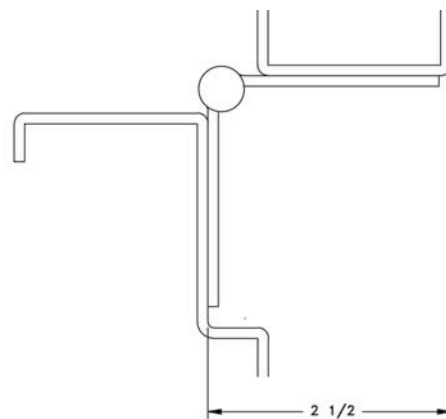
ElectroLYNX™

EL-8 (8 wire), EL-12 (12 wire)

This edge mount pin and barrel type hinge is fabricated with extra-heavy duty components for use on high traffic, high abuse doors. The hinge is specially designed and well suited for correctional facilities and other high security locations using 2" thick swing-type doors. Prison doors, gates, extremely tall doors and extra heavy doors are all good candidates for Markar's 3500 Security Hinge.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

FS-3501 Full Surface Security Hinge

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STANDARD FEATURES

Material

Heavy-duty 12 Gauge (.105")
stainless steel

Finishes

US32D Satin Stainless Steel (630)

Abuse Testing

Exceeds ASTM-F-1450-92

Cycle Testing

Grade 1
ANSI/BHMA Standard A156.26

Hospital Tip Standard

Mounting Hardware

12-24 S.S. Phillips F.H.M.S.

Capacity

Supports weights up to 900lbs.
4'0" maximum door width

Sizes

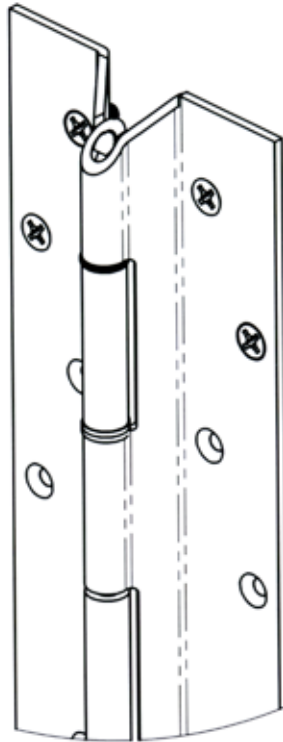
6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

Symmetrically templated
Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin
Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)
Scratch-Resistant Powder Coated Paint

Hole Patterns

Plug weld hole pattern
Custom hole pattern

Mounting Hardware

12-24 S.S. Torx with security pin

Other Features

Custom lengths – specify in inches
Dutch door hinges – suffix hinge "DD"
Raised barrel
Special sheared leaf

Fire Rating

3 hours- hollow metal doors mounted singly
90 minutes- hollow metal and composite core wood fire doors
20 minutes- wood doors

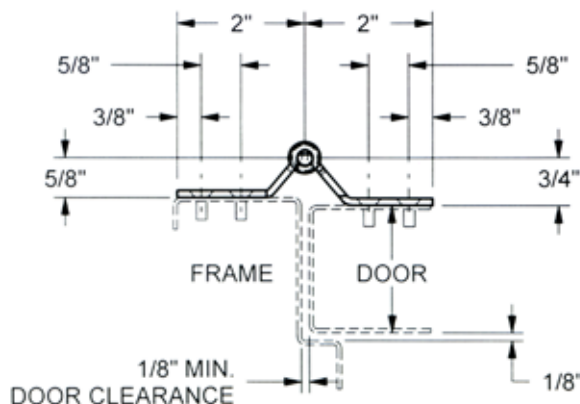


Classified in accordance with UBC
code standard 7-2 for positive pressure

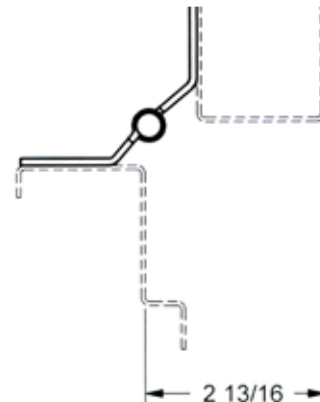


fire-rated label

For 1/8" inset doors. This hinge allows for perfect alignment for the retrofitting of doors in correctional facilities and other high security locations using 2" thick swing-type doors. Prison doors, gates, extremely tall doors and extra heavy doors are all good candidates for Markar's 3501 Security Hinge.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

FS-3502 Full Surface Security Hinge

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 12 Gauge (.105") stainless steel

Finishes

US32D Satin Stainless Steel (630)

Abuse Testing

Exceeds ASTM-F-1450-92

Cycle Testing

Grade 1

ANSI/BHMA Standard A156.26

Hospital Tip Standard

Mounting Hardware

12-24 S.S. Phillips F.H.M.S.

Capacity

Supports weights up to 900lbs.
4'0" maximum door width

Sizes

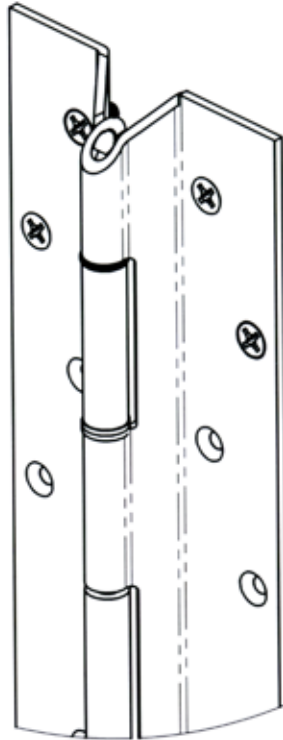
6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

Symmetrically templated
Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin
Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Hole Patterns

Plug weld hole pattern

Custom hole pattern

Mounting Hardware

12-24 S.S. Torx with security pin

Other Features

Custom lengths – specify in inches

Dutch door hinges – suffix hinge "DD"

Raised barrel

Special sheared leaf

Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

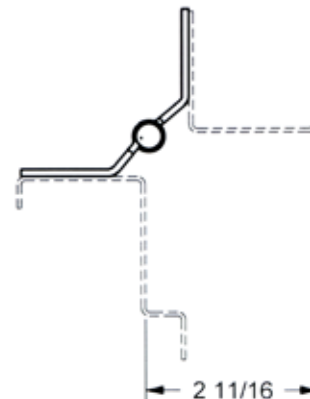
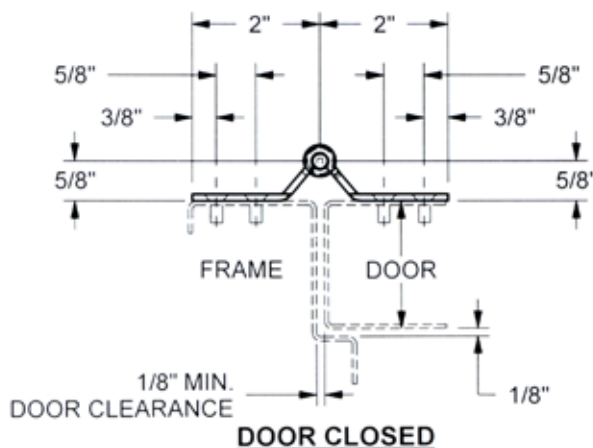


Classified in accordance with UBC
code standard 7-2 for positive pressure



fire-rated label

This surface-mounted pin and barrel type hinge is fabricated with extra-heavy duty components and designed for solving door sag problems on high traffic, high abuse doors. This hinge is well suited for correctional facilities and other high security locations using 2" thick swing-type doors. Prison doors, gates extremely tall doors and extra heavy doors are all good candidates for Markar's 3502 Security Hinge.





ASSA ABLOY

HG-3505 Hinge Guard

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 12 Gauge (.105") hinge leafs
16 Gauge angle on door leaf
stainless steel

Finishes

US32D Satin Stainless Steel (630)

Abuse Testing

Exceeds ASTM-F-1450-92

Cycle Testing

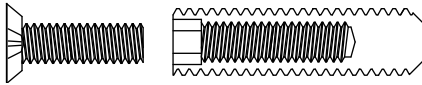
Grade 1

ANSI/BHMA Standard A156.26

Hospital Tip Standard

Mounting Hardware

12-24 S.S. Phillips F.H.M.S.
Adjusta Screws for correcting alignment
problems up to 3/8"



Capacity

Supports weights up to 900lbs.
4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

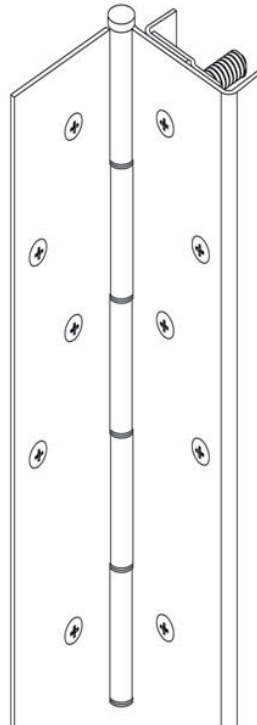
Hole Pattern

Symmetrically templated
Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin
Long-life split nylon bearings

This unique design answers the problem of aligning doors and locking mechanisms crucial in any security application. It also solves the problem when adjusting doors where frames are not installed plumb or properly aligned. The incorporated edge guard protects the door from unsightly dents and gouges while also protecting the hinge from vandalism. The proper alignment of the door to the frame will allow your closers, panics, magnetic locks, electronic strikes and automatic operators to assist you in meeting all your life safety code requirements.



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)
Scratch-Resistant Powder Coated Paint

Mounting Hardware

12-24 S.S. Torx with security pin

Other Features

Custom lengths – specify in inches
Custom hole pattern
Dutch door hinges – suffix hinge "DD"
Raised barrel
Special sheared leaf

Electrical Modifications

Exposed switch with adjusting screw- suffix hinge "ES"
Current transfer Prep - suffix hinge "CTP"
Concealed current transfer – suffix hinge "CE-4D"
Concealed current transfer – suffix hinge "CE-8D"

ElectroLYNX™

EL-8 (8 wire), EL-12 (12 wire)

Fire Rating

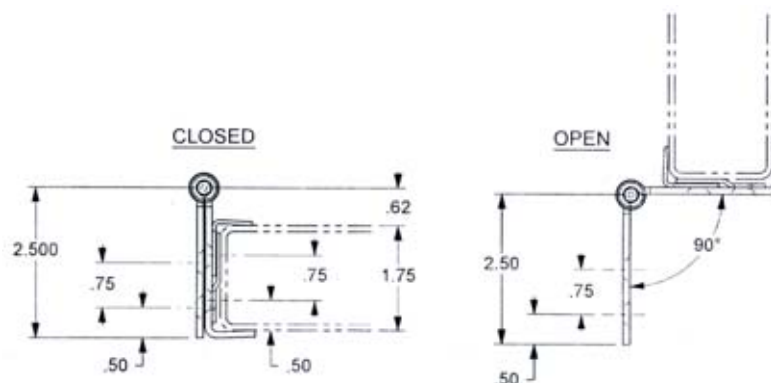
3 hours- hollow metal doors mounted singly
90 minutes- hollow metal and composite core wood fire doors
20 minutes- wood doors



Classified in accordance with UBC
code standard 7-2 for positive pressure



fire-rated label



300 Series Pin & Barrel Type Continuous Stainless Steel Hinges

Continuous hinges shall be full height piano-type hinge providing full height door support.

- Supports weights up to 600 lbs. 4' 0" maximum door width
- Material to be 14 gauge, stainless steel
- .25 diameter stainless steel pin (except MB option)
- Exterior barrel diameter .438 (7/16)
- Each knuckle 2", including split nylon bearing at each separation for a quiet, smooth, self-lubricating operation
- Finish: US32D Satin Stainless Steel (630) Optional Finish: US32 Bright Stainless Steel (629), Scratch-Resistant Powder Coated Paint, Bright Dipped Fastener Covers.
- Non-Handed
- All hinges shall be furnished with manufacturer's recommended hardware pack per specific model application
- Must be able to carry Warnock Hersey Int. or UL for fire rated doors and frames up to 3 hours
- Hinges shall meet ANSI/BHMA Standard A 156.26 Grade 1
- Symmetrically templated hole pattern

Note: 10-Year Warranty on all Continuous Hinges
***25-Year with Medical Bearings (MB)**

Note: If HG 305 or HG 310 – 1 3/8 Adjusta-Screw fastener with 10-32 thread x hex adjustment must be supplied

Note: Fire label for doors and frames should be placed on the header and top rail of fire rated doors and frames



ASSA ABLOY

FM-300 Edge Mount

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

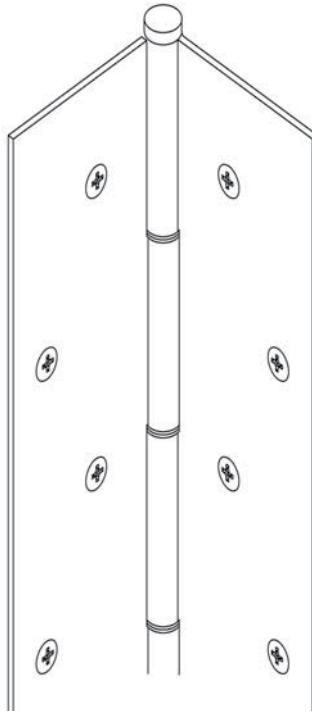
Symmetrically templated

Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Other Features

Custom lengths- specify in inches

Custom hole pattern

Tamper-proof security screws

Dutch door hinges- suffix hinge "DD"

Hospital tips – suffix hinge "HT"

Medical Bearings – suffix "MB"

Raised barrel

Special sheared leaf

Electrical Modifications

Exposed switch with adjusting screw- suffix hinge "ES"

Current Transfer Prep - suffix hinge "CTP"

Concealed current transfer – suffix hinge

"CE-4D"

Concealed current transfer – suffix hinge

"CE-8D"

Adjustable monitoring switch – suffix hinge "AMS"

ElectroLYNX™

EL-8 (8 wire), EL-12 (12 wire)

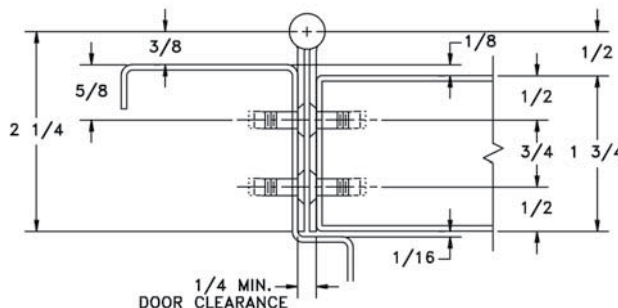


Classified in accordance with UBC
code standard 7-2 for positive pressure

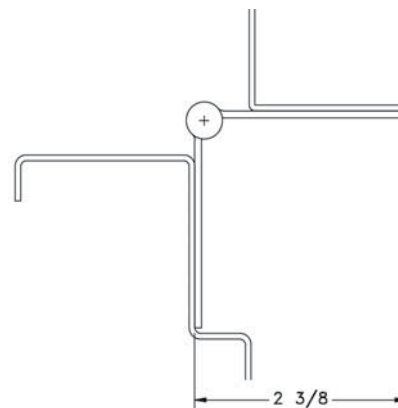


fire-rated label

This edge-mounted pin & barrel type hinge is used on many of today's high traffic, high abuse doors. The hinge works well in locations that used anchor hinges, pivot reinforcement hinges or thrust pivot unit and hinge sets. This hinge saves on special door and frame preparation charges and makes the installer's job easier. It can be used on both fire labeled and non-labeled openings.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

FS-301 Full Surface 1/8" Inset

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

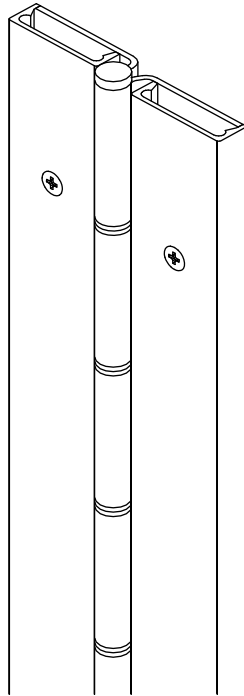
Decorative Fastener Covers

Brushed Aluminum

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Bright Dipped Fastener Covers

Other Features

Custom lengths- specify in inches

1 3/4" aluminum sleeve bolts

Dutch door hinges- suffix hinge "DD"

Hospital tips – suffix hinge "HT"

Medical Bearings – suffix hinge "MB"

Lead lined covers with 1/16" lead lining - suffix hinge "LL"

Raised barrel

Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

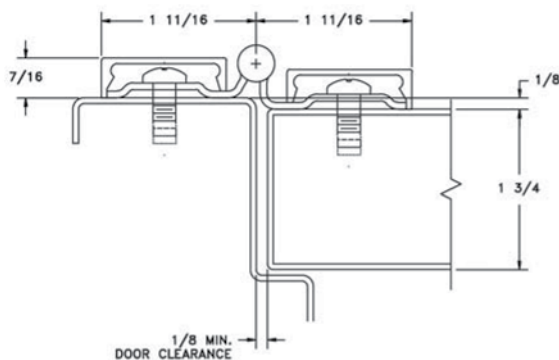


Classified in accordance with UBC
code standard 7-2 for positive pressure

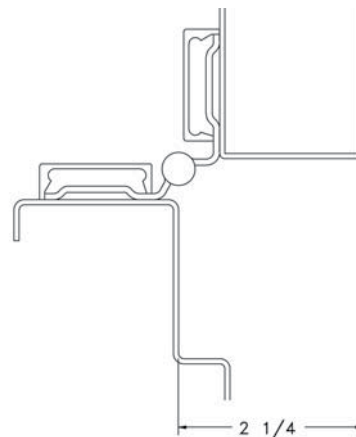


fire-rated label

For 1/8" inset doors. This surface-mounted pin & barrel type continuous hinge can be used to repair both fire labeled and non-labeled doors that have very tight clearances. The hinge has a built-in 1/8" offset to assist in weather seal and sound barrier areas.



DOOR CLOSED



DOOR OPEN 90°

STANDARD FEATURES

Material

Heavy-duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Capacity

Supports weights up to 600lbs.
4'0" maximum door width

Sizes

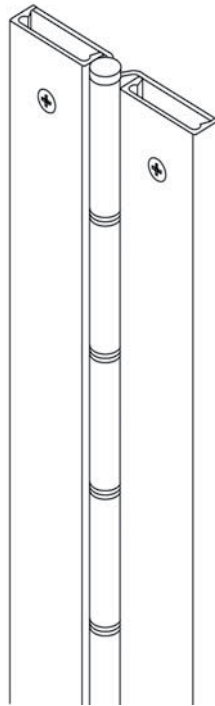
6'8", 7'0", 7'2", 8'0", 10'0"

Decorative Fastener Covers

Brushed aluminum

Barrel Type Hinge

1/4" diameter stainless steel pin
Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Bright Dipped Fastener Covers

Other Features

Custom lengths - specify in inches

1 3/4" aluminum sleeve bolts

Dutch door hinges - suffix hinge "DD"

Hospital tips - suffix hinge "HT"

Medical Bearings - suffix hinge "MB"

Lead lined cover with 1/16" lead lining - suffix hinge "LL"

Raised barrel

Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

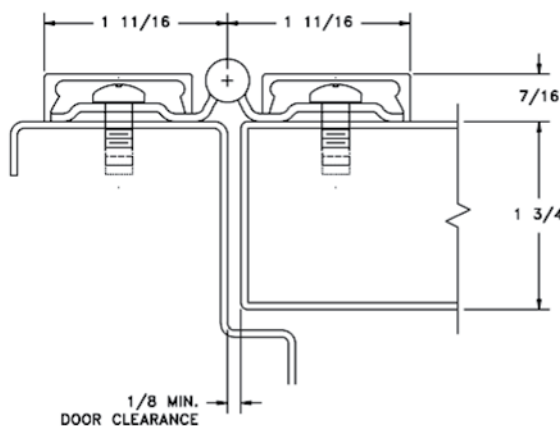


Classified in accordance with UBC
code standard 7-2 for positive pressure

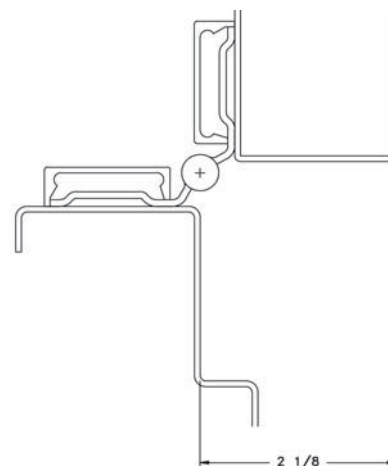


fire-rated label

For flush doors. This surface-mounted pin & barrel type continuous hinge can be used to repair both fire labeled and non-labeled doors that have very tight clearances.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

HS-303 Half Surface

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Decorative Fastener Covers

Brushed aluminum

Hole Pattern

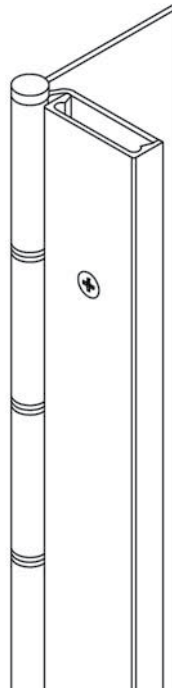
Symmetrically templated

Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors



Classified in accordance with UBC
code standard 7-2 for positive pressure



fire-rated label

OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Bright Dipped Fastener Covers

Other Features

Custom lengths - specify in inches

Custom hole pattern

Dutch door hinges - suffix hinge "DD"

Hospital tips - suffix hinge "HT"

Medical Bearings

Raised barrel

Special sheared leaf

Lead lined cover with 1/16" lead lining -
suffix hinge "LL"

Fasteners

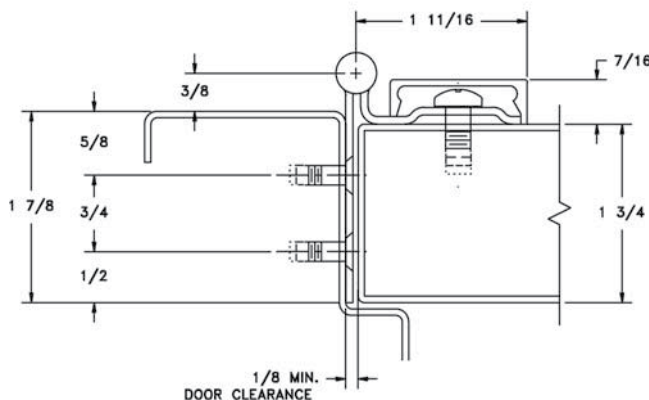
Tamper-proof security screws

1 3/4" aluminum sleeve bolts

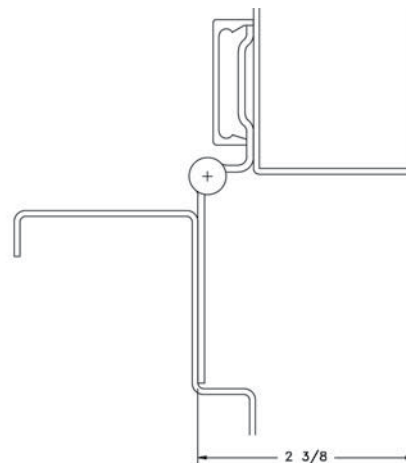
Electrical Modifications

Current Transfer Prep (frame leaf only) -
suffix hinge "CTP"

This half-surface pin & barrel type continuous hinge can be used to repair both fire labeled and non-labeled openings. The hinge fits into the gap left after standard butt hinges are removed. It can assist in reversing the handing of a door, or to reverse the swing of a door hung in an evenly-rabbetted frame. (Please call Markar Architectural Products, Inc. for instructions for unevenly-rabbetted frames.)



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

HM-304 Half Mortise

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Decorative Fastener Cover

Brushed Aluminum

Hole Pattern

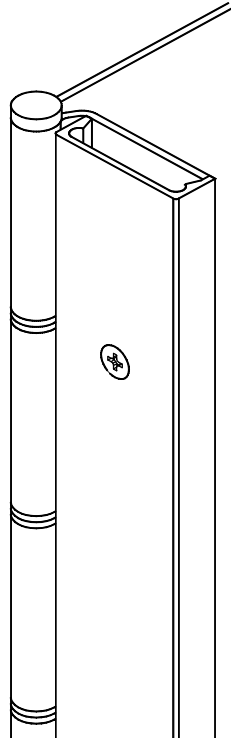
Symmetrically templated

Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Bright Dipped Fastener Covers

Other Features

Custom lengths- specify in inches

Custom hole pattern

Dutch door hinges- suffix hinge "DD"

Hospital tips – suffix hinge "HT"

Medical Bearings

Raised barrel

Special sheared leaf

Fasteners

Tamper-proof security screws

Electrical Modifications

Current Transfer Prep - suffix hinge "CTP"

(door leaf only)

Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

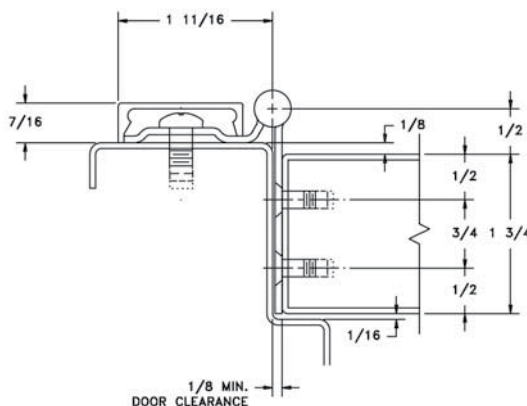


Classified in accordance with UBC
code standard 7-2 for positive pressure

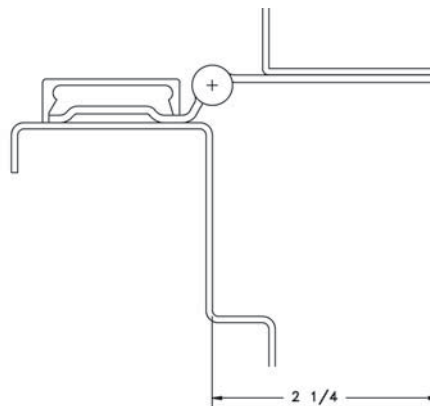


fire-rated label

This pin & barrel type hinge is used to repair wooden doors that have split, or are chipped and dented from traffic abuse. The surface mounted frame leaf allows for easy retrofit installation.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

HG-305 Hinge Guard

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

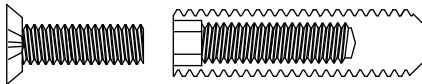
ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

AdjustaScrews for correcting frame fit problems up to 3/8"



Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

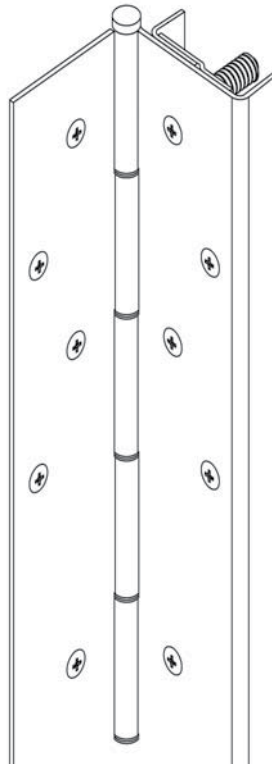
Symmetrically templated

Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors



Classified in accordance with UBC
code standard 7-2 for positive pressure



fire-rated label

OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Other Features

Custom lengths - specify in inches

Custom hole pattern

Dutch door hinges - suffix hinge "DD"

Hospital tips - suffix hinge "HT"

Medical Bearings

Raised barrel

Special sheared leaf

Fasteners

Tamper-proof security screws

Electrical Modifications

Exposed switch with adjusting screw - suffix hinge "ES"

Current Transfer Prep - suffix hinge "CTP"

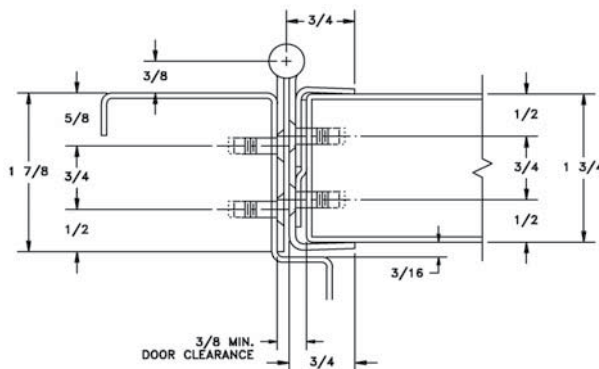
Concealed current transfer - suffix hinge "CE-4D"

Concealed current transfer - suffix hinge "CE-8D"

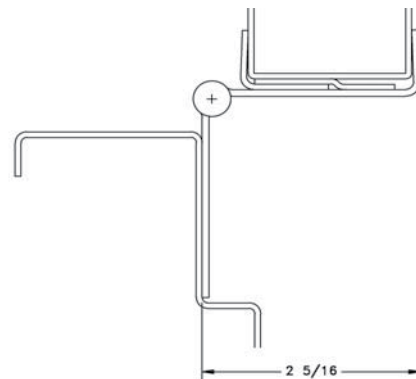
ElectroLYNX™

EL-8 (8 wire), EL-12 (12 wire)

This is the greatest continuous hinge ever engineered. This unique design answers the problem of adjusting doors where frames are not installed plumb or properly aligned. Not only that, but the wrap-around edge guard protects the door from unsightly dents and gouges and will deflect objects, preventing further damage. Strategically located fasteners coupled with the AdjustaScrew fastener allow the door to be adjusted up to 3/8" within the channel of the hinge and distribute the load of the door down the entire length of the jamb. The proper alignment of the door to the frame will allow your closers, panics, magnetic locks, electronic strikes, and automatic operators to assist you in meeting all your life safety code requirements.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

HG-306 Hinge Guard

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Decorative Fastener Cover

Brushed aluminum

Hole Pattern

Symmetrically templated

Non-handed

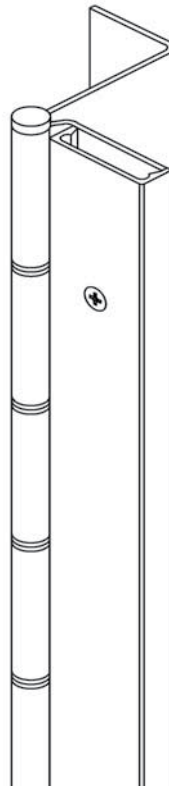
Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings

Door Edge

Specify square or beveled edge when ordering



Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

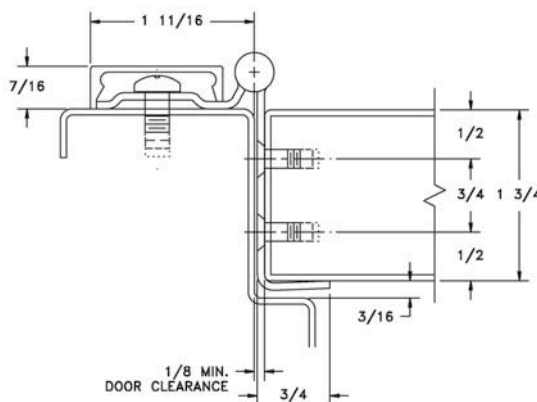


Classified in accordance with UBC
code standard 7-2 for positive pressure

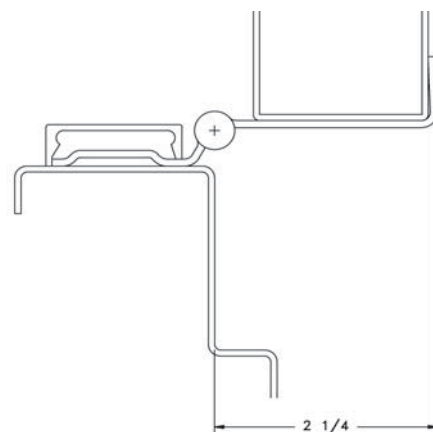


fire-rated label

This barrel-type hinge is used with hollow metal frames and wood or hollow metal doors. The guard that wraps the door covers up dents, scratches, and splitting of the door. This product covers the door's edge and wraps the door face to prevent further damage. This hinge can also be used to reverse the swing of a door.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

FS/SC-309 Full Surface Swing Clear

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

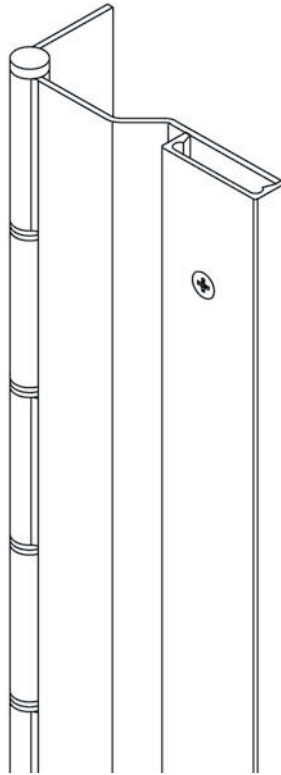
Decorative Fastener Cover

Brushed aluminum

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Bright Dipped Fastener Covers

Other Features

Custom lengths - specify in inches

1 3/4" aluminum sleeve bolts

Dutch door hinges - suffix hinge "DD"

Hospital tips - suffix hinge "HT"

Medical Bearings

Swing clear hinges for ADA compliance

Lead lined cover with 1/16" lead lining -

suffix hinge "LL"

Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

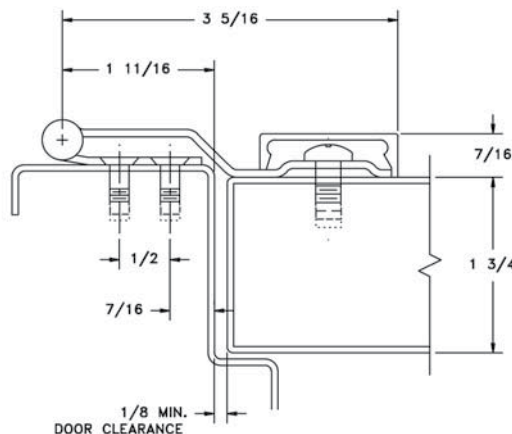


Classified in accordance with UBC
code standard 7-2 for positive pressure

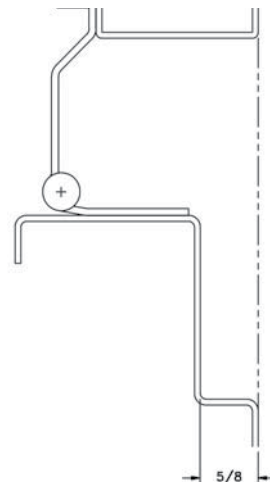


fire-rated label

This barrel-type hinge is used to ensure that a door opened to a 90-degree angle is removed from the opening. This hinge will mount on a 1 3/4" face, and is especially useful for ADA upgrade work and lead lined door conversion projects.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

HG-310 Swing Clear Hinge Guard

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

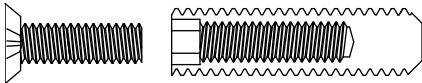
ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

AdjustaScrews for correcting frame fit problems up to 3/8"



Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

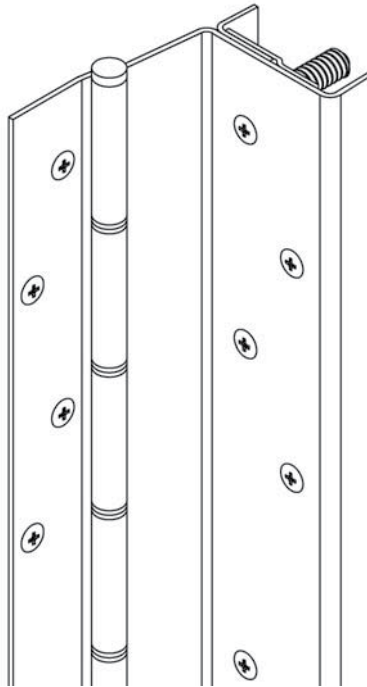
Symmetrically templated

Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



Fire Rating

3 hours - hollow metal doors mounted singly

90 minutes - hollow metal and composite core wood fire doors

20 minutes - wood doors



Classified in accordance with UBC code standard 7-2 for positive pressure

OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Other Features

Custom lengths - specify in inches

Custom hole patterns

Dutch door hinges - suffix hinge "DD"

Hospital tips - suffix hinge "HT"

Medical Bearings

Swing clear hinges for ADA compliance

Raised barrel

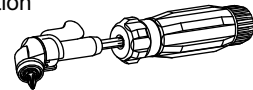
Special sheared leaf

Fasteners

Tamper-proof security screws

Tools

MTSP-100 Right angle skewdriver for ease of installation



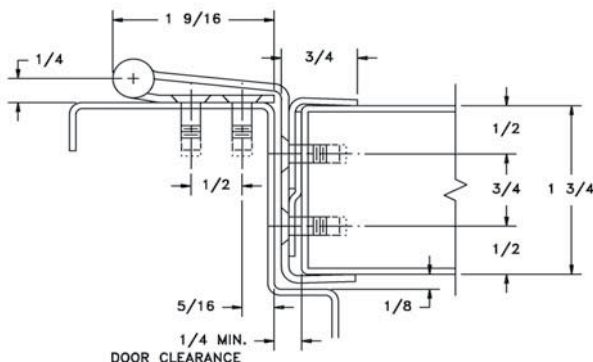
Electrical Modifications

Current Transfer Prep - suffix hinge "CTP" (4612-SC)

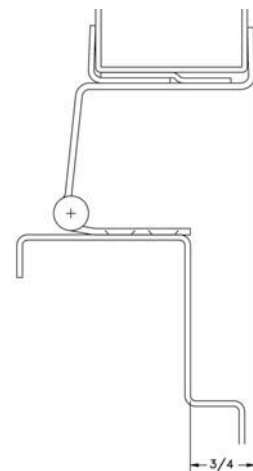


fire-rated label

The ADA-compliant barrel-type hinge is used on operating room doors to swing the door out of the opening when moving equipment in and out. The hinge guard also protects the door in the half-open position.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

HG-311 Swing Clear Hinge Guard

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

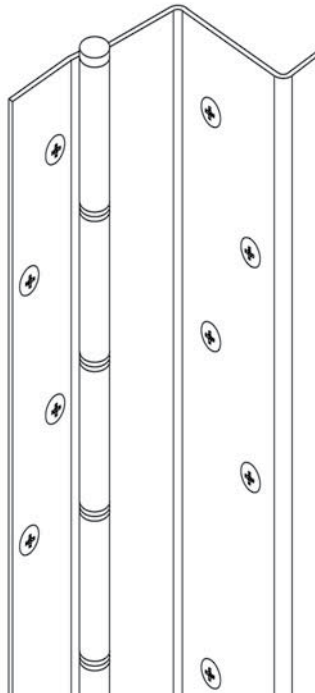
Symmetrically templated

Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



Fire Rating

3 hours - hollow metal doors mounted singly

90 minutes - hollow metal and composite core wood fire doors

20 minutes - wood doors

OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Other Features

Custom lengths - specify in inches

Custom hole patterns

Dutch door hinges - suffix hinge "DD"

Hospital tips - suffix hinge "HT"

Medical Bearings

Swing clear hinges for ADA compliance

Raised barrel

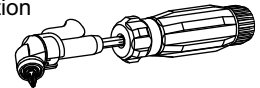
Special sheared leaf

Fasteners

Tamper-proof security screws

Tools

MTSP-100 Right angle skewdriver for ease of installation



Electrical Modifications

Current Transfer Prep - suffix hinge "CTP" (4612-SC)

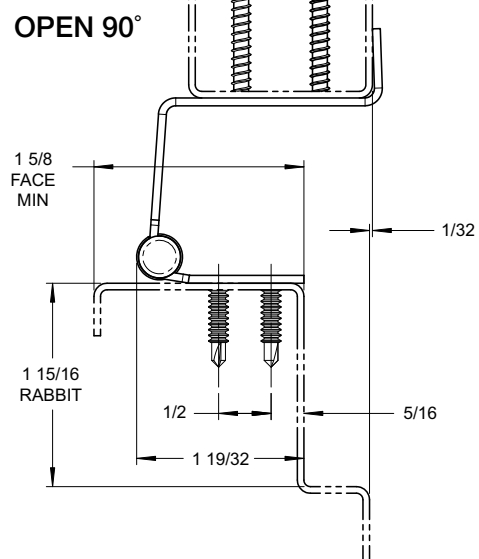
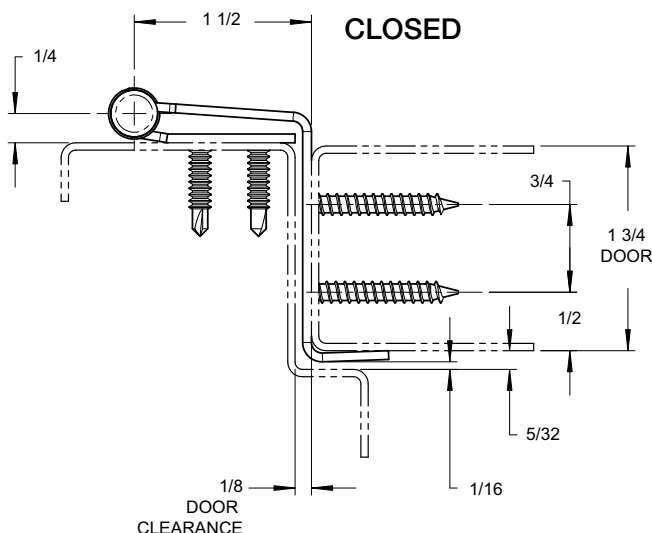


Classified in accordance with UBC
code standard 7-2 for positive pressure



fire-rated label

This surface applied swing clear version allows doors to meet ADA requirements.
The single wrap protects door edges from cart damage.





ASSA ABLOY

HG-315 Edge Mount Hinge Guard

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

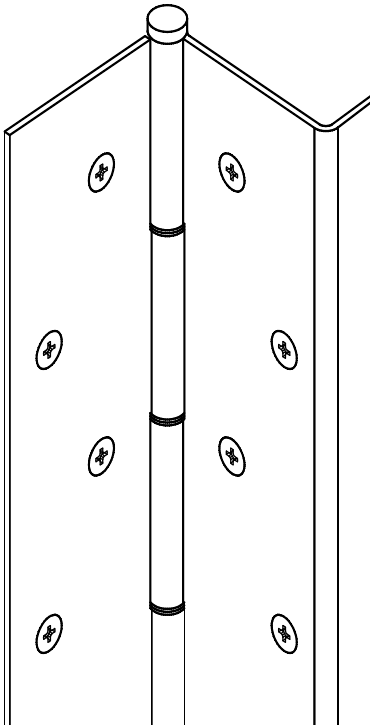
Symmetrically templated

Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Other Features

Custom lengths- specify in inches

Custom hole pattern

Dutch door hinges- suffix hinge "DD"

Hospital tips- suffix hinge "HT"

Medical Bearings

Raised Barrel

Special sheared leaf

Fasteners

Tamper-proof security screws

Electrical Modifications

Exposed switch with adjusting screw- suffix hinge "ES"

Current Transfer Prep - suffix hinge "CTP"

Concealed Current Transfer – suffix hinge "CE-4D"

Concealed Current Transfer – suffix hinge "CE-8D"

Adjustable Monitoring Switch – suffix hinge "AMS"

ElectroLYNX™

EL-8 (8 wire), EL-12 (12 wire)

Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

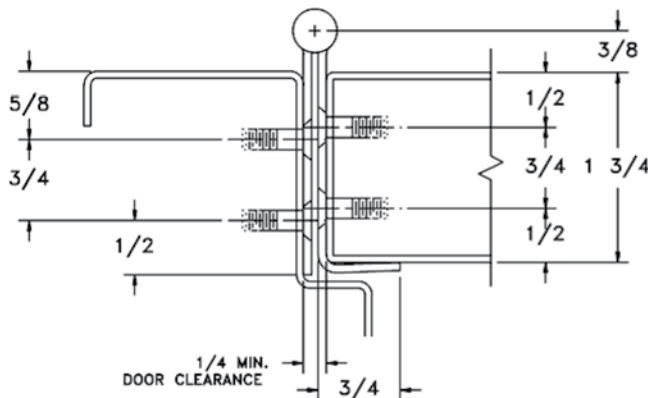


Classified in accordance with UBC
code standard 7-2 for positive pressure

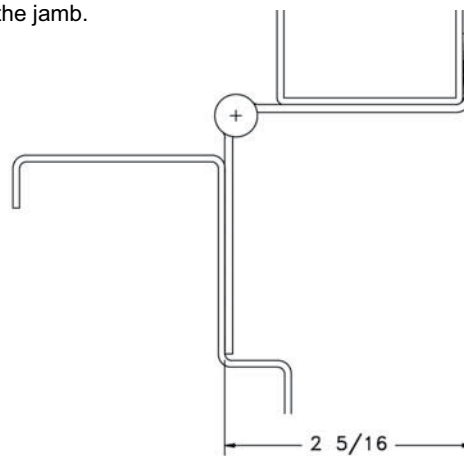


fire-rated label

Featuring our unique edge guard, this economical hinge prevents objects being placed between the door and frame as well as protecting the door's edge while supporting the door's weight along the entire length of the jamb.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

FS-321 Full Surface $\frac{3}{4}$ " Inset

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260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

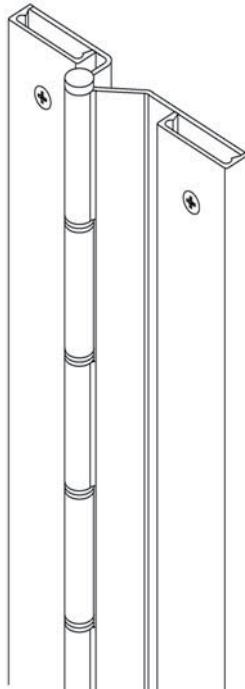
Decorative Fastener Covers

Brushed aluminum

Barrel Type Hinge

$\frac{1}{4}$ " diameter stainless steel pin

Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Bright Dipped Fastener Covers

Other Features

Custom lengths - specify in inches

$1\frac{3}{4}$ " aluminum sleeve bolts

Dutch door hinges - suffix hinge "DD"

Lead lined cover with $\frac{1}{16}$ " lead lining -

suffix hinge "LL"

Medical Bearings

Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

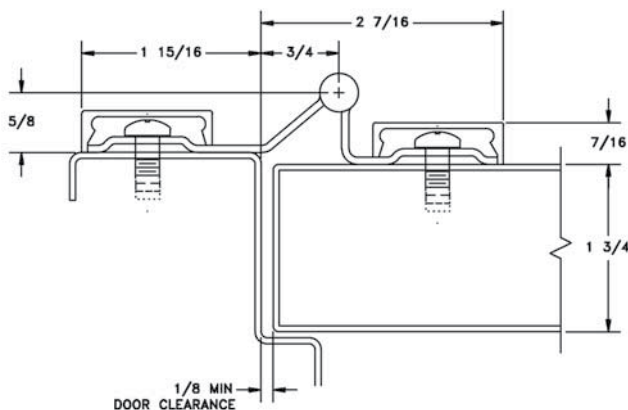


Classified in accordance with UBC
code standard 7-2 for positive pressure

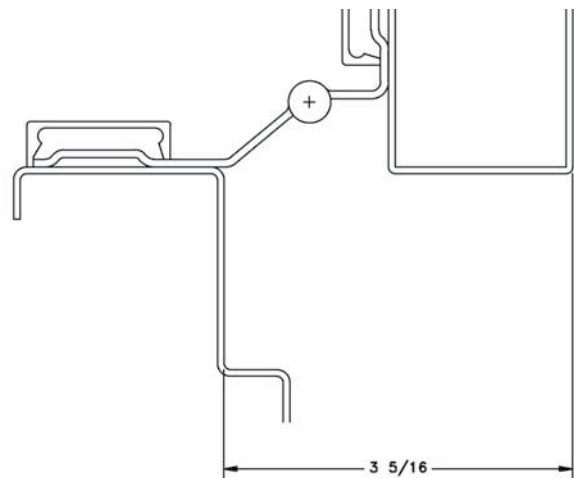


fire-rated label

This surface mount pin & barrel model was developed to work in conjunction with existing $\frac{3}{4}$ " offset floor closers. Where top or intermediate pivots have worn and the floor closer will remain, the FS-321 is the solution to extending the life of the opening.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

HG-322 Edge Mount Hinge Guard

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-Duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

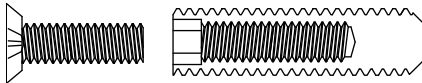
ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

AdjustaScrews for correcting frame fit problems up to 3/8"



Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

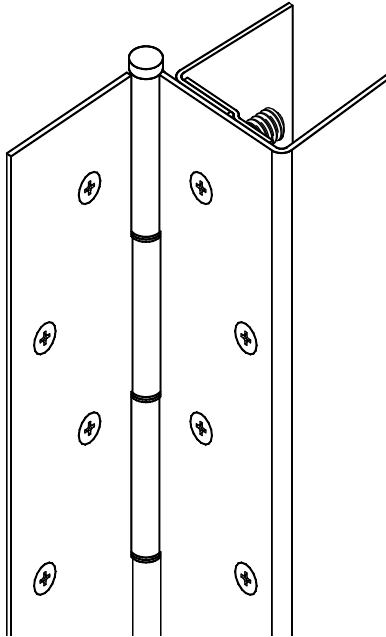
Symmetrically templated

Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors



Classified in accordance with UBC code standard 7-2 for positive pressure



fire-rated label

OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Other Features

Custom lengths- specify in inches

Custom hole pattern

Dutch door hinges- suffix hinge "DD"

Hospital tips- suffix hinge "HT"

Medical Bearings

Raised barrel

Special sheared leaf

Fasteners

Tamper-proof security screws

Electrical Modifications

Exposed Switch with adjusting screw- suffix hinge "ES"

Current Transfer Prep - suffix hinge "CTP"

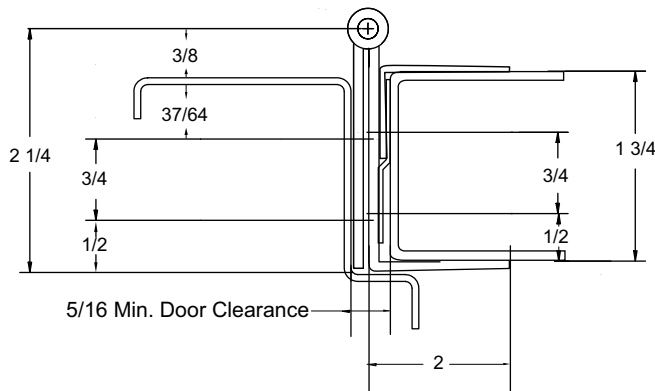
Concealed Current Transfer - suffix hinge "CE-4D"

Concealed Current Transfer - suffix hinge "CE-8D"

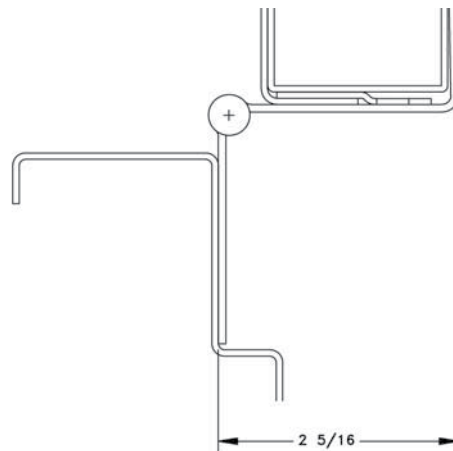
ElectroLYNX™

EL-8 (8 wire), EL-12 (12 wire)

Occasionally the need arises for an extended door wrap. Markar meets this need with the HG-322. All the features of the HG-305 Hinge/Guard plus 2" extensions.



DOOR CLOSED



DOOR OPEN 90°

STANDARD FEATURES

Material

Heavy-Duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

Capacity

Supports weights up to 600lbs.
4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

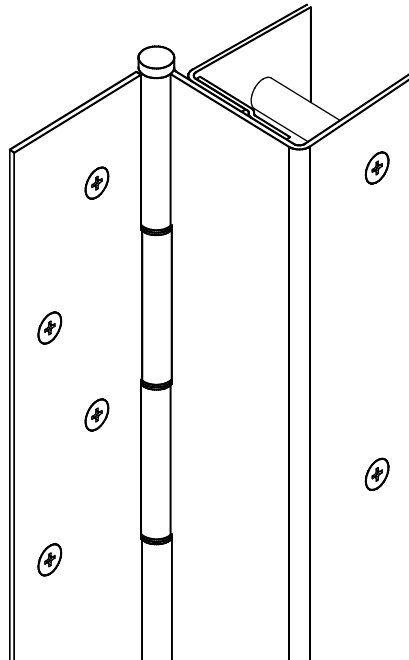
Hole Pattern

Symmetrically templated

Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin
Long-life split nylon bearings



Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Other Features

Custom lengths- specify in inches

Custom hole pattern

Dutch door hinges- suffix hinge "DD"

Hospital tips- suffix hinge "HT"

Medical Bearings

Raised barrel

Special sheared leaf

Fasteners

Tamper-proof security screws

Electrical Modifications

Exposed switch with adjusting screw- suffix hinge "ES"

Current Transfer Prep - suffix hinge "CTP"

Concealed current transfer - suffix hinge

"CE-4D"

Concealed current transfer - suffix hinge

"CE-8D"

ElectroLYNX™

EL-8 (8 wire), EL-12 (12 wire)

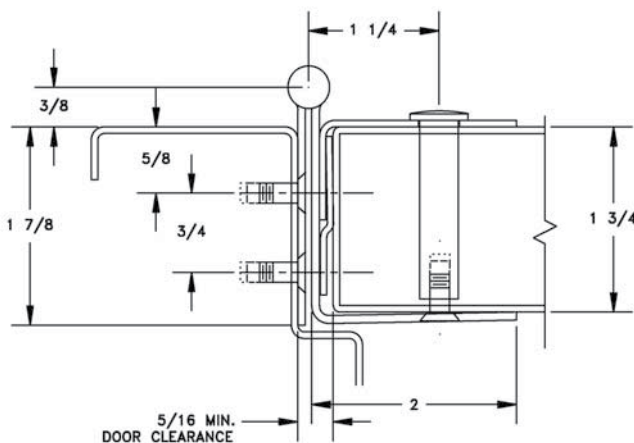


Classified in accordance with UBC
code standard 7-2 for positive pressure

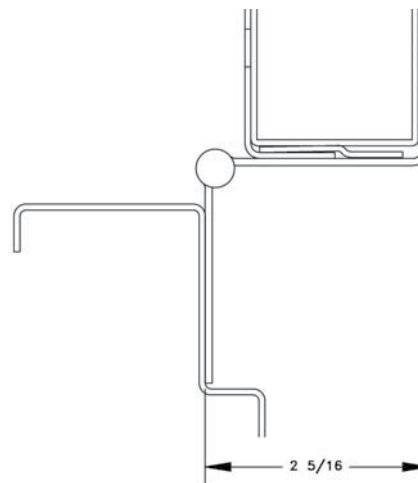


fire-rated label

This extended wrap model allows you to sandwich the door between two leafs of stainless steel and through bolt them together. It is ideal where doors have split and you want to save them.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

HG-326 Swing Clear Hinge Guard

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-Duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

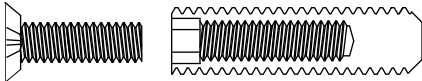
ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

AdjustaScrews for correcting frame fit problems up to 3/8"



Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

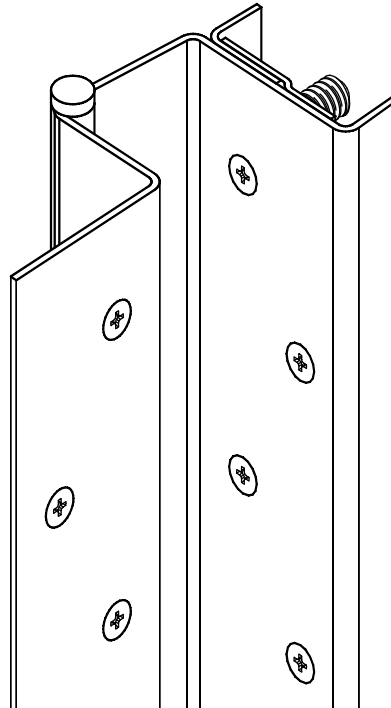
Symmetrically templated

Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors



Classified in accordance with UBC
code standard 7-2 for positive pressure



fire-rated label

OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Door Edge

Specify square or beveled edge when ordering

Other Features

Custom lengths – specify in inches

Custom hole pattern

Tamper-proof security screws

Dutch door hinges- suffix hinge "DD"

Hospital tips- suffix "HT"

Medical Bearings

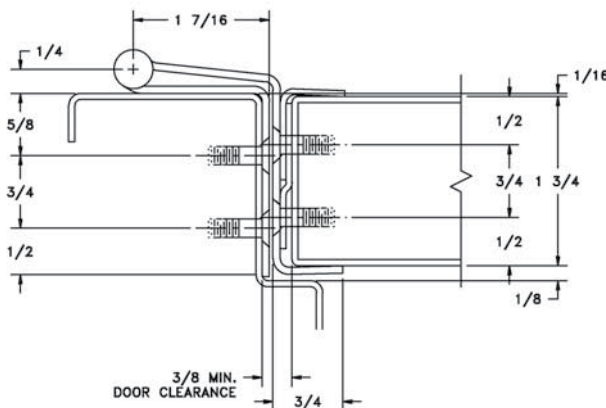
Raised barrel

Special sheared leaf

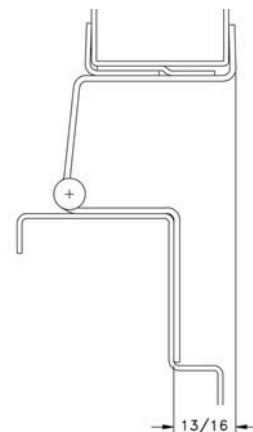
Electrical Modifications

Current Transfer Prep - "CTP" 4612-SC only

This unique design answers the problem of aligning doors and locking mechanisms crucial in any security application. It also solves the problem when adjusting doors where frames are not installed plumb or properly aligned. The incorporated edge guard protects the door from unsightly dents and gouges while also protecting the hinge from vandalism. The proper alignment of the door to the frame will allow your closers, panics, magnetic locks, electronic strikes and automatic operators to assist you in meeting all your life safety code requirements



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

FM-327 Edge Mount Safety Hinge

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners

Universal screw pack

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

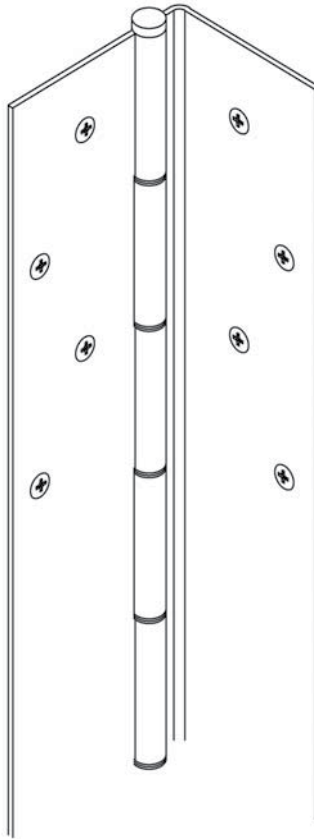
Symmetrically templated

Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Other Features

Custom lengths - specify in inches

Custom hole pattern

Dutch door hinges - suffix hinge "DD"

Medical Bearings

Raised barrel

Special sheared leaf

Fasteners

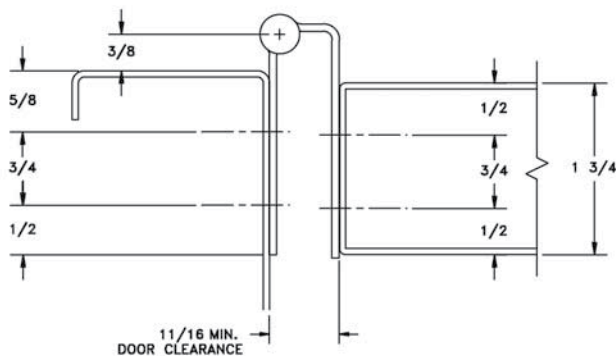
Tamper-proof security screws

Electrical Modifications

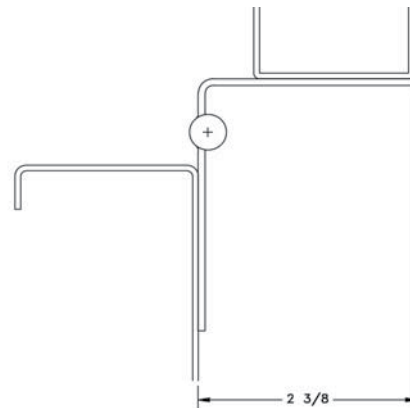
Current Transfer Prep - "CTP" 4612-SC only

This hinge is not fire rated

This unique design prevents small fingers from getting pinched in the door. It is ideal for elementary schools, day care, childcare, and nursing home facilities. This full-length continuous hinge also provides privacy by blocking sight lines into rooms. The hinge **must** be used with a cased open type frame.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

HG-329 Swing Clear Hinge Guard for Square Edge Door

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-Duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Cycle Testing

Grade 1

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

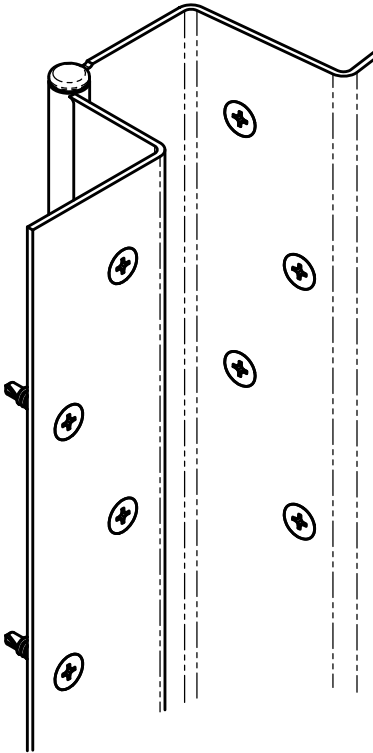
Symmetrically templated

Specify handing

Pin & Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

Door Edge

Specify HG-329 for square door edge

Other Features

Custom lengths – specify in inches

Custom hole pattern

Tamper-proof security screws

Dutch door hinges- suffix hinge "DD"

Hospital tips- suffix "HT"

Raised barrel

Special sheared leaf

Electrical Modifications

Current Transfer Prep-suffix hinge

"CTP" 4612-SC only

Exposed switch with adjusting screw-

suffix hinge "ES"

AMS-Adjustable monitoring switch

Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

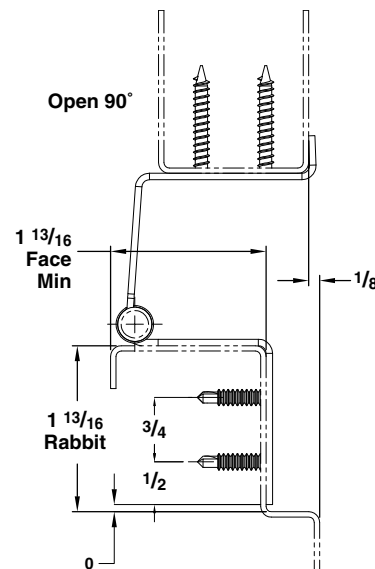
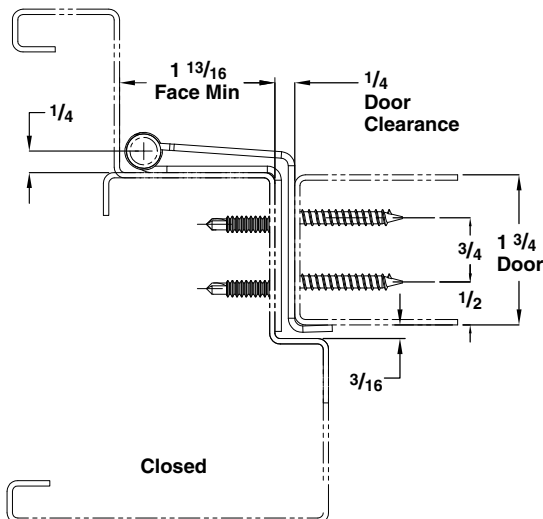


Classified in accordance with UBC
code standard 7-2 for positive pressure



fire-rated label

This unique design answers the problem of aligning doors and locking mechanisms crucial in any security application. It also solves the problem when adjusting doors where frames are not installed plumb or properly aligned. The incorporated edge guard protects the door from unsightly dents and gouges while also protecting the hinge from vandalism. The proper alignment of the door to the frame will allow your closers, panics, magnetic locks, electronic strikes and automatic operators to assist you in meeting all your life safety code requirements.





ASSA ABLOY

EG-308 Edge Guard

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 16 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Mounting Hardware

No exposed mounting fasteners when closed

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Door Edge

Specify square or beveled edge when ordering



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)
Scratch-Resistant Powder Coated Paint

Hardware Cutouts

(requires handing information)

Flush bolts

ASA strike

Deadlock strike and latch

86 edge and ASA lock

Hospital latch

161 cutout

*Measurements should be given from
Top of door to centerline of cutout.*

Other Features

Custom lengths - specify in inches

Custom hole pattern for lead-lined doors

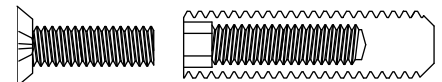
Custom Cutouts

Dutch door application - suffix edge
guard "DD"

Fasteners

Tamper-proof security screws

AdjustaScrew fasteners - suffix edge guard
"AS"



Classified in accordance with UBC
code standard 7-2 for positive pressure

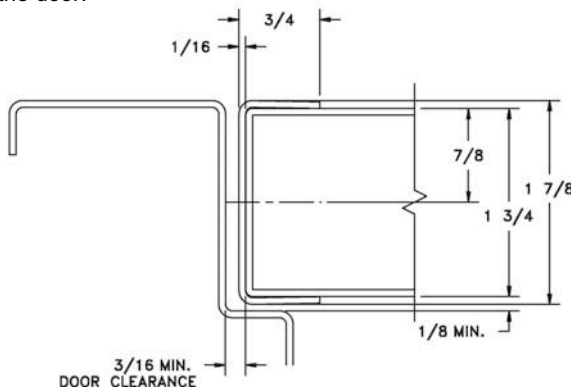


fire-rated label

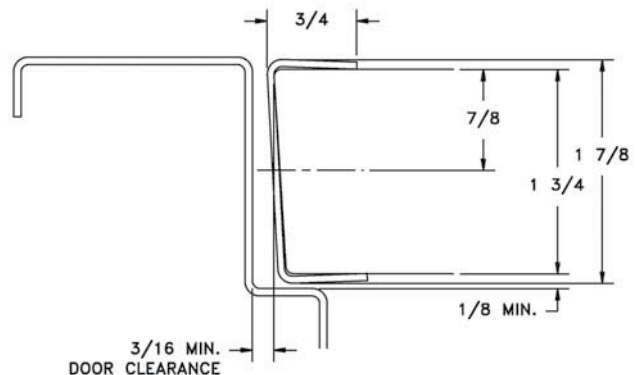
**MAY NOT APPLY TO ALL WOOD
DOORS IN ACCORDANCE WITH UBC
STANDARD 7-2. PLEASE CONSULT
FACTORY FOR SPECIFIC WOOD
DOOR APPLICATIONS.**

**Markar's Patented Adjusta Screw
assemblies are now approved for use
on labeled doors.
US PATENT NUMBER 5,943,824**

This fire-labeled edge guard is used in conjunction with the HG-305 Hinge/Guard for a balanced aesthetic look. It also protects the leading edge of the door.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

EG-C-308 Edge Guard

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 16 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Mounting Hardware

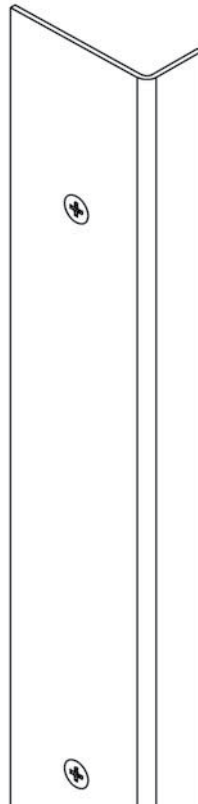
No exposed mounting fasteners when closed

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Door Edge

Specify square or beveled edge when ordering



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)
Scratch-Resistant Powder Coated Paint

Hardware Cutouts

(requires handing information)

Flush bolts
ASA strike
Deadlock strike and latch
86 edge and ASA lock
Hospital latch
161 cutout

Measurements should be given from top of door to centerline of cut-out with handing.

Custom Cutouts

Other Features

Custom lengths – specify in inches
Custom cutouts
Custom hole pattern for lead-lined doors
Dutch door application – suffix edge guard “DD”

Fasteners

Tamper-proof security screws



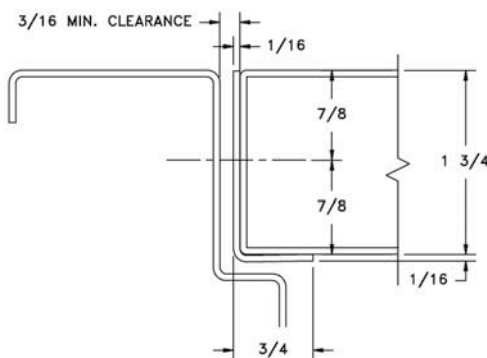
Classified in accordance with UBC
code standard 7-2 for positive pressure



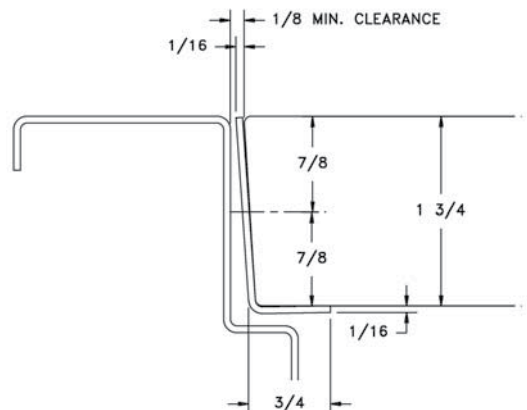
fire-rated label

**MAY NOT APPLY TO ALL WOOD
DOORS IN ACCORDANCE WITH UBC
CODE STANDARD 7-2. PLEASE
CONSULT FACTORY FOR SPECIFIC
WOOD DOOR APPLICATIONS.**

This fire-labeled edge guard works with the HG-315 Hinge/Guard. It gives protection to the leading edge of the door, while maintaining the door's aesthetic look in the closed position.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

EG-T-308 Edge Guard

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 16 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Mounting Hardware

No exposed mounting fasteners when closed

Sizes

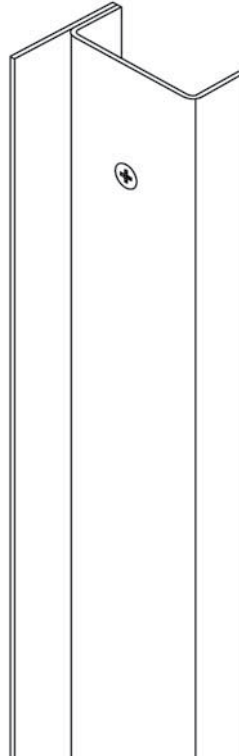
6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

Symmetrically templated
Non-handed

Door Edge

Specify square or beveled edge when ordering



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)
Scratch-Resistant Powder Coated Paint

Hardware Cutouts

(requires handing information)

Flush bolts
ASA strike
Deadlock strike and latch
86 edge and ASA lock
Hospital latch
161 cutout

Measurements should be given from top of door to centerline of cut-out with handing.

Custom Cutouts

Other Features

Custom lengths – specify in inches
Custom cutouts
Custom hole pattern for lead-lined doors
Dutch door application – suffix edge guard "DD"
Lead lined astragal with 1/16" lead lining - suffix hinge "LL"

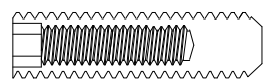
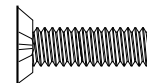
Fasteners

Tamper-proof security screws
AdjustaScrew fasteners - suffix edge guard "AS"



Classified in accordance with UBC code standard 7-2 for positive pressure

MAY NOT APPLY TO ALL WOOD DOORS IN ACCORDANCE WITH UBC STANDARD CODE 7-2. PLEASE CONSULT FACTORY FOR SPECIFIC WOOD DOOR APPLICATIONS.

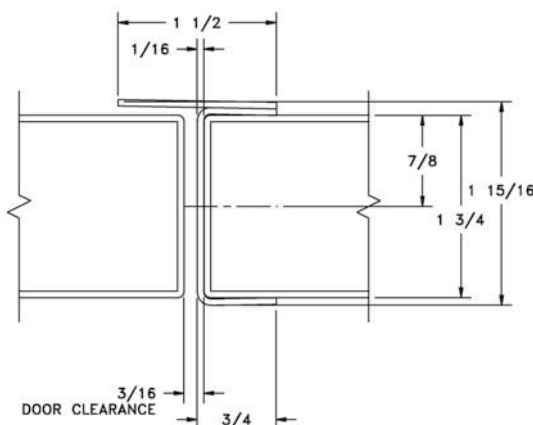


fire-rated label

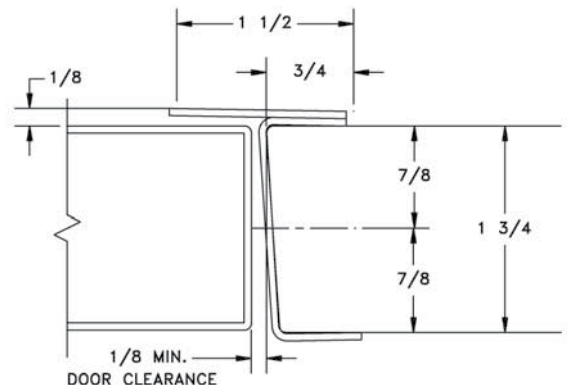
Markar's Patented Adjusta Screw assemblies are now approved for use on labeled doors.

US PATENT NUMBER 5,943,824

The integral overlapping astragal of the EG-T-308 provides an additional level of security by acting as a latch protector. It is ideal for exterior pairs or doors that require protection from vandalism.



DOOR CLOSED



DOOR OPEN 90°

200 Series Pin & Barrel Type Continuous Steel Hinges

Continuous hinges shall be full height piano-type hinge providing full height door support.

- Supports weights up to 600 lbs. 4'0" maximum door width
- Material to be 14 gauge 1012 carbon steel
- .25 diameter stainless steel pin
- Each knuckle 2", including split nylon bearing at each separation for a quiet, smooth, self-lubricating system
- Finish: Gray Powder Coat Primer Optional Finish: Scratch-Resistant Powder Coated Paint, Bright Dipped Fastener Covers.
- Gray powder coat primer standard
- Non-handed
- All hinges shall be furnished with manufacturer's recommended hardware pack per specific model application
- Must use undercut head screws
- Must be able to carry Warnock Hersey Int. or UL fire rated doors and frames up to 3 hours
- Hinges shall meet ANSI/B HMA Standard A 156.26 Grade 2
- Symmetrically templated hole pattern

Note: 10-Year Warranty on all Continuous Hinges

Note: Fire label for doors and frames should be placed on the header and top rail of fire rated doors and frames.



ASSA ABLOY

FM-200 Edge Mount

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge 1012 carbon steel

Finishes

Gray Powder Coat Primer

Cycle Testing

Grade 2

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

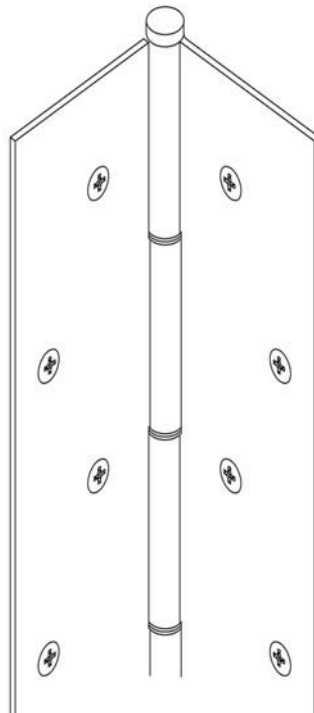
Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

Symmetrically templated

Non-handed



OPTIONAL FEATURES

Finishes

Scratch-Resistant Powder Coated Paint

Other Features

Custom lengths - specify in inches

Custom hole pattern

Dutch door hinges - suffix hinge "DD"

Hospital tips - suffix hinge "HT"

Raised barrel

Special sheared leaf

Fasteners

Tamper-proof security screws

Electrical Modifications

Current Transfer Prep - suffix hinge "CTP"

Exposed switch with adjusting screw - suffix hinge "ES"

Concealed current transfer - suffix hinge "CE-4D"

Concealed current transfer - suffix hinge "CE-8D"

ElectroLYNX™

EL-8 (8 wire), EL-12 (12 wire)

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings

Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

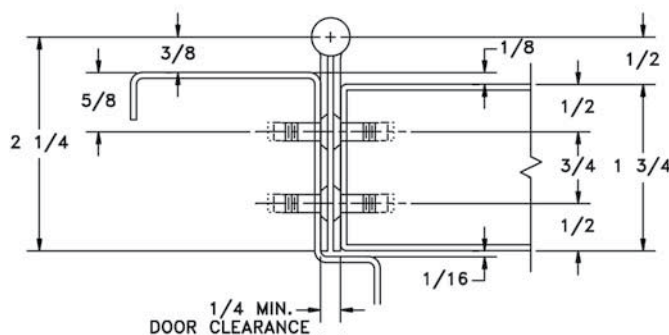


Classified in accordance with UBC
code standard 7-2 for positive pressure

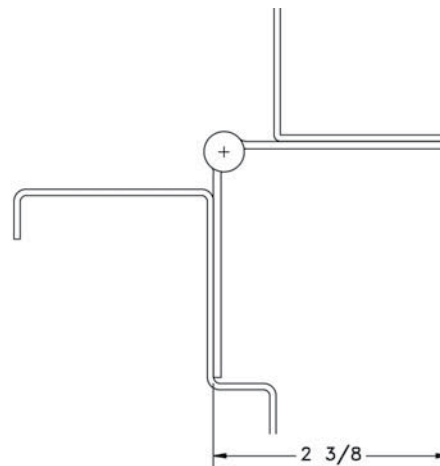


fire-rated label

This edge-mounted pin & barrel type hinge is used on many of today's high traffic, high abuse interior doors. The hinge works well in locations that used anchor hinges, pivot reinforced hinges, or thrust pivot unit and hinge sets. This hinge saves on special door and frame preparation charges and makes the installer's job easier. It can be used on both fire labeled and non-labeled openings.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

FS-201 Full Surface 1/8" Inset

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge 1012 carbon steel

Finishes

Gray Powder Coat Primer

Cycle Testing

Grade 2

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

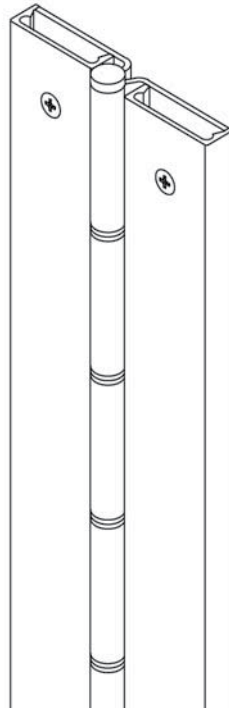
Decorative Fastener Covers

Aluminum

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

Scratch-Resistant Powder Coated Paint

Bright Dipped Fastener Covers

Other Features

Custom lengths - specify in inches

1 3/4" aluminum sleeve bolts

Dutch door hinges - suffix hinge "DD"

Hospital tips - suffix hinge "HT"

Raised barrel

Lead-lined cover with 1/16" lead lining – suffix hinge "LL"

Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

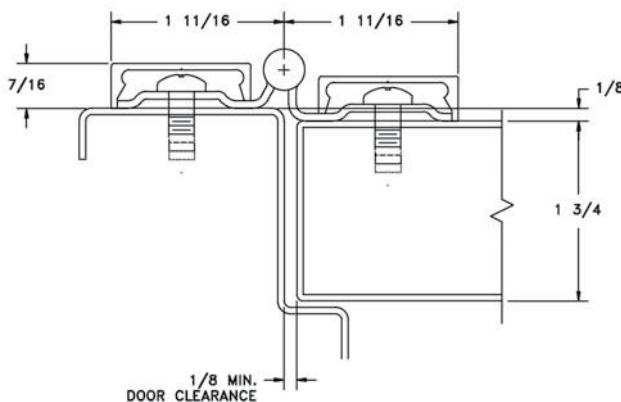


Classified in accordance with UBC
code standard 7-2 for positive pressure

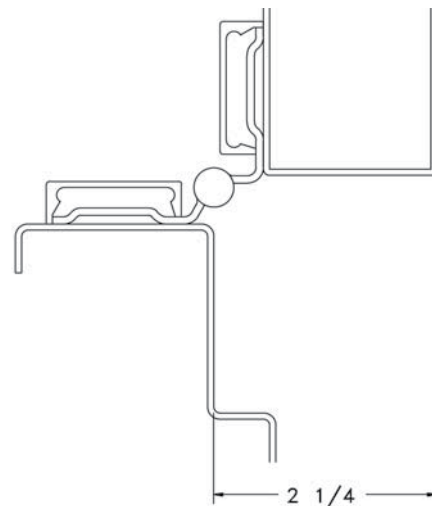


fire-rated label

For 1/8" inset doors. This surface-mounted pin & barrel type continuous hinge can be used to repair both fire labeled and non-labeled doors that have very tight clearances. The hinge has a built-in 1/8" offset to assist in weather seal and sound barrier areas.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

FS-202 Full Surface Flush Mount

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge 1012 carbon steel

Finishes

Gray Powder Coat Primer

Cycle Testing

Grade 2

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

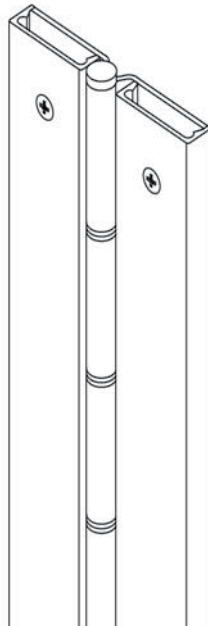
Decorative Fastener Covers

Aluminum

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

Scratch-Resistant Powder Coated Paint

Bright Dipped Fastener Covers

Other Features

Custom lengths - specify in inches

1 3/4" aluminum sleeve bolts

Dutch door hinges - suffix hinge "DD"

Hospital tips - suffix hinge "HT"

Raised barrel

Lead-lined cover with 1/16" lead lining – suffix hinge "LL"

Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

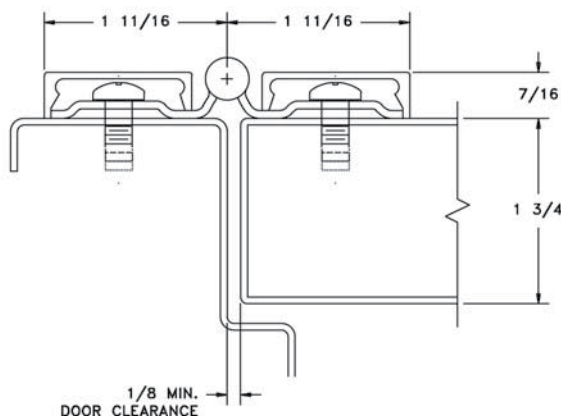


Classified in accordance with UBC
code standard 7-2 for positive pressure

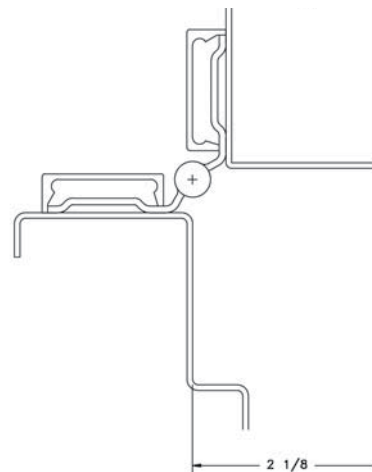


fire-rated label

For flush doors. This surface-mounted pin & barrel type continuous hinge can be used to repair both fire labeled and non-labeled doors that have very tight clearances.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

HS-203 Half Surface

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge 1012 carbon steel

Finishes

Gray Powder Coat Primer

Cycle Testing

Grade 2

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Decorative Fastener Covers

Aluminum

Hole Pattern

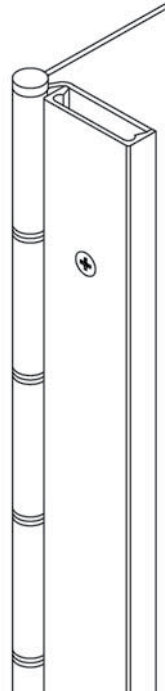
Symmetrically templated

Non-handed

Barrel Type Hinge

1/4" diameter stainless steel pin

Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

Scratch-Resistant Powder Coated Paint

Bright Dipped Fastener Covers

Other Features

Custom lengths - specify in inches

Custom hole pattern

Dutch door hinges - suffix hinge "DD"

Hospital tips - suffix hinge "HT"

Raised barrel

Special sheared leaf

Lead-lined cover with 1/16" lead-lining - suffix hinge "LL"

Fasteners

Tamper-proof security screws

1 3/4" aluminum sleeve bolts

Electrical Modifications

Current Transfer Prep (frame leaf only) - suffix hinge "CTP"

Fire Rating

3 hours- hollow metal doors mounted singly

90 minutes- hollow metal and composite core wood fire doors

20 minutes- wood doors

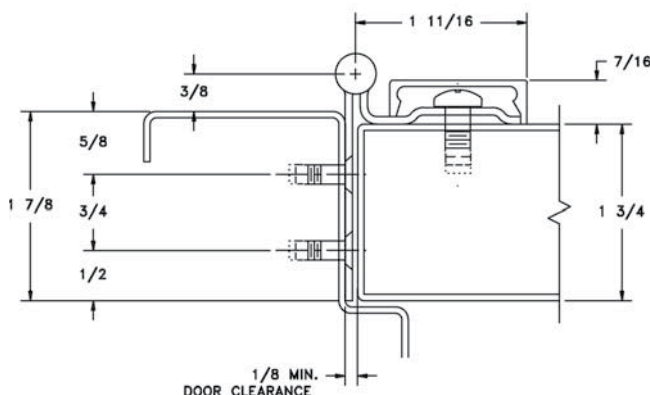


Classified in accordance with UBC
code standard 7-2 for positive pressure

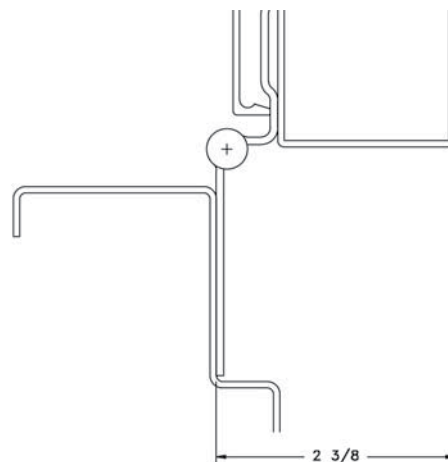


fire-rated label

This half-surface pin & barrel type continuous hinge can be used to repair both fire labeled and non-labeled openings. The hinge fits into the gap left after standard butt hinges are removed. It can assist in reversing the handing of a door, or to reverse the swing of a door hung in an evenly-rabbetted frame. (Please call Markar Architectural Products, Inc. for instructions for unevenly-rabbetted frames.)



DOOR CLOSED



DOOR OPEN 90°

100 Series Pin & Barrel Type Continuous Aluminum Hinges

Continuous hinges shall be full height piano-type hinge providing full height door support.

- Supports weights up to 600 lbs. 4'0" maximum door width
- Material to be extruded aluminum 6063-T6 alloy
- .25 diameter stainless pin must be Teflon coated
- Each knuckle 2", including split nylon bearing at each separation for a quiet, smooth, self-lubricating operation
- Finish: Clear Anodized (628), Dark Bronze Anodized (313) Optional Finish: Light Bronze Anodized (311), Black Anodized (315), Scratch-Resistant Powder Coated Paint, Bright Dipped Locking Security Covers. Other finishes available upon request.
- Hinge pin cap
- Non-handed
- All hinges shall be furnished with manufacturer's recommended hardware pack per specific model application
- Exterior barrel diameter .515 (1/2 inch)
- Material thickness less than .125 inches
- Material weight will be no less than 1.5 lbs. per foot
- Hinges shall meet ANSI/BHMA Standard A 156.26 Grade 2
- Symmetrically templated hole pattern

Note: 10-Year Warranty on all Continuous Hinges



ASSA ABLOY

FM-100 Edge Mount

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

6063-T6 aluminum

Finishes

Clear Anodized (628)

Dark Bronze Anodized (313)

Cycle Testing

Grade 2

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern

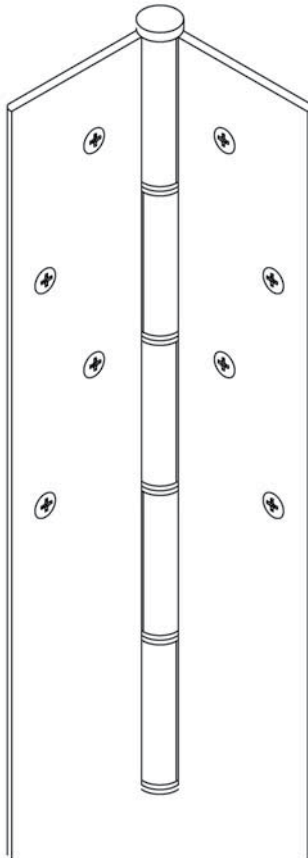
Symmetrically templated

Non-handed

Barrel Type Hinge

1/4" diameter Teflon-coated stainless steel pin

Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

Light Bronze Anodized (311)

Black Anodized (315)

Scratch-Resistant Powder Coated Paint

Other Features

Custom lengths - specify in inches

Custom hole pattern

Dutch door hinges - suffix hinge "DD"

Hospital tips - suffix hinge "HT"

Fasteners

Tamper-proof security screws

Electrical Modifications

Exposed switch with adjusting screw - suffix hinge "ES"

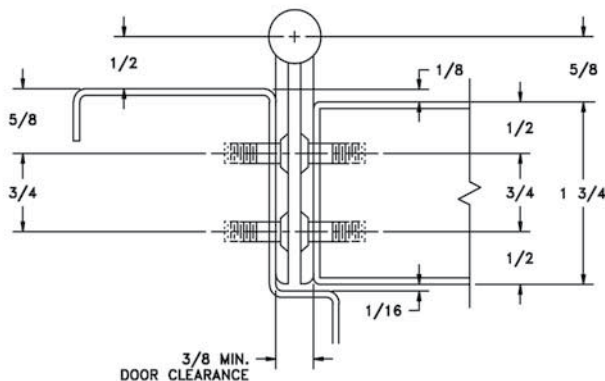
Current transfer - 4 or 8 28 gauge wires - suffix hinge "CE4" or "CE8"

Current Transfer Prep - suffix hinge "CTP"

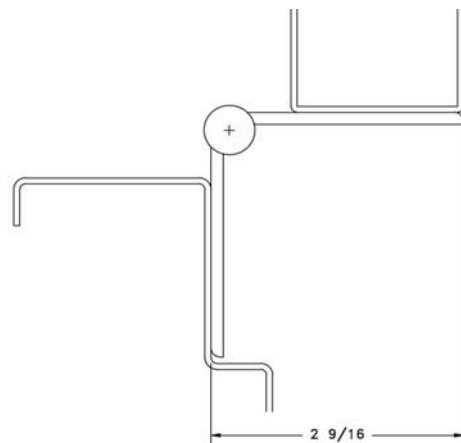
ElectroLYNX™

EL-8 (8 wire), EL-12 (12 wire)

This door-edge mounted aluminum pin & barrel type hinge is extruded using 30% more aluminum than most geared hinges, giving it exceptional strength and durability. This product is specified in lieu of pivots or butt hinges due to its unique design which distributes the weight of the door down the entire length of the hinge.



DOOR CLOSED



DOOR OPEN 90°

STANDARD FEATURES

Material

6063-T6 aluminum

Finishes

Clear Anodized (628)
Dark Bronze Anodized (313)

Cycle Testing

Grade 2
ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners

Capacity

Supports weights up to 600lbs.
4'0" maximum door width

Sizes

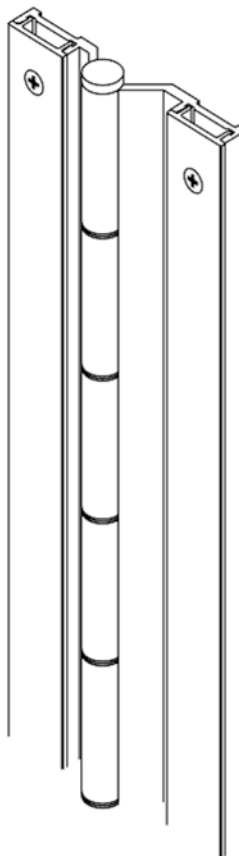
6'8", 7'0", 7'2", 8'0"

Locking Security Covers

Brushed aluminum finish

Barrel Type Hinge

1/4" diameter Teflon-coated stainless steel pin
Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

Light Bronze Anodized (311)
Black Anodized (315)
Scratch-Resistant Powder Coated Paint
Bright Dipped Locking Security Covers

Other Features

Custom lengths - specify in inches
1 3/4" aluminum sleeve bolts
Dutch door hinges - suffix hinge "DD"
Hospital tips - suffix hinge "HT"
Lead lined cover with 1/16" lead lining -
suffix hinge "LL"

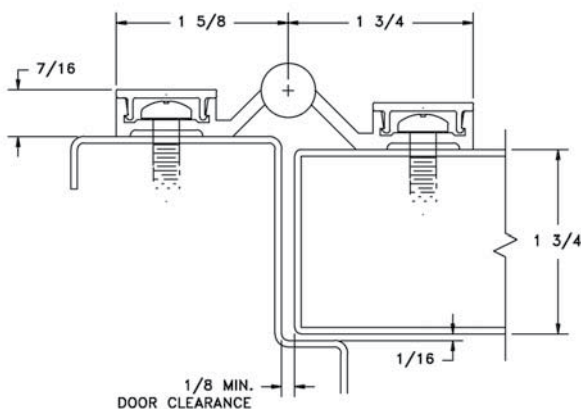
Electrical Modifications

Current transfer - 4 or 8 28 gauge wires -
suffix hinge "CE4" or "CE8"

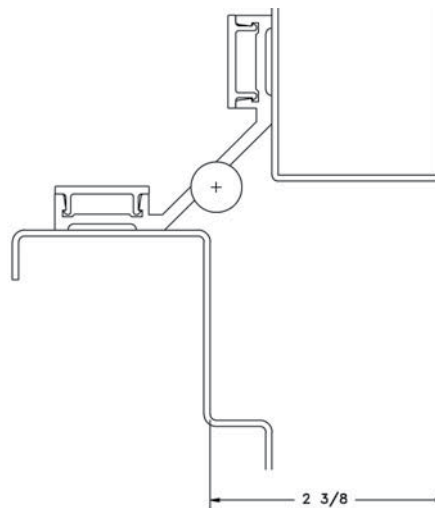
ElectroLYNX™

EL-8 (8 wire), EL-12 (12 wire)

This surface-mounted pin & barrel type continuous hinge is the correct hinge to solve door sag problems. The 1/8" inset allows perfect alignment for retrofitting hollow metal, wood or aluminum doors within the existing conditions - no need to readjust your weather-stripping!



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

FS-102 Full Surface Flush Mount

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

6063-T6 aluminum

Finishes

Clear Anodized (628)

Dark Bronze Anodized (313)

Cycle Testing

Grade 2

ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed

Universal screw pack

Capacity

Supports weights up to 600lbs.

4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0"

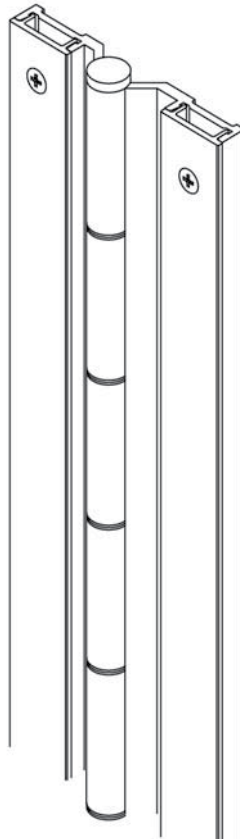
Locking Security Covers

Brushed aluminum finish

Barrel Type Hinge

1/4" diameter Teflon-coated stainless steel pin

Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

Light Bronze Anodized (311)

Black Anodized (315)

Scratch-Resistant Powder Coated Paint

Bright Dipped Locking Security Covers

Other Features

Custom lengths - specify in inches

1 3/4" aluminum sleeve bolts

Dutch door hinges - suffix hinge "DD"

Hospital tips - suffix hinge "HT"

Lead lined cover with 1/16" lead lining - suffix hinge "LL"

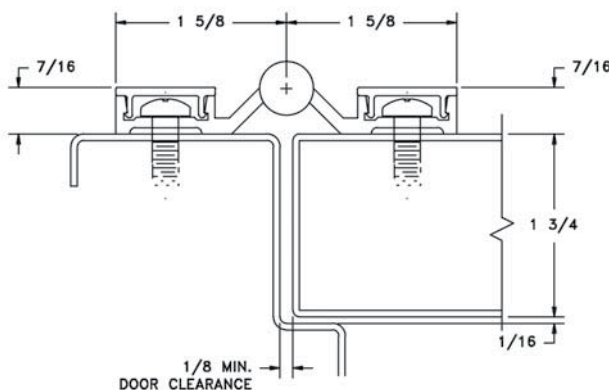
Electrical Modifications

Current transfer - 4 or 8 28 gauge wires - suffix hinge "CE4" or "CE8"

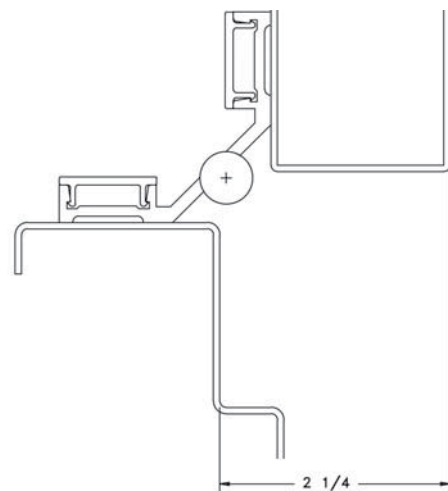
ElectroLYNX™

EL-8 (8 wire), EL-12 (12 wire)

For flush-mounted doors. This surface-mounted pin & barrel type continuous hinge is the right choice for solving your door sag problems. This unit works well on all types of aluminum, wood and hollow metal door applications. The hinge also features tamper-resistant cover caps to prevent vandalism or break-ins.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

HS-103 Half Surface

Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

6063-T6 aluminum

Finishes

Clear Anodized (628)
Dark Bronze Anodized (313)

Cycle Testing

Grade 2
ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed
Universal screw pack

Capacity

Supports weights up to 600lbs.
4'0" maximum door width

Sizes

6'8", 7'0", 7'2", 8'0"

Locking Security Covers

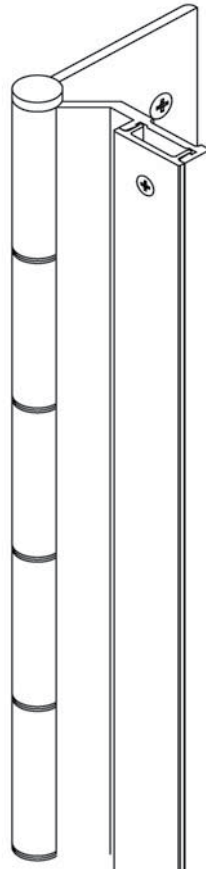
Brushed aluminum finish

Hole Pattern

Symmetrically templated
Non-handed

Barrel Type Hinge

1/4" diameter Teflon-coated stainless steel pin
Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

Light Bronze Anodized (311)
Black Anodized (315)
Scratch-Resistant Powder Coated Paint
Bright Dipped Locking Security Covers

Other Features

Custom lengths - specify in inches
Custom hole pattern
Dutch door hinges - suffix hinge "DD"
Hospital tips - suffix hinge "HT"
Lead lined cover with 1/16" lead lining - suffix hinge "LL"

Fasteners

Tamper-proof security screws
1 3/4" aluminum sleeve bolts

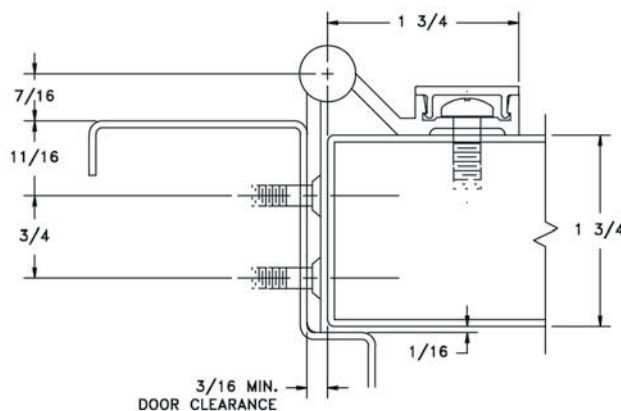
Electrical Modifications

Current transfer - 4 or 8 28 gauge wires - suffix hinge "CE4" or "CE8"
Current Transfer Prep (frame leaf only) - suffix hinge "CTP"

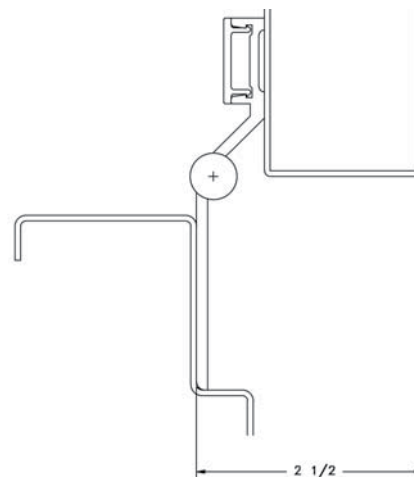
ElectroLYNX™

EL-8 (8 wire), EL-12 (12 wire)

This half-surface aluminum pin & barrel type hinge can be used to repair doors that need the frame reinforced. This hinge can also be used on openings that have too large a gap between the door and frame. The hinge is surface edge mounted on the door frame.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

HG-105 Hinge/Guard

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STANDARD FEATURES

Material

6063-T6 aluminum

Finishes

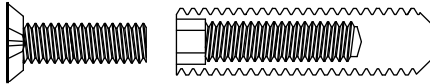
Clear Anodized (628)
Dark Bronze Anodized (313)

Cycle Testing

Grade 2
ANSI/BHMA Standard A156.26

Mounting Hardware

No exposed mounting fasteners when closed
Universal screw pack
AdjustaScrews for correcting frame fit problems up to 3/8"



Capacity

Supports weights up to 600lbs.
4'0" maximum door width

Sizes

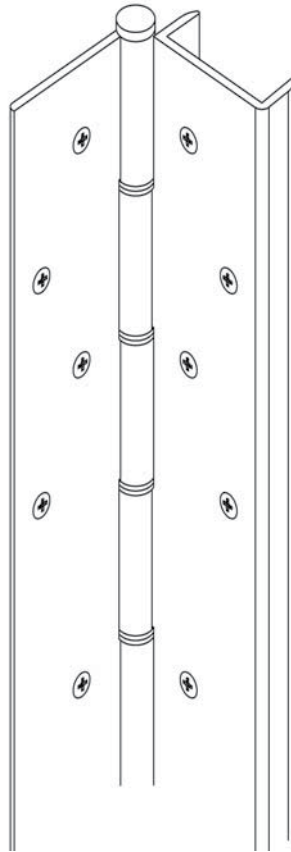
6'8", 7'0", 7'2", 8'0"

Hole Pattern

Symmetrically templated
Non-handed

Barrel Type Hinge

1/4" diameter Teflon-coated stainless steel pin
Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

Light Bronze Anodized (311)
Black Anodized (315)
Scratch-Resistant Powder Coated Paint

Other Features

Custom lengths - specify in inches
Custom hole pattern
Dutch door hinges - suffix hinge "DD"
Hospital tips - suffix hinge "HT"

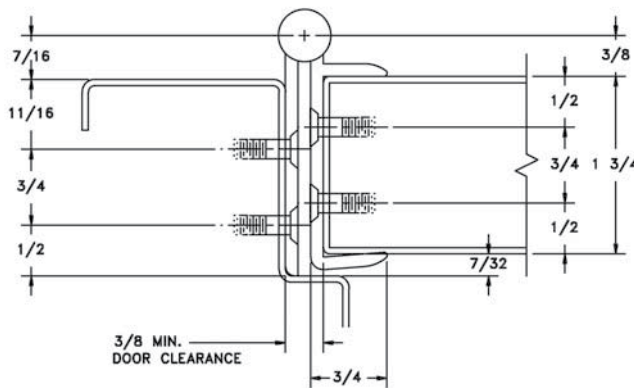
Fasteners

Tamper-proof security screws

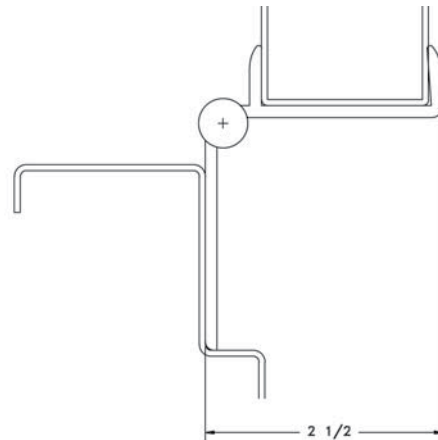
Electrical Modifications

Exposed switch with adjusting screw - suffix hinge "ES"
Current Transfer Prep - suffix hinge "CTP"

This pin and barrel edge-mounted hinge can be used in conjunction with automatically operated aluminum doors that have heavy cart traffic through them. Ideal for both commercial and institutional doors, shipping and receiving doors, as well as storefronts where door edge protection is critical. The AdjustaScrew fastener allows adjustment of the door in the frame to assure alignment of magnetic locks, access control systems and associated hardware.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

EG-108 Edge Guard

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STANDARD FEATURES

Material

6063-T6 aluminum

Finishes

Clear Anodized (628)
Dark Bronze Anodized (313)

Mounting Hardware

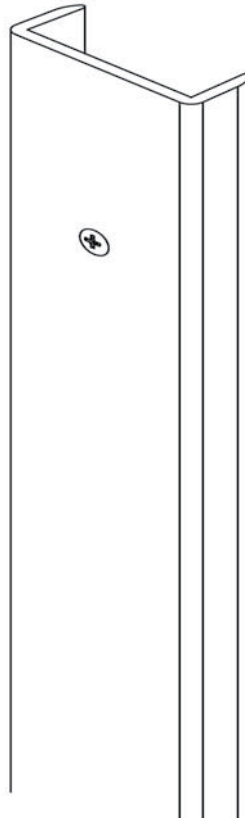
No exposed mounting fasteners
when closed

Sizes

6'8", 7'0", 7'2", 8'0"

Hole Pattern

Symmetrically templated
Non-handed



OPTIONAL FEATURES

Finishes

Light Bronze Anodized (311)
Black Anodized (315)
Scratch-Resistant Powder Coated Paint

Other Features

Custom lengths - specify in inches
Custom cutouts
Custom hole pattern for lead-lined doors
Dutch door application

Fasteners

Tamper-proof security screws

Hardware Cutouts

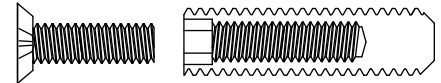
(requires handing information)

Flush bolts
ASA strike
Deadlock strike and latch
86 edge and ASA lock
Hospital latch
161 cutout

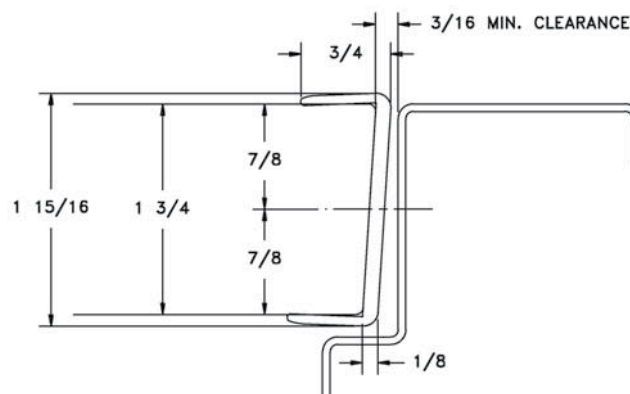
Measurements should be given from top of door to centerline of cut-out with handing.

Fasteners

Tamper-proof security screws
AdjustaScrew fasteners – suffix hinge "AS"



This aluminum edge guard features a full wrap on the lock side of the door that prevents unsightly dents and gouges. When used in conjunction with the HG-105 Hinge/Guard it provides a balanced aesthetic look.



DOOR CLOSED

1100 Series Pin & Barrel Type Continuous Aluminum Hinges

Continuous hinges shall be full height piano-type hinge providing full height door support.

- Supports weights up to 300 lbs. 3'0" maximum width
- Material to be extruded aluminum 6063-T6 alloy
- .1875 diameter stainless pin must be Teflon coated
- Each knuckle 2", including split nylon bearing at each separation for a quiet, smooth, self-lubricating operation
- Finish: Clear Anodized (628), Dark Bronze Anodized (313) Optional Finish: Black Anodized (315), Light Bronze Anodized (311), Scratch-Resistant Powder Coated Paint. Other finishes available upon request.
- Hinge pin cap
- Non-handed
- All hinges shall be furnished with manufacturer's recommended hardware pack per specific model application
- Exterior barrel diameter .375 (3/8 inch)
- Hinges shall meet ANSI/BHMA Standard A156.26 Grade 3
- Symmetrically templated hole pattern

Note: 10-Year Warranty on all Continuous Hinges

STANDARD FEATURES

Material

6063-T6 aluminum

Finishes

Clear Anodized (628)
Dark Bronze Anodized (313)

Cycle Testing

Grade 3
ANSI/BHMA A156.26

Mounting Hardware

No exposed mounting fasteners when closed
Universal screw pack

Capacity

Supports weights up to 300lbs.

Sizes

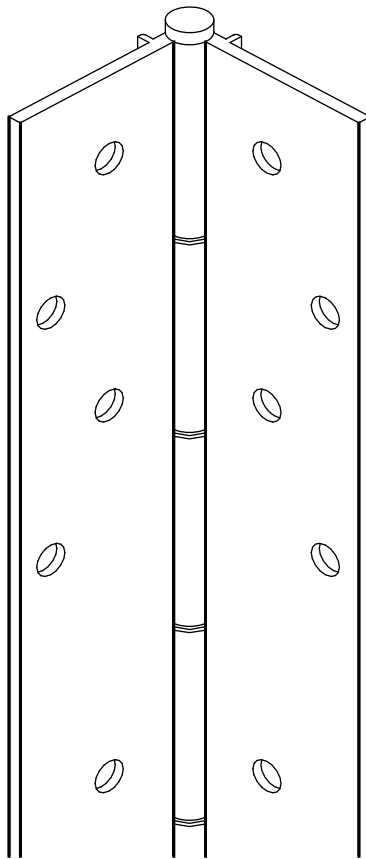
6'8", 7'0", 7'2", 8'0"
3'-0" maximum door width

Hole Pattern

Symmetrically templated
Non-handed

Barrel Type Hinge

3/16" diameter stainless steel pin
Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

Black Anodized (315)
Light Bronze Anodized (311)
Scratch-Resistant Powder Coated Paint

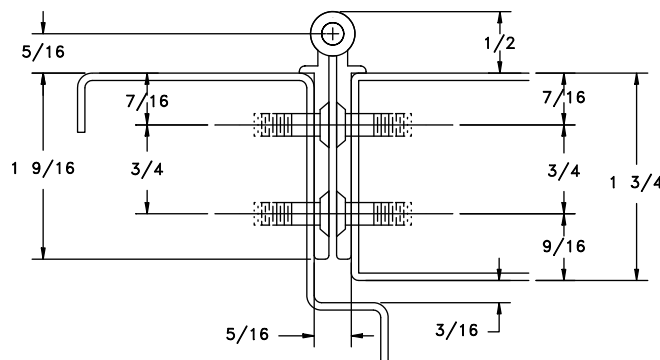
Other Features

Custom lengths - specify in inches
Custom hole pattern
Dutch door hinges - suffix hinge "DD"
Hospital tips - suffix hinge "HT"

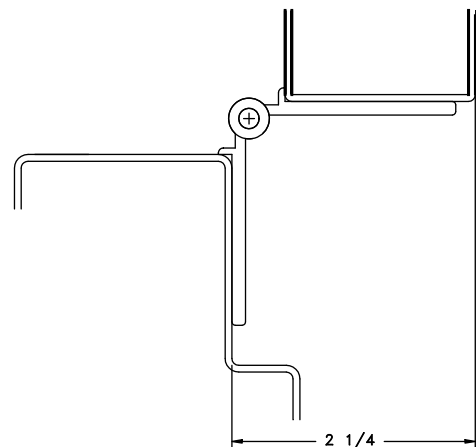
Fasteners

Tamper-proof security screws

Use this edge mounted aluminum pin and barrel hinge on any of today's store front entry systems and aluminum curtain-wall projects. This hinge can be used anywhere that would have required reinforcing pivots in the past.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

FM-1111 Edge Mount – Self Aligning

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STANDARD FEATURES

Material

6063-T6 aluminum

Finishes

Clear Anodized (628)
Dark Bronze Anodized (313)

Cycle Testing

Grade 3
ANSI/BHMA A156.26

Mounting Hardware

No exposed mounting fasteners when closed
Universal screw pack

Capacity

Supports weights up to 300lbs.

Sizes

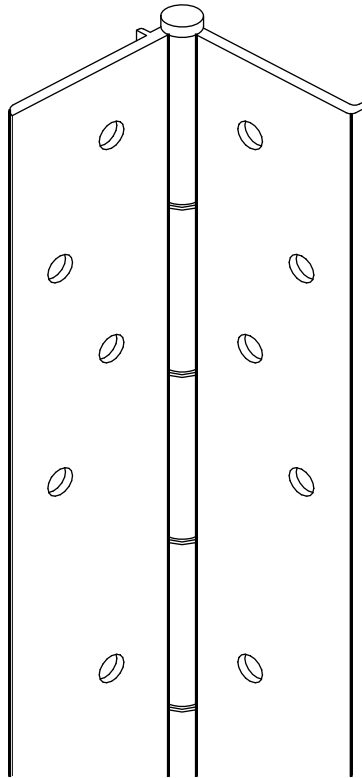
6'8", 7'0", 7'2", 8'0"
3'-0" maximum door width

Hole Pattern

Symmetrically templated
Non-handed

Barrel Type Hinge

3/16" diameter stainless steel pin
Long-life split nylon bearings



OPTIONAL FEATURES

Finishes

Black Anodized (315)
Light Bronze Anodized (311)
Scratch-Resistant Powder Coated Paint

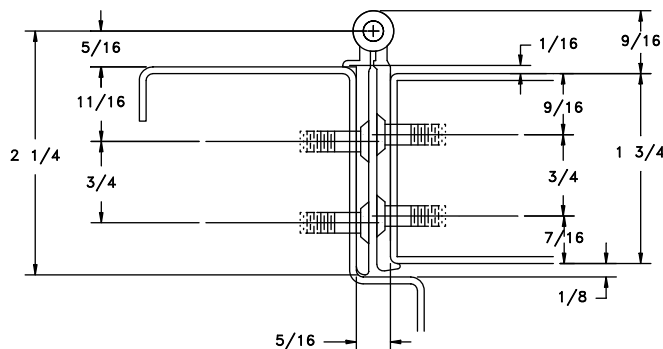
Other Features

Custom lengths - specify in inches
Custom hole pattern
Dutch door hinges - suffix hinge "DD"
Hospital tips - suffix hinge "HT"

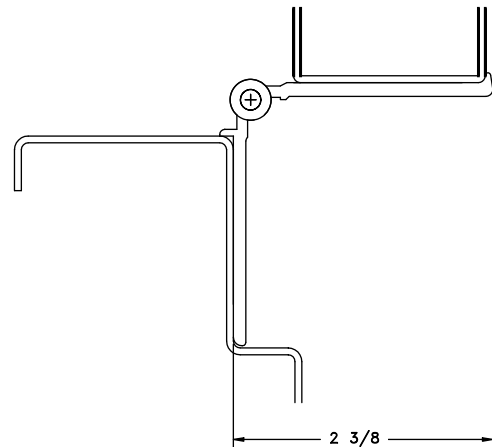
Fasteners

Tamper-proof security screws

Use this edge mounted aluminum pin and barrel hinge on any of today's store front entry systems and aluminum curtain-wall projects. This hinge can be used anywhere that would have required reinforcing pivots in the past.



DOOR CLOSED



DOOR OPEN 90°

900 Series Spring Loaded Pin & Barrel Type Continuous Stainless Steel Hinges

Continuous hinges shall be full height piano-type hinge providing full height door support.

- Supports weights up to 80lbs. 3' 0" maximum door width
- Material to be 14 gauge, stainless steel
- Patented .25 diameter 303 stainless steel self closing pin assembly
- Exterior barrel diameter .438 (7/16)
- Adjustable, tamper resistant Torx Head end caps
- Each knuckle 2", including split nylon bearing at each separation for a quiet, smooth, self-lubricating operation
- Finish: US32D Satin Stainless Steel (630). Optional Finish: US32 Bright Stainless Steel (629), Bright Dipped Anodized Aluminum Cover Caps
- Non-Handed
- All hinges shall be furnished with manufacturer's recommended hardware pack per specific model application
- Removable roll pin for spring loaded adjustment
- Symmetrically templated hole pattern

Note: 10-Year Warranty on all Continuous Hinges



ASSA ABLOY

FS-902-TP Flush Mount

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260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

Heavy-duty 14 Gauge stainless steel

Finishes

US32D Satin Stainless Steel (630)

Spring-Loaded Barrel Type Hinge

1/4" diameter stainless steel pin with stainless steel spring mechanism
Torx tip cap to adjust spring tension
Long-life split nylon bearings
28 bearing surfaces

Torx Adjusting Screw

Adjust tension on door to close tightly for out-swinging ADA compliance

Mounting Hardware

1/4" 20 pan head machine screws
Concealed by cover caps

Capacity

Close door weighing up to 80lbs.

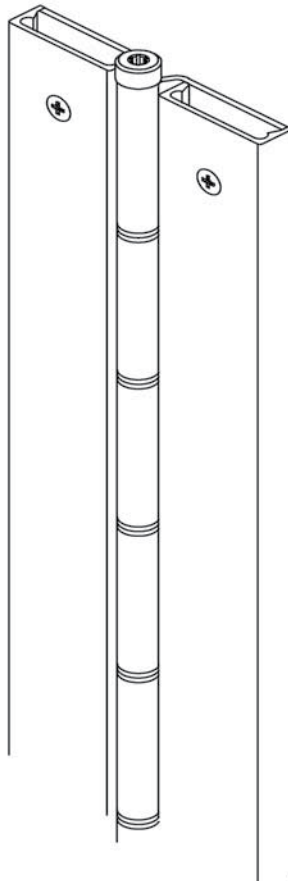
Size

54" & 57"

Non-Handed

Use the same hinge for right- or left- Handed doors

For Doors over 3'0" consult factory



OPTIONAL FEATURES

Finishes

US32 Bright Stainless Steel (629)
Bright Dipped Anodized Aluminum Cover Caps

Other Features

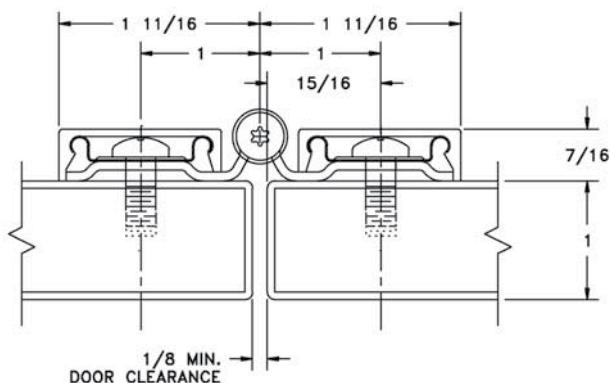
Custom lengths - specify in inches
Custom hole pattern

Fasteners

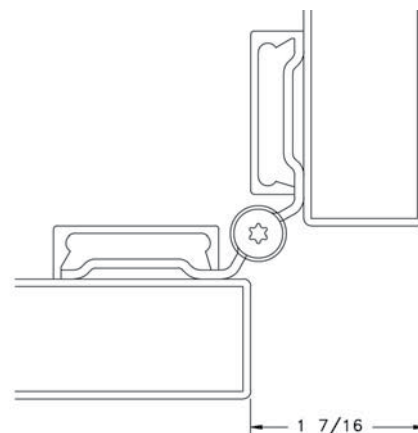
Tamper-proof security screws

USA patent no. 4823437
Canadian patent no. 1303804

Ideal for damp or corrosive environments, Markar's stainless toilet partition hinge adds years of life to your high-quality partition. Markar understands durability!



DOOR CLOSED



DOOR OPEN 90°

400 Series Spring Loaded Pin & Barrel Type Continuous Aluminum Hinges

Continuous hinges shall be full height piano-type hinge providing full height door support

- Supports weights up to 80lbs. 3'0" maximum width
- Material to be extruded aluminum 6463-T5 alloy
- Patented .25 diameter 303 stainless steel self closing pin assembly
- Each knuckle 2", including split nylon bearing at each separation
For a quiet, smooth, self-lubricating operation
- Finish: Clear Anodized (628), Bright Dipped Anodized. Other finishes available upon request.
- Adjustable, tamper resistant Torx Head end caps
- Non-handed
- Exterior barrel diameter .515 (1/2 inch)
- Material thickness less than .125 inches
- Material weight will be no less than 1.5lbs. per foot
- Removable roll pin for spring loaded adjustment
- Symmetrically templated hole pattern

Note: 10-Year Warranty on all Continuous Hinges



ASSA ABLOY

FS-402-TP Flush Mount

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260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

STANDARD FEATURES

Material

6463-T5 aluminum

Finishes

Bright Dipped Anodized

Spring-Loaded Barrel Type Hinge

1/4" diameter stainless steel pin with stainless steel spring mechanism
Torx tip cap to adjust spring tension
Long-life split nylon bearings
28 bearing surfaces

Torx Adjusting Screw

Adjust tension on door to close tightly for out-swinging ADA compliance

Mounting Hardware

Concealed by cover caps

Locking Security Covers

Bright dipped aluminum

Capacity

Close door weighing up to 80lbs.

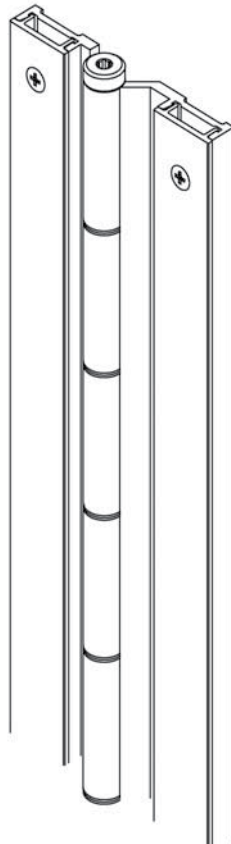
Size

54"

Non-handed

Use the same hinge for right- or left-handed doors

For Doors over 3'0" consult factory



OPTIONAL FEATURES

Features

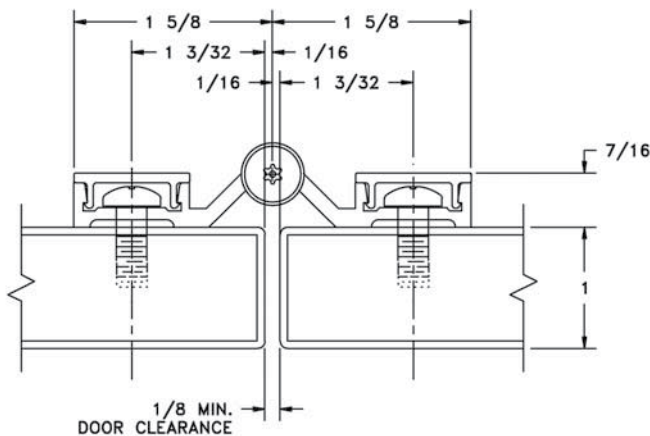
Custom lengths - specify in inches
Custom hole pattern
Lift-up safety feature

Fasteners

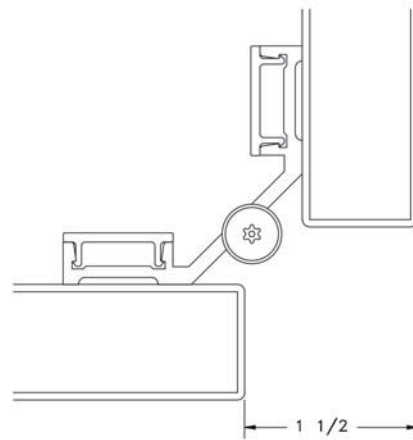
Tamper-proof security screws

USA patent no. 4823437
Canadian patent no. 1303804

Specify Markar to create the total finished look that your high-quality toilet partition deserves. The Markar continuous spring hinge gives a clean, finished look while virtually eliminating the "sight line" that multi-part systems cause. Continuous hinges also give complete support along the entire length of the partition door.



DOOR CLOSED



DOOR OPEN 90°



ASSA ABLOY

FSTP10021 & FSTP10022

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STANDARD FEATURES

Material

Flush mount steel (Spring loaded) pin and barrel hinge

Finishes

US32D Brushed Satin Stainless Steel (630)

Mounting Hardware

#14 x 3/4 T-27 Torx Button Head Sheet Metal Screw

Capacity

Close door weighing up to 80lbs.

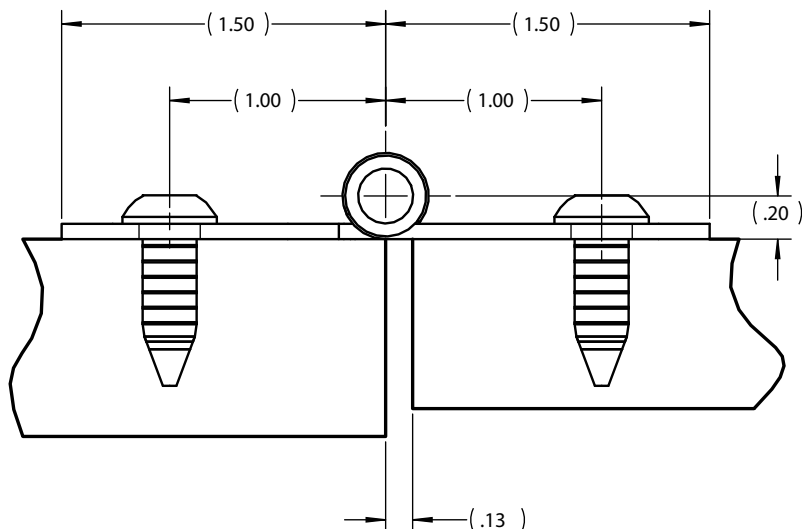
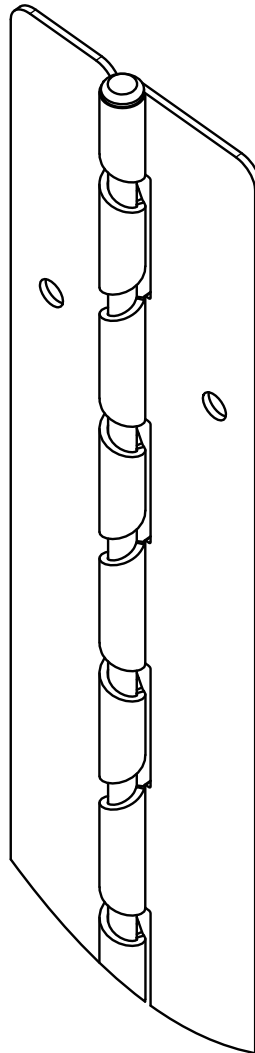
Size

54.5

Non-Handed

Use the same hinge for right- or left- Handed doors

Self-Closing Gravity Pin & Barrel



Edge Mount Hinges

For hinge models FM-100, FM-200, FM-1100, & FM-1111

Screw type	Aluminum	Bronze	6'8"-7'0"-7'2"	8'0"	10'0"
10-24 x 3/4" Phillips flat head undercut machine screw	MP-26	MP-27	42	46	54
#10 x 1 1/4" Phillips flat head undercut sheet metal screw	MP-28	MP-29	42	46	54
#10 x 1/2" Phillips flat head undercut self-drilling Tek screw	MP-30	MP-31	42	46	54

For hinge models FM-300, HG-311, HG-315, & FM-327

Screw type	Satin	6'8"-7'0"-7'2"	8'0"	10'0"
#10 x 1/2" Phillips flat head undercut self-drilling Tek screw	MP-3	42	46	54
#10 x 1 1/4" Phillips flat head undercut sheet metal screw	MP-32	42	46	54
10-24 x 1/2" Phillips flat head undercut machine screw	MP-33	42	46	54

For hinge/guard model HG-105

Screw type	Aluminum	Bronze	6'8"-7'0"-7'2"	8'0"	10'0"
10-32 x 3/4" Phillips flat head undercut machine screw	MP-7	MP-7	21	23	27
1 3/8" Adjusta-Screw with 10-32 internal thread	MP-25	MP-25	21	23	27
10-24 x 3/4" Phillips flat head undercut machine screw	MP-26	MP-27	4	46	54
#10 x 1 1/4" Phillips flat head undercut sheet metal screw	MP-28	MP-29	42	46	54
#10 x 1/2" Phillips flat head undercut self-drilling Tek screw	MP-30	MP-31	42	46	54

For hinge/guard models HG-305, HG-310, HG-322, & HG-326

Screw type	Satin	6'8"-7'0"-7'2"	8'0"	10'0"
#10 x 1/2" Phillips flat head undercut self-drilling Tek screw	MP-3	21	23	27
10-32 x 3/4" Phillips flat head undercut machine screw	MP-7	21	23	27
1 3/8" Adjusta-Screw with 10-32 internal thread	MP-25	21	23	27
#10 x 1 1/4" Phillips flat head undercut sheet metal screw	MP-32	42	46	54
10-24 x 1/2" Phillips flat head undercut machine screw	MP-33	42	46	54

For hinge/guard model HG-323

Screw type	Satin	6'8"-7'0"-7'2"	8'0"	10'0"
#10 x 1/2" Phillips flat head undercut self-drilling Tek screw	MP-3	21	23	27
#10 x 1 1/4" Phillips flat head undercut sheet metal screw	MP-32	21	23	27
10-24 x 1/2" Phillips flat head undercut machine screw	MP-33	30	32	38
10-24 x 1 3/4" sleeve bolt	MP-34	9	10	11

For edge/guard model EG-108

Screw type	Aluminum	Bronze	6'8"-7'0"-7'2"	8'0"	10'0"
#10 x 1 1/4" Phillips flat head undercut sheet metal screw	MP-28	MP-29	8	10	12

For edge/guard models EG-308, EG-C-308, & EG-T-308

Screw type	Satin	6'8"-7'0"-7'2"	8'0"	10'0"
#10 x 1 1/4" Phillips flat head undercut sheet metal screw	MP-32	8	10	12

For security hinge models FM-3500, FS-3501, & FS-3502

Screw type	Standard	Security	6'8"-7'0"-7'2"	8'0"	10'0"
12-24 x 1/2" flat head undercut machine screw	MP-35	MP-39	42	46	54
MP-35 has a number 3 Phillips recess					
MP-39 has a Torx recess with security pin					

Full Surface Hinges

For models FS-101, FS-102

Screw type	Aluminum	Bronze	6'8"-7'0"-7'2"	8'0"	10'0"
¼-20 x ¾" Phillips pan head self-drilling Tek screw	MP-13	MP-13	32	36	40
#8 x ¾" Phillips flat head sheet metal screw	MP-8	MP-9	4	4	4

For models FS-201, FS-202, FS-302, & FS-321

Screw type	Satin	6'8"-7'0"-7'2"	8'0"	10'0"
¼-20 x ¾" Phillips pan head self-drilling Tek screw	MP-13	32	36	40
Cover clip	MP-606	10	12	16
#8 x ¾" Phillips flat head sheet metal screw	MP-8	4	4	4

For swing clear model FS/SC-309

Screw type	Satin	6'8"-7'0"-7'2"	8'0"	10'0"
#10 x ½" Phillips flat head undercut self-drilling Tek screw	MP-3	22	24	28
¼-20 x ¾" Phillips pan head self-drilling Tek screw	MP-13	16	18	20
#10 x 1 ¼" Phillips flat head undercut sheet metal screw	MP-32	22	24	28
10-24 x ½" Phillips flat head undercut machine screw	MP-33	22	24	28
Cover clip	MP-606	5	6	8
#8 x ¾" Phillips flat head sheet metal screw	MP-8	2	2	2

Half Surface & Half Mortise Hinges

For hinge models HS-103 & HM-104

Screw type	Aluminum	Bronze	6'8"-7'0"-7'2"	8'0"	10'0"
¼-20 x ¾" Phillips pan head self-drilling Tek screw	MP-13	MP-13	16	18	20
10-24 x ¾" Phillips flat head undercut machine screw	MP-26	MP-27	21	23	27
#10 x 1 ¼" Phillips flat head undercut sheet metal screw	MP-28	MP-29	21	23	27
#10 x ½" Phillips flat head undercut self-drilling Tek screw	MP-30	MP-31	21	23	27
#8 x ¾" Phillips flat head sheet metal screw	MP-8	MP-9	2	2	2

For hinge models HS-203 & HM-204

Screw type	Prime Paint	6'8"-7'0"-7'2"	8'0"	10'0"
¼-20 x ¾" Phillips pan head self-drilling Tek screw	MP-13	14	16	20
10-24 x ¾" Phillips flat head undercut machine screw	MP-26	21	23	27
#10 x 1 ¼" Phillips flat head undercut sheet metal screw	MP-28	21	23	27
#10 x ½" Phillips flat head undercut self-drilling Tek screw	MP-30	21	23	27
Cover clip	MP-606	5	6	8
#8 x ¾" Phillips flat head sheet metal screw	MP-8	2	2	2

For hinge models HS-303, HM-304, & HG-306

Screw type	Satin	6'8"-7'0"-7'2"	8'0"	10'0"
#10 x ½" Phillips flat head undercut self-drilling Tek screw	MP-3	21	23	27
¼-20 x ¾" Phillips pan head self-drilling Tek screw	MP-13	14	16	20
#10 x 1 ¼" Phillips flat head undercut sheet metal screw	MP-32	21	23	27
10-24 x ½" Phillips flat head undercut machine screw	MP-33	21	23	27
Cover clip	MP-606	5	6	8
#8 x ¾" Phillips flat head sheet metal screw	MP-8	2	2	2

Toilet Partition Hinges

For hinge models FM-400-TP

Screw type	Satin	54"	57"
#10 x 1 ¼" Phillips flat head undercut zinc metal screw	MP-28	26	26
#10 x ½" Phillips flat head undercut zinc self-drilling Tek screw	MP-30	26	26

Security option	Satin	54"	57"
#10 x 1 ¼" Spanner recess flat head undercut stainless steel sheet metal screw	MP-5	26	26
10-24 x ½" Spanner recess flat head undercut stainless steel machine screw	MP-6	26	26

For hinge models FS-401-TP, FS-402-TP

Screw type	Bright Dip	54"	57"
#14 x ¾" Torx button head sheet metal screw	MP-49	12	12
#8 x ¾" Phillips flat head self-drilling tek screw	MP-8	4	4

Security option	Bright Dip	54"	57"
#10-24 x 1 ⅛" one-way truss head shoulder bolt	MP-37	12	12
10-24 x ⅝" one-way truss head sleeve bolt	MP-38	12	12
#8 x ¾" Torx flat head self-drilling Tek screw	MP-61	4	4

For hinge models HG-406-TP, HG-407TP

Screw type	Bright Dip	54"	57"
#10 x 1 ¼" Phillips flat head zinc sheet metal screw	MP-28	12	12

Security option	Bright Dip	54"	57"
#10 x 1 ¼" Spanner recess flat head stainless steel sheet metal screw	MP-5	12	12

Adjusta-Screw option	Bright Dip	54"	57"
10-32 x ¾" Phillips flat head undercut machine screw	MP-7	6	6
1 ⅜" Adjusta-Screw with 10-32 internal thread	MP-25	6	6

For hinge models FM-900-TP

Screw type	Stainless Steel	54"	57"
#10 x 1 ¼" Phillips flat head undercut stainless steel sheet metal screw	MP-32	26	26
#10 x ½" Phillips flat head nickel self-drilling Tek screw	MP-3	26	26

Security option	Stainless Steel	54"	57"
#10 x 1 ¼" Spanner recess flat head stainless steel sheet metal screw	MP-5	26	26
#10 x ½" Spanner recess flat head stainless steel undercut machine screw	MP-6	26	26

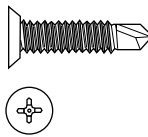
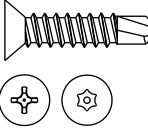
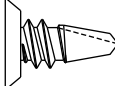
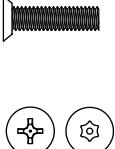
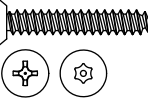
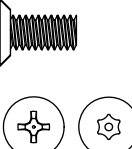
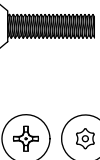
Toilet Partition Hinges

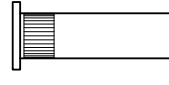

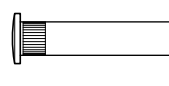




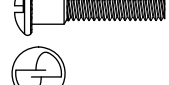

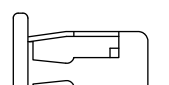
For hinge models FS-901-TP, FS-902-TP










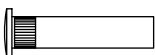
Screw type	Stainless Steel	54"	57"
#14 x 3/4" Torx button head sheet metal screw	MP-49	12	12
Cover clip	MP-606	6	6
#8 x 3/4" Phillips flat head self-drilling Tek screw	MP-8	4	4
Security option	Stainless Steel	54"	57"
10-24 x 1 1/8" One way truss head chrome shoulder bolt	MP-37	12	12
10-24 x 5/8" One way truss head chrome sleeve bolt	MP-38	12	12
#8 x 3/4" Torx flat head self-drilling Tek screw	MP-61	4	4

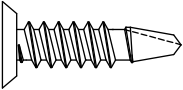
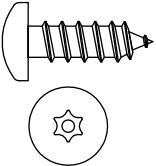
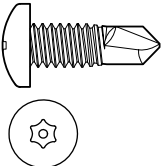
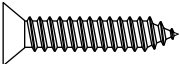
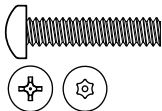

For hinge models FS-910-TP

Screw type	Stainless steel	54"	57"
#10 x 1/2" Phillips flat head nickel self-drilling Tek screw	MP-3	26	26
Security option	Stainless Steel	54"	57"
10-24 x 1 1/8" one-way truss head shoulder belt	MP-37	26	26
10-24 x 5/8" one-way truss head sleeve bolt	MP-38	26	26

	Product Number	Description	Properties
	MP-10	#10 x 7/8" Phillips Flat Head Undercut Self-Drilling Screw Replaces MP-3 and MP-33 (Quantity 100)	410 Stainless Steel
	MP-11	Replaces MP-31 and MP-27 (Quantity 100)	Black Zinc
	MP-12	Replaces MP-30 and MP-26 (Quantity 100)	Zinc Plated
	MP-8	#8 x 3/4" Flat Head Self Drilling Tek Screw For attaching 100, 200, and 300 series covers (Quantity 100)	Zinc Phillips
	MP-9	For attaching 100, 200, and 300 series covers (Quantity 100)	Bronze
	MP-61	For attaching 100, 200, and 300 series covers (Quantity 100)	Zinc Torx
	MP-50	#12 x 1/2" Phillips Flat Head Undercut Self-Drilling Screw (Quantity 100)	Zinc
	MP-16	1/4-20 x 3/4" Flat Head Machine Screw For reinforcing pivots on metal (Quantity 100)	Zinc Phillips
	MP-63	For reinforcing pivots on metal (Quantity 100)	Zinc Torx
	MP-28	#10 x 1-1/4" Flat Head Undercut Sheet Metal Screw For edge mounting to wood (Quantity 100)	Zinc Phillips
	MP-29	For edge mounting to wood (Quantity 100)	Bronze Phillips
	MP-32	For edge mounting to wood (Quantity 100)	Stainless Steel Phillips
	MP-54	For edge mounting to wood (Quantity 100)	Stainless Steel Torx
	MP-66	12-24 x 3/4" Flat Head Undercut Machine Screw Used with MP-58/3500 series for edge mounting to metal (Q. 100)	Stainless Steel Phillips
	MP-67	Used with MP-58/3500 series for edge mounting to metal (Q. 100)	Stainless Steel Torx
	MP-7	10-32 x 3/4" Flat Head Machine Screw Used with MP-25 Adjusta-Screw (Quantity 100)	Stainless Steel Phillips
	MP-55	Used with MP-25 Adjusta-Screw (Quantity 100)	Stainless Steel Torx

	Product Number	Description	Properties
	MP-24	1/4-20 x 1-3/8" Sleeve Bolt For surface mounting to wood (Quantity 100)	Aluminum
	MP-21	10-24 x 1-3/4" Sleeve Bolt For surface mounting to wood (Quantity 100)	Aluminum
	MP-34	For surface mounting to wood (Quantity 100)	Steel
	MP-38	10-24 x 5/8" One Way Truss Head Sleeve Bolt For surface mount toilet partition hinges Consult factory for pricing and availability	Chrome
	MP-37	10-24 x 1-1/8" One Way Truss Head Shoulder Bolt For surface mount toilet partition hinges Consult factory for pricing and availability	Chrome
	MP-19	6 SJN 10-24 Molly Jack Nut 3/8" hole (Quantity 100)	Zinc
	MP-20	8 SJN 1/4-20 Molly Jack Nut 7/16" hole (Quantity 100)	Zinc
	MP-25	1-3/8" Adjusta-Screw with 10-32 Internal Thread and Hex Head Adjustment Right Hand used with MP-7 screw (Quantity 100) Left Hand used with MP-7 screw (Quantity 100) Note: 5/16" pilot hole required for 3/8" - 16 tap	
	MP-57		
	MP-58	1-3/8" Adjusta-Screw with 12-24 Internal Thread and Hex Head Adjustment Right Hand used with MP-66 (Quantity 100)	

	Product Number	Description	Properties
 	MP-52	10-24 x 1/2" Flat Head Undercut Machine Screw For edge mounting to metal (Quantity 100)	Stainless Steel Torx
	MP-27	10-24 x 3/4" Phillips Flat Head Undercut Machine Screw For edge mounting to metal (Quantity 100)	Bronze
  	MP-35 MP-39	12-24 x 1/2" Flat Head Machine Screw For FM-3500 security hinge (Quantity 100) For FM-3500 security hinge (Quantity 100)	Stainless Steel Phillips Stainless Steel Torx
  	MP-60	12-16 x 1-1/4" Flat Head Masonry Screw (Quantity 100)	Zinc
	MR-RSP	Screw Pack Specify hinge model when ordering. May require 2-3 packs depending on model and length.	
	MP-22 MP-23 MP-56	1/4-20 x 1-3/4" Sleeve Bolt For surface mounting to wood (Quantity 100) For surface mounting to wood (Quantity 100) For surface mounting to wood (Quantity 100)	Aluminum Steel Bronze

	Product Number	Description	Properties
	MP-53	#10 x 3/4" Phillips Flat Head Undercut Self-Drilling Screw For edge mounting to wood (Quantity 100)	Zinc
	MP-49	#14 x 3/4" T-27 Torx Button Head Sheet Metal Screw (Quantity 100)	Stainless
	MP-62	1/4-20 x 3/4" Pan Head Self-Drilling Screw For surface mounting to metal (Quantity 100)	Zinc Torx
	MP-18	#14 x 1-1/4" T-27 Phillips Flat Head Sheet Metal Screw For mounting reinforcing pivots to wood (Quantity 100)	Zinc
	MP-14	1/4-20 x 1" Pan Head Machine Screw For surface mounting to metal (Quantity 100)	Zinc Phillips
	MP-65	For surface mounting to metal (Quantity 100)	Torx



ASSA ABLOY

Tools, Parts and Accessories

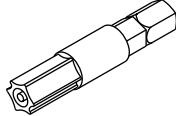
Markar Architectural Products, Inc. a subsidiary of Adams Rite Manufacturing Co.
260 Santa Fe Street, Pomona, CA 91767 • 800-872-3267 • 909-632-2300 • 800-232-6752 fax • www.markar.com

MT-T20, 27, & 15 Torx Driver Bit

T-20 used on MP-39, 52, 54 & 55

T-27 used on MP-49

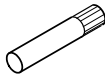
T-15 used on MP-61



The T-27 driver bit is also used for adjusting 400 & 900 series spring-loaded hinges

MP-36 Knurl Pin

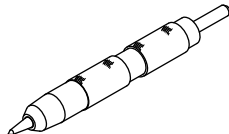
Replacement pin for spring-loaded toilet partition hinges



MT-806 Center Punch

For centering screw holes when installing hinges and other countersunk hardware.

Bevel tip assures correct alignment.

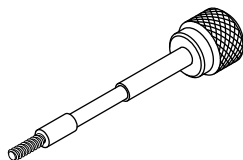


Installer Rod

For installing Molly Jack Nuts with MT-1956 installer

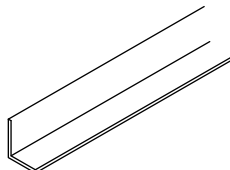
MT-R-2 for 6S-JN 10-24 nuts

MT-R-3 for 8S-JN 1/4-20 nuts



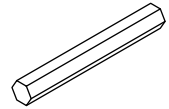
MP-AB Angle Board

2" x 2" Heavy-duty cardboard angles for shipping hinge cartons
Length 90"



MT-AD Hex Driver Bit

Used for installing MP-25 Adjusta-Screw fasteners
3/16" diameter (.188)

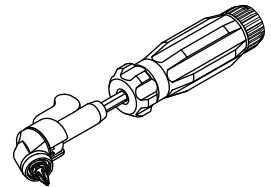


MT- LHT

3/8 – 16 Left Hand Tap

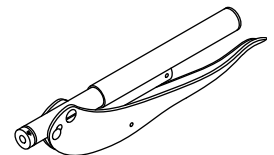
MTSP100 Right Angle Skewdriver

Used for installing HG-310 & HG-311 Hinge/Guards



MT-1956 Molly Jack Nut Installer

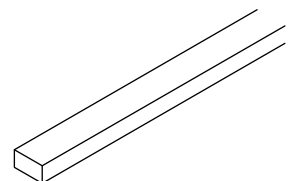
Used for installing Molly Jack Nuts. Includes 1/4-20 installer rod.

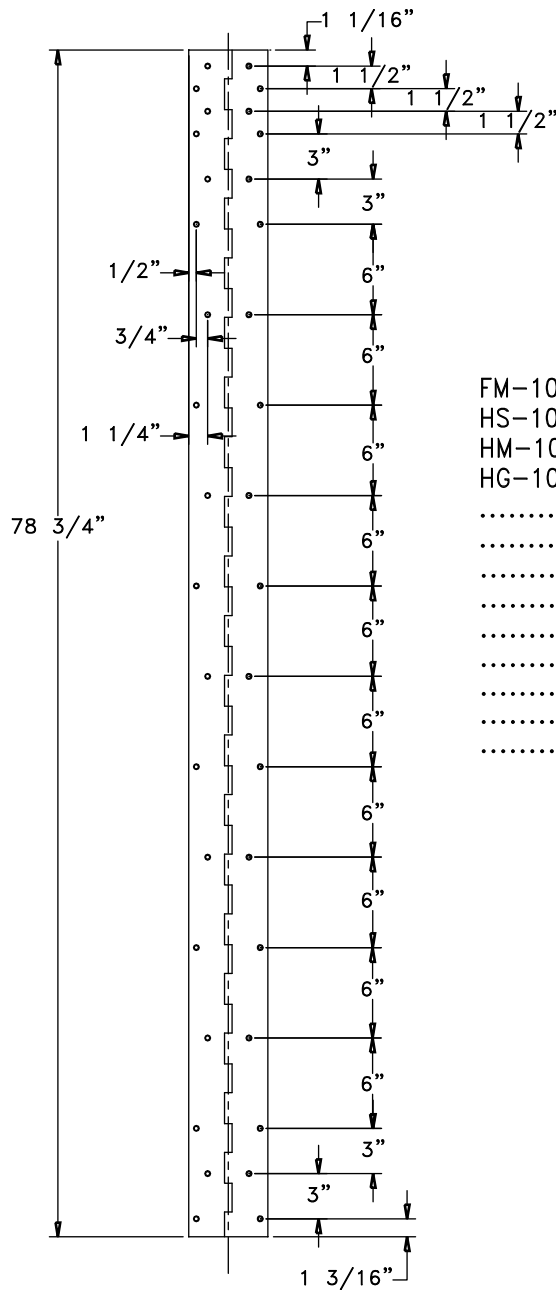


MP-UBOX Hinge Carton

Please Specify:

- Length
- 1" x 3" **or**
- 1-1/2" x 3"



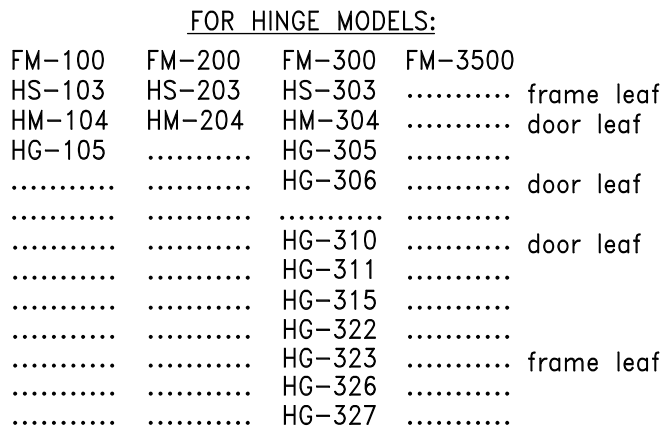


FOR HINGE MODELS:

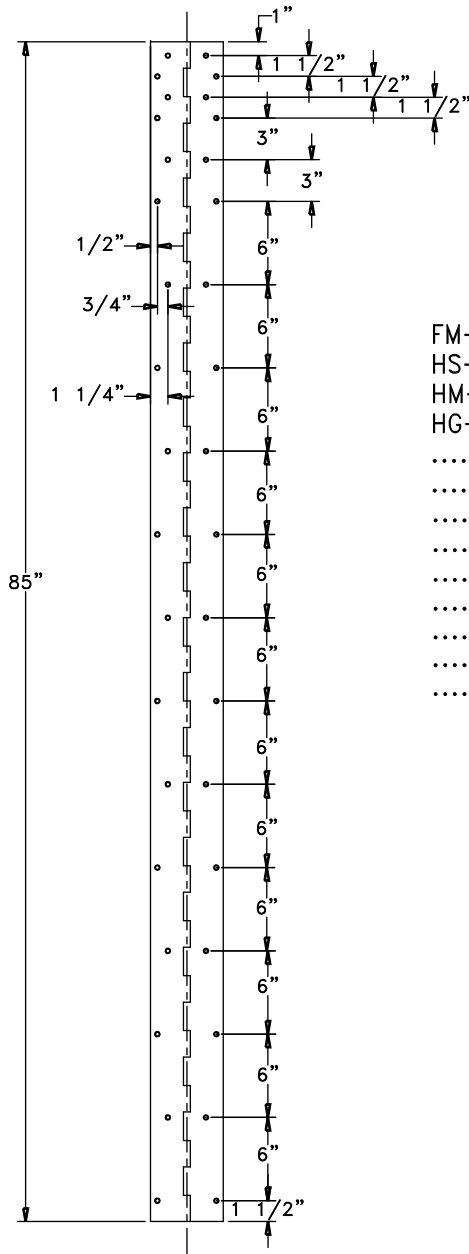
FM-100	FM-200	FM-300	FM-3500
HS-103	HS-203	HS-303	..... frame leaf
HM-104	HM-204	HM-304	..... door leaf
HG-105	.....	HG-305	.....
.....	.....	HG-306	..... door leaf
.....
.....	.....	HG-310	..... door leaf
.....	.....	HG-311	.....
.....	.....	HG-315	.....
.....	.....	HG-322	.....
.....	.....	HG-323	..... frame leaf
.....	.....	HG-326	.....
.....	.....	HG-327	.....

***NOTE: THIS IS HINGE LENGTH REQUIRES HANDING FOR SPECIFIC MODELS. PLEASE CONSULT FACTORY FOR DETAILS**

TITLE TEMPLATED HOLE PATTERN FOR 6'8" HINGES		DRAWN BY S.R.B.	DATE 121300	R E V I S I O N		
				NO.	DESCRIPTION	DATE
CHECKED BY		DATE	01	HOLE PATT. REVISION	012403	S.R.B.
PART NO. FMHOLEPATT68	MATERIAL (STAINLESS) STEEL OR 6063-T5 ALUMINUM	APPROVED BY	DATE			
FILE NAME FMHOLEPATT68	FINISH ALL	VENDOR				
SCALE N.T.S.	SLIT WIDTH	VENDORS NO.				



TITLE TEMPLATED HOLE PATTERN FOR 7'0" HINGES		DRAWN BY S.R.B.	DATE 121300	R E V I S I O N			
				NO.	DESCRIPTION	DATE	BY
		CHECKED BY	DATE	01	HOLE PATT. REVISION	012403	S.R.B.
PART NO. FMHOLEPATT70	MATERIAL (STAINLESS) STEEL OR 6063-T5 ALUMINUM	APPROVED BY	DATE				
FILE NAME FMHOLEPATT70	FINISH ALL	VENDOR					
SCALE N.T.S.	SLIT WIDTH	VENDORS NO.					

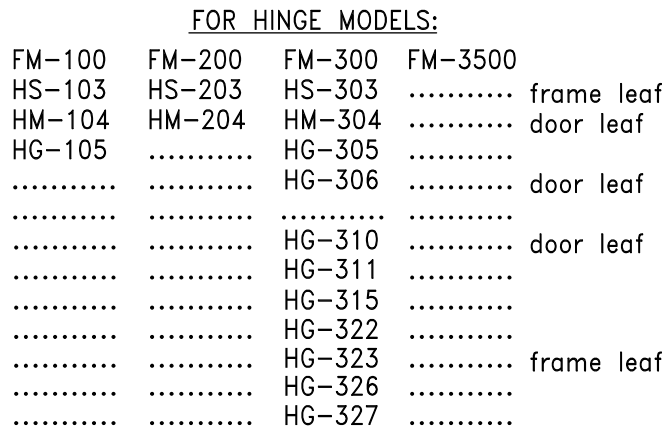


FOR HINGE MODELS:

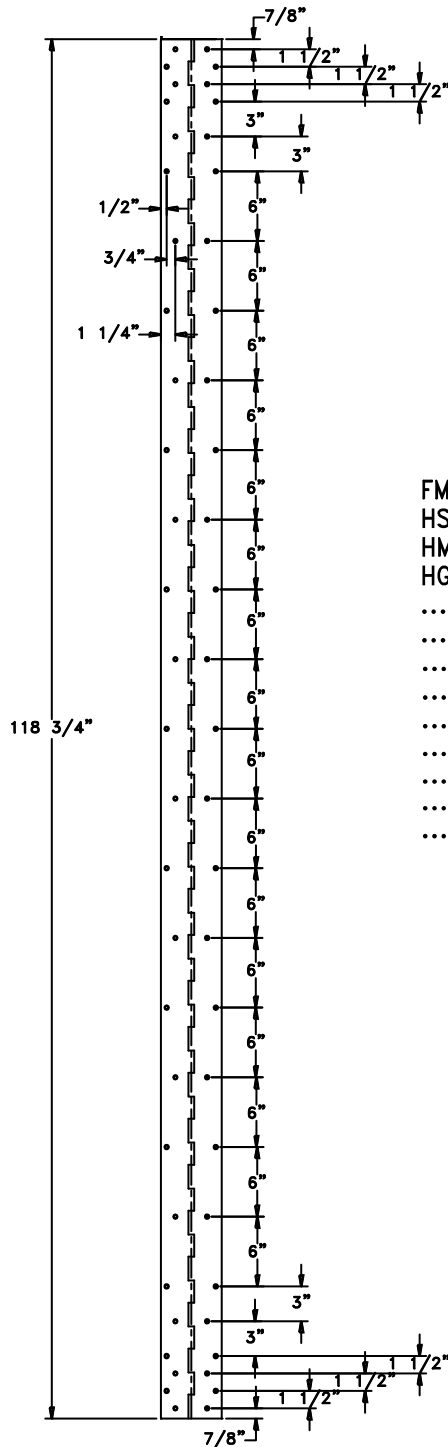
FM-100	FM-200	FM-300	FM-3500
HS-103	HS-203	HS-303	..... frame leaf
HM-104	HM-204	HM-304	..... door leaf
HG-105	.....	HG-305	.....
.....	.....	HG-306	..... door leaf
.....
.....	.....	HG-310	..... door leaf
.....	.....	HG-311	.....
.....	.....	HG-315	.....
.....	.....	HG-322	.....
.....	.....	HG-323	..... frame leaf
.....	.....	HG-326	.....
.....	.....	HG-327	.....

*NOTE: THIS IS HINGE LENGTH REQUIRES HANDING FOR SPECIFIC MODELS. PLEASE CONSULT FACTORY FOR DETAILS

TITLE TEMPLATED HOLE PATTERN FOR 7'-2" HINGES		DRAWN BY S.R.B.	DATE 121300	R E V I S I O N			
				NO.	DESCRIPTION	DATE	BY
PART NO. FMHOLEPATT72	MATERIAL (STAINLESS) STEEL OR 6063-T5 ALUMINUM	CHECKED BY	DATE	01	HOLE PATT. REVISION	012403	S.R.B.
FILE NAME FMHOLEPATT72	FINISH ALL	APPROVED BY	DATE				
SCALE N.T.S.	SLIT WIDTH	VENDOR					
		VENDORS NO.					



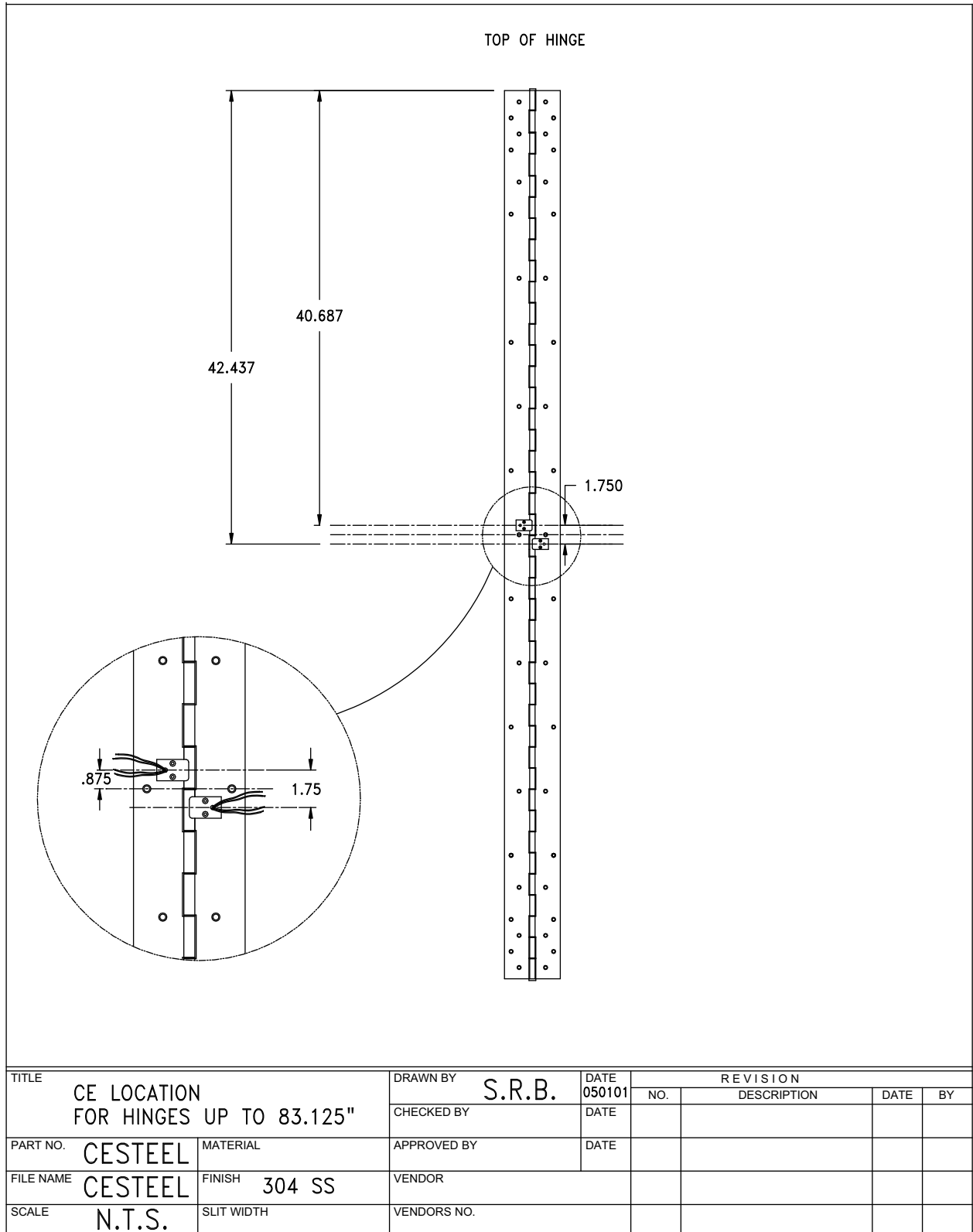
TITLE TEMPLATED HOLE PATTERN FOR 8'0" HINGES		DRAWN BY S.R.B.	DATE 121300	R E V I S I O N			
				NO.	DESCRIPTION	DATE	BY
		CHECKED BY	DATE	01	HOLE PATT. REVISION	012403	S.R.B.
PART NO. FMHOLEPATT80	MATERIAL (STAINLESS) STEEL OR 6063-T5 ALUMINUM	APPROVED BY	DATE				
FILE NAME FMHOLEPATT80	FINISH ALL	VENDOR					
SCALE N.T.S.	SLIT WIDTH	VENDORS NO.					



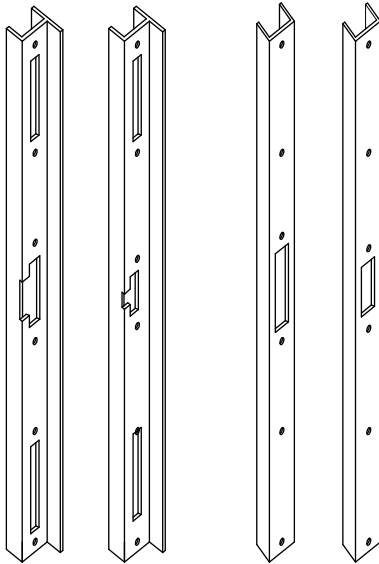
FOR HINGE MODELS:

FM-100	FM-200	FM-300	FM-3500	
HS-103	HS-203	HS-303	.....	frame leaf
HM-104	HM-204	HM-304	.....	door leaf
HG-105	.....	HG-305	.....
.....	.....	HG-306	.....	door leaf
.....	
.....	.....	HG-310	.....	door leaf
.....	.....	HG-311	.....
.....	.....	HG-315	.....
.....	.....	HG-322	.....
.....	.....	HG-323	.....	frame leaf
.....	.....	HG-326	.....
.....	.....	HG-327	.....

TITLE TEMPLATED HOLE PATTERN FOR 10'-0" HINGES		DRAWN BY S.R.B.	DATE 121300	R E V I S I O N			
				NO.	DESCRIPTION	DATE	BY
PART NO. FMHOLEPATT10	MATERIAL (STAINLESS) STEEL OR 6063-T5 ALUMINUM	CHECKED BY	DATE	01	HOLE PATT. REVISION	012403	S.R.B.
FILE NAME FMHOLEPATT10	FINISH ALL	APPROVED BY	DATE				
SCALE N.T.S.	SLIT WIDTH	VENDOR					
		VENDORS NO.					



DOOR EDGE GUARDS AND ASTRAGALS FOR WOOD AND PLASTIC-FACE COMPOSITE DOORS



GENERAL SPECIFICATIONS

MATERIAL:

EDGE GUARDS ARE FABRICATED FROM 18 GA. (.049) GALV. AND ASTRAGALS WHICH ARE ATTACHED ARE FABRICATED FROM 16 GA. (.065) GALV.

FLAT ASTRAGALS (SET NO. .96TB) ARE FABRICATED FROM 1/8" HRPO EDGE BAR STOCK

FINISH:

STANDARD FINISH FOR EDGE GUARDS AND ASTRAGALS ARE GREY POWDER COAT PRIMER UNLESS OTHERWISE SPECIFIED

MOUNTING:

ALL EDGE GUARDS AND ASTRAGALS ARE MOUNTED WITH #10 x 1 1/4" SHEET METAL SCREWS. HOLES ARE LOCATED 3" FROM EACH END, 3" FROM EACH CUT OUT AND THE REMAINING HOLES NOT TO EXCEED MORE THAN 12" ON CENTER

SIZES:

STANDARD EDGE GUARDS AND ASTRAGALS ARE FOR 1 3/4" BEVEL (1/8" ON 2") OR 1 3/4" SQUARE EDGE 90° DOORS. STANDARD LENGTHS ARE FOR 6'-8", 7'-0" AND 8'-0" NOMINAL SIZE DOORS. OTHER LENGTHS ARE AVAILABLE

HARDWARE LOCATIONS:

DETERMINE HAND OF ACTIVE AND INACTIVE DOOR. LOCATE HARDWARE CUT OUTS FROM TOP EDGE GUARD TO TOP OF EACH CUT OUT OR FROM TOP OF EDGE GUARD TO CENTER LINE OF EACH CUT OUT. SPECIFY ONE OR BOTH DIMENSIONS WHEN ORDERING

Edge Guard and Astragal Sets are UL listed for use on wood or plastic covered wood composite type fire doors rated up to 1 1/2 hrs. Also hollow metal, steel covered, composite type fire doors rated up to and including 3 hrs



Z Astragals For 1 3/4" Wood and Hollow Metal Doors



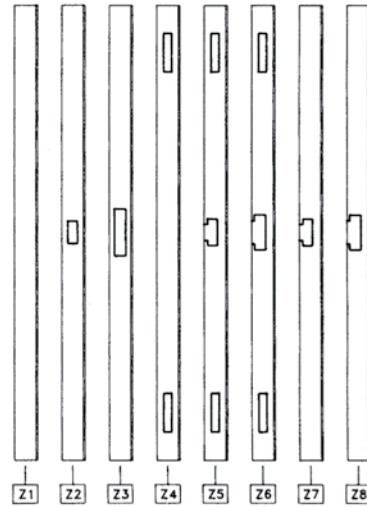
Z Astragals are manufactured from
14 ga. (.083) GALVN steel
Finish –gray powder coat primer
Holes are punched and countersunk to
receive no.10 x 1/4" Philips F.H.M.S.

When ordering, give door mfg. name and
we will locate hardware cut outs to match
or give location from top of door to top of
each cut out.

Specify square or bevel edge

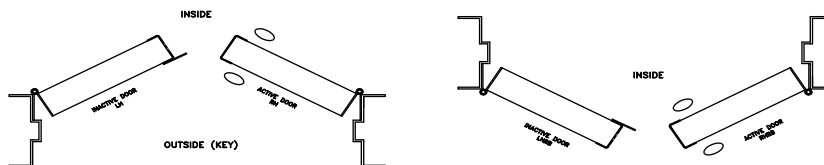
Specify if welded tabs are required

Additional charge for CTRT



TO ORDER INDICATE THE FOLLOWING:

- ASTRAGAL NUMBER
- HAND
- ACTIVE/INACTIVE
- DOOR MFG. NAME (OR LOCATIONS)
- NOMINAL DOOR HEIGHT

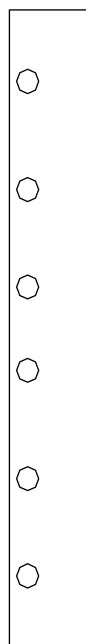


HANDING INFORMATION

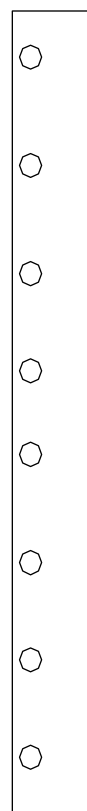
Z1 Blank
Z2 161 Latch 1 1/8" x 2 1/4"
Z3 86 Mortise Lock 1 1/4" x 8"
Z4 Flush Bolts (2) 1" x 6 3/4"
Z5 Flush Bolts (2) 161 small strike 1 x 6 3/4" & 1 1/8" x 2 3/4"
Z6 Flush Bolts (2) ASA strike 1 x 6 3/4" & 1 1/4" x 4 7/8"
Z7 161 Small Strike 1 1/8" x 2 3/4"
Z8 ASA Strike 1 1/4" x 4 7/8"

Flat Astragals

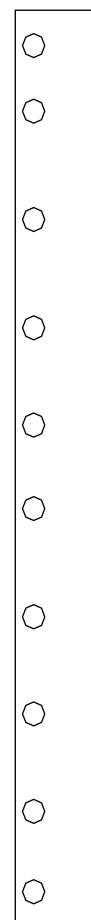
- For 6'8", 7'0", and 8'0" doors
- Holes are countersunk and equally spaced
- 1/8" x 1 3/4" HRPO
- 1-pkg. # 6 x 1" F.H.S.M. screws
- Finish –gray powder coat primer



FA68



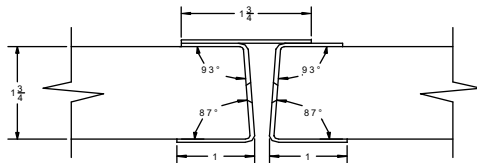
FA70



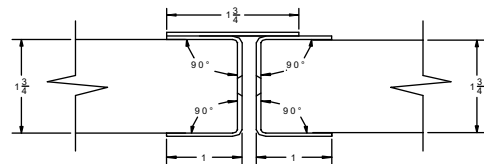
FA80

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EDGE GUARDS ARE FOR 1 3/4" DOORS
EDGE GUARDS AND ASTRAGALS ARE PUNCHED
AND COUNTERSUNK TO RECEIVE #8 X 3/4" F.H. PHILLIPS
SCREWS (PAINTED TO MATCH EACH SET)

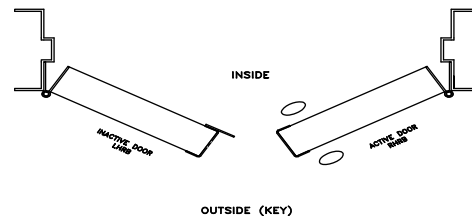
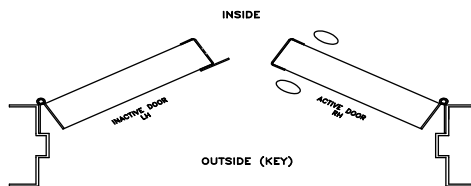


EDGE GUARD AND ASTRAGALS
FOR BEVEL EDGE DOORS
SET NO'S 87EE – 87AE – 87AO
93EE – 93AE – 93AO
95EA – 95AO

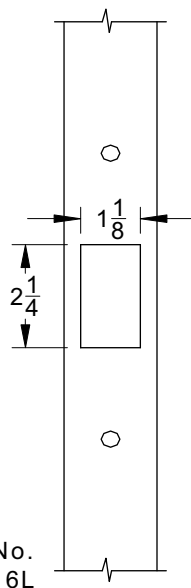


EDGE GUARD AND ASTRAGALS
FOR SQUARE EDGE DOORS
SET NO'S 90EE – 90AE – 90AO

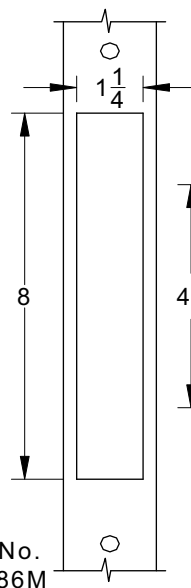
HANDING INFORMATION DETERMINE HAND AND SWING
FOR DOUBLE DOORS



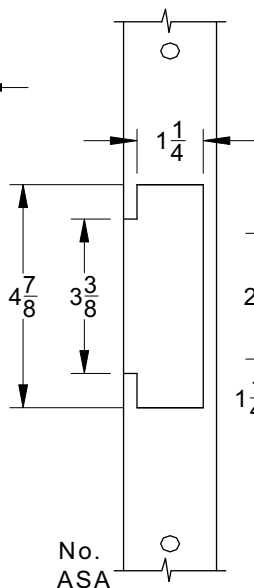
HARDWARE CUTOUT PATTERNS FOR EDGE GUARDS AND ASTRAGALS
WOOD AND PLASTIC COMPOSITE FIRE DOORS
HARDWARE CUTOUTS ARE 1/32" LARGER THAN SHOWN TO ALLOW FOR PROPER FIT



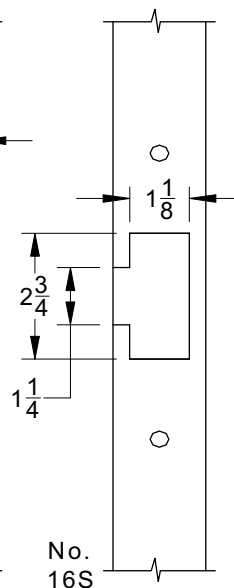
161 LATCH BOLT
CUT OUT



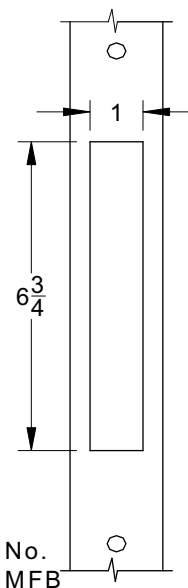
No. 86M
86 MORTISE LOCK
CUT OUT



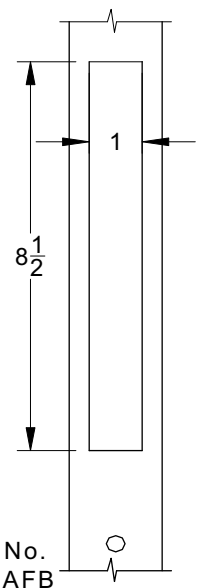
No. ASA
ASA STRIKE
CUT OUT



No. 16S
161 STRIKE
CUT OUT

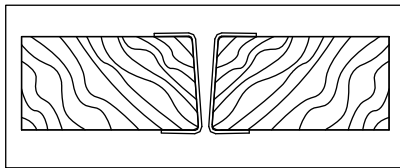


No. MFB
MANUAL FLUSH BOLT
CUT OUT (2-Reg.)

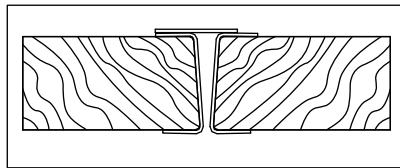


No. AFB
AUTOMATIC FLUSH BOLT
CUT OUT (2-Reg.)

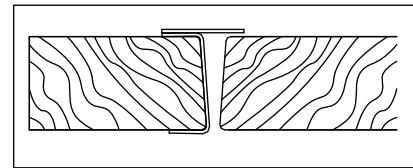
BEVEL EDGE



SET No. 87EE
EDGE GUARD INACTIVE
EDGE GUARD ACTIVE

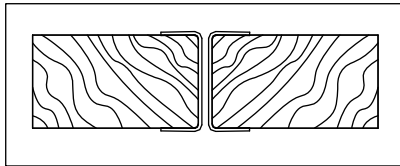


SET No. 87AE
ASTRAGAL INACTIVE
EDGE GUARD ACTIVE

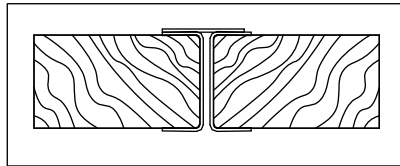


SET No. 87AO
ASTRAGAL INACTIVE
ONLY

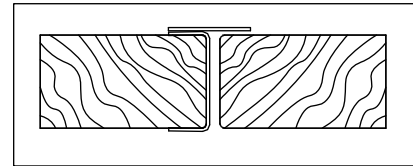
SQUARE EDGE



SET No. 90EE
EDGE GUARD INACTIVE
EDGE GUARD ACTIVE

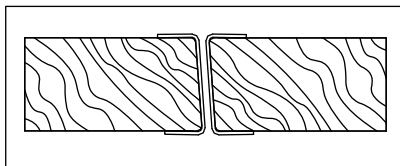


SET No. 90AE
ASTRAGAL INACTIVE
EDGE GUARD ACTIVE

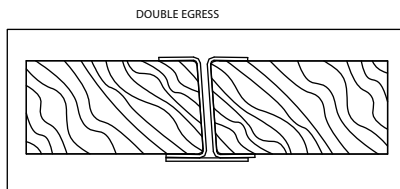


SET No. 90AO
ASTRAGAL INACTIVE ONLY

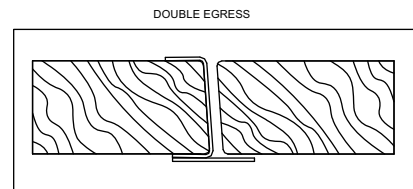
BEVEL EDGE - DOUBLE EGRESS



SET No. 93EE
EDGE GUARD BOTH
DOORS

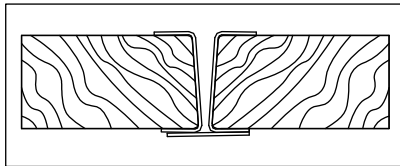


SET No. 93AE
EDGE GUARD ONE DOOR
ASTRAGAL ONE DOOR

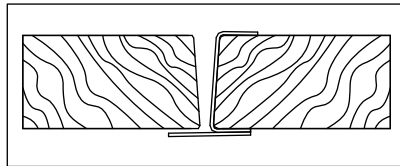


SET No. 93AO
ASTRAGAL ONE DOOR
ONLY

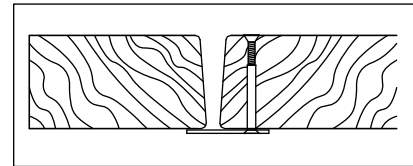
BEVEL EDGE



SET No. 95EA
EDGE GUARD INACTIVE
ASTRAGAL ACTIVE

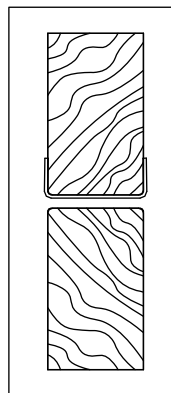


SET No. 95AO
ASTRAGAL ACTIVE ONLY

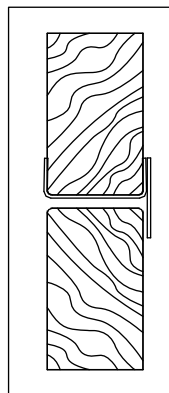


SET No. 96TB
FLAT ASTRAGAL
1/2" x 1 1/2" x C.R. STEEL
WITH # 8 F.H. THRU BOLTS

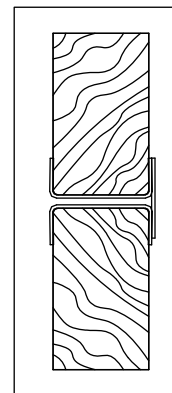
TRANSOM AND TOP OF DOOR EDGE GUARDS AND ASTRAGALS



SET No. 90ET
TRANSOM
EDGE GUARD



SET No. 90AT
TRANSOM
ASTRAGAL



SET No. 90AET
TRANSOM/DOOR
ASTRAGAL/EDGE



Markar™ Continuous Hinge & Pivot Warranty

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Limited Warranty

Markar Architectural Products Inc. guarantees its products to be free from defects in materials and workmanship for a period of ten years. Our liability, expressed or implied shall be limited to replacement of goods proven defective. No claims will be allowed for damages incurred or work done thereon.

This limited warranty specifically excludes damage arising from abuse, misuse, modification, incorrect installation or adjustment, deterioration of finish due to improper handling or improper placement or protection of product prior to or after installation in excess of normal weathering or usage, and all other circumstances beyond the control of Markar Architectural Products, Inc.

This limited warranty is in lieu of all other warranties expressed or implied, and excludes any warranty of fitness or merchantability. No agent, representative, dealer or employee of Markar Architectural Products, Inc. has the authority to increase or alter the terms and conditions of this limited warranty.



Order Form

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Date _____

Sold to _____

Ship to _____

Telephone _____

Fax _____

P.O. Number _____

Placed by _____

Engineering or technical information _____

Hinges

Quantity	Model	Exact Length	Finish	Handing	Fasteners, Modifications, Locations

Pivots

Quantity	Model	Handing

Filler Plates & Miscellaneous Parts

Quantity	Model

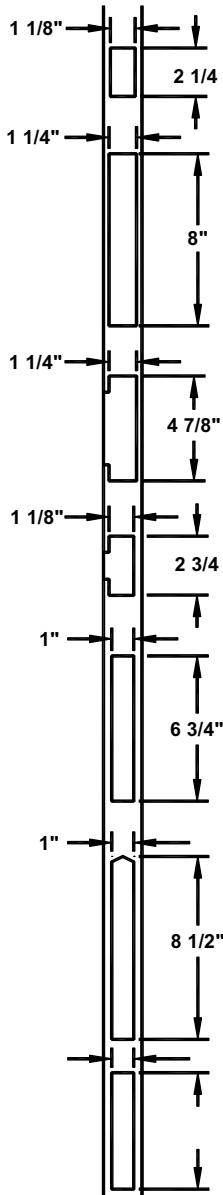


ASSA ABLOY

Edge Guard Order Form

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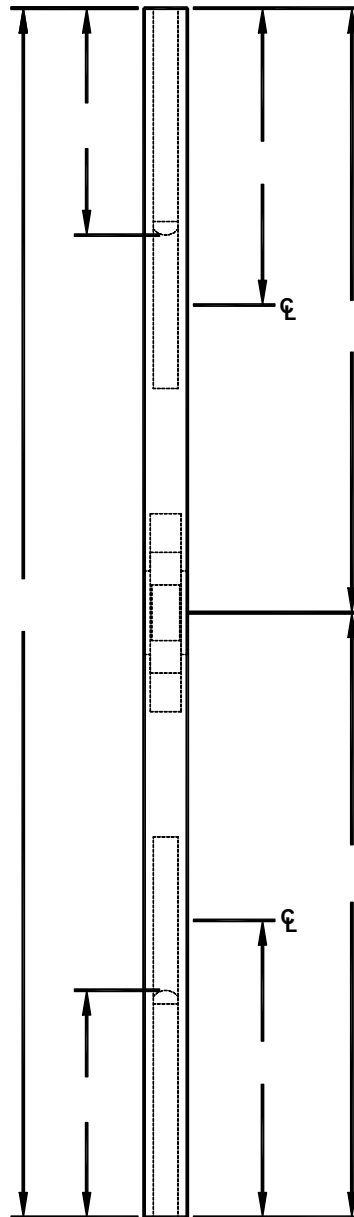
- ☐ For use on 1 3/4" door
- ☐ For use on 1 7/8" door
- ☐ For use on ____" door



- ☐ 161 LATCH BOLT
- ☐ 86 MORTISE LOCK
- ☐ ASA STRIKE
- ☐ 161 STRIKE
- ☐ MANUAL FLUSH BOLT
- ☐ AUTO FLUSH BOLT
- ☐ *CUSTOM
Please Specify Dimensions

- ☐ Hollow metal door
- ☐ Wood door

Top of Door - Please provide correct handing



- ☐ EDGE GUARD



- ☐ ASTRAGAL



- ☐ Z ASTRAGAL



- ☐ EG-"C"



DOOR EDGE

- ☐ SQUARE
- ☐ BEVEL

QUANTITY: _____

HANDING

- ☐ LH/RHR ACTIVE
- ☐ RH/LHR ACTIVE
- ☐ LH/RHR INACTIVE
- ☐ RH/LHR INACTIVE

TAGGING INFO

SPECIAL NOTES

*** DRAWING SUBMITTAL AND FACTORY APPROVAL REQUIRED PRIOR TO ORDER ENTRY**

Customer: _____

P.O. No. _____

S.O. No. _____

I, the undersigned, approve the design and dimensions as shown on this print, and authorize the fabrication of these Edge Guards as indicated.

Signed: _____



ASSA ABLOY

Dutch Door Order Form

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Please circle handing illustrated below in order to process the order. Thank you.

Hinge Side <input type="checkbox"/>	Edge Guard <input type="checkbox"/>
-------------------------------------	-------------------------------------

LEFT HAND RIGHT HAND LEFT HAND REVERSE RIGHT HAND REVERSE

DUTCH DOOR HINGE ORDER FORM

Customer:		I, the undersigned, approve the design and dimensions as shown on this print, and authorize the fabrication of these parts as indicated.
Model:	Qty:	
P.O. No.		
MM-		
Signed:		Date:

Markar Standard Powder Coated Finishes

www.markar.com

Tough, Durable, Long-Lasting

Designed for general-purpose interior and exterior use and applications where maximum chemical and solvent resistance is required.

Performance Properties

The data below is based on 24 gauge Bonderite 1000 panels with 1.5 to 2.0 mills of high gloss formulation.

Adhesion (ASTM D-3359B): There is no lifting of 1/8" squares of coating between scribed lines in crosshatch adhesion testing using pressure sensitive adhesive backed tape.

Pencil Hardness (ASTM D-3363): 2H – 4H

Flexibility (ASTM D-522 modified): The coating withstands a 180° bend over a 1/4" diameter mandrel without cracking or loss of adhesion.

Impact Resistance (ASTM D 2794 modified): The coating withstands 160 inch-pound impacts, both direct and reverse, without cracking or loss of adhesion using the standard Gardner impact tester.

Abrasion Resistance (ASTM D-4060 modified): The weight loss of coating after 1,000 cycles on a Taber abraser equipped with CS-10 wheels and operating under a 1 kilogram loading per wheel is on the order of 35 to 50 milligrams.

Salt Spray Resistance (ASTM B-117): Bonderite 1000 steel panels, in a scribed condition, exhibit no undercutting after 1,000 hours in 5% salt spray testing at 95°F and 95% relative humidity. There was no rusting or blistering on the panel face away from the scribe.

Humidity Resistance (ASTM D-2247): Bonderite 1000 steel panels in an unscribed condition exhibit no effect after 1000 hours exposure to 100% relative humidity at 100°F.

Chemical and Solvent Resistance: After 60 days immersion in the test fluid, the following data was obtained for epoxy powder coatings:

15% Hydraulic Acid	No Effect
Lacquer Thinner	No Effect
Dilute "HTH" Pool Chemical	No Effect
15% Sulfuric Acid	Pinhole Rust
15% Caustic Soda	#8 Blisters
Ammonia Hydroxide	#8 Blisters
Petrochloroethylene	No Effect
15% Acetic Acid	#4 Blisters
Gasoline	No Effect

Verification of resistance properties should be made for each chemical or solvent proposed for use with the coating.



ASSA ABLOY

TECH MEMO

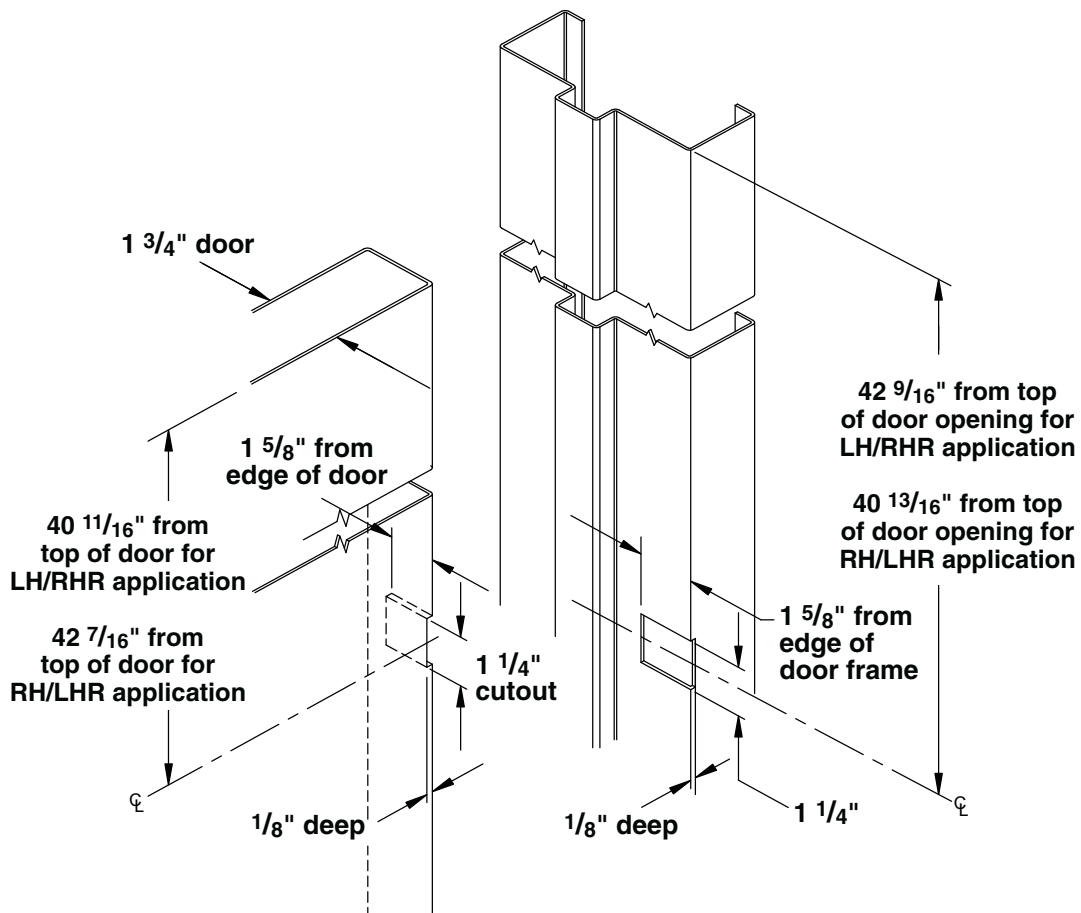
"CE" Concealed Current Transfer Preparation for 7' 200, 300 and 3500 Series Hinges for Hinges Up to 83 1/8"

Frame and Door

www.markar.com

IMPORTANT: Please indicate desired handing and location when ordering custom location other than shown.

Left Hand Application Shown



Note: Dimensions are true based on industry standard of 1/8" clearance between top of door opening and top of door.



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TECH MEMO

"CTP" Current Transfer Preparation

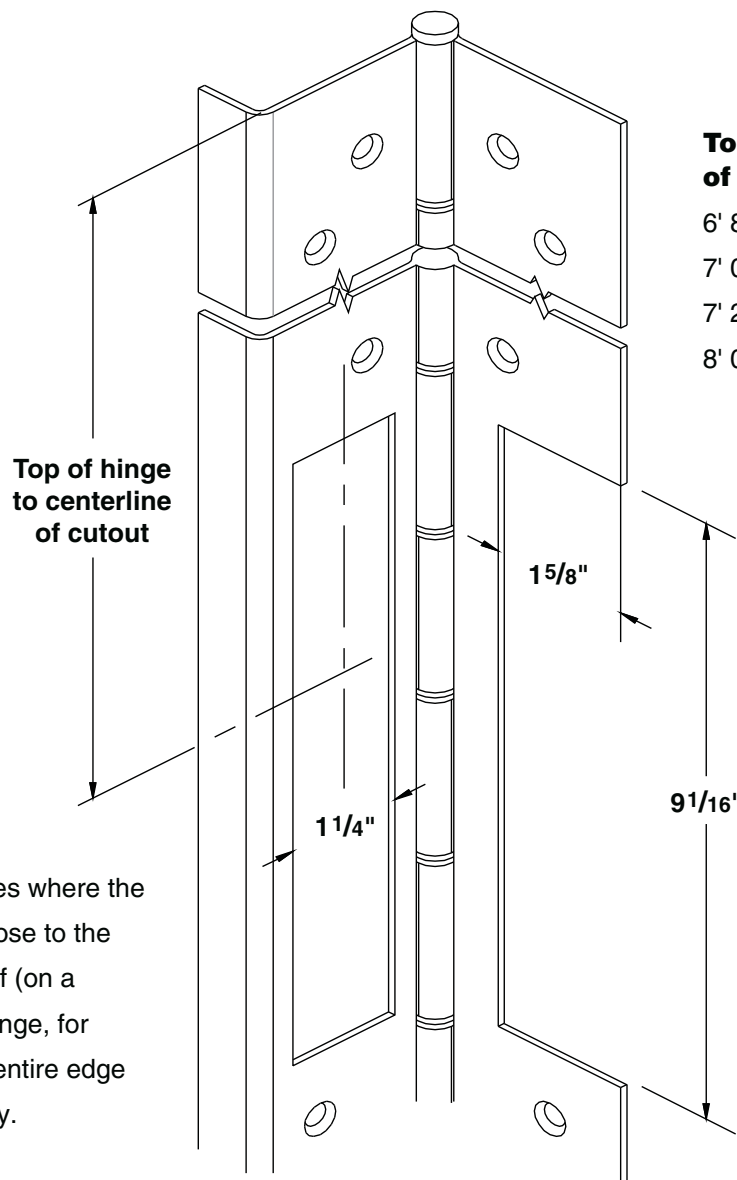
Specify by suffixing "-CTP" to the hinge model number.

www.markar.com

IMPORTANT: Please indicate desired handing and location when ordering custom location other than shown.

Von Duprin cutout

Cutout in frame or door leaf to accommodate Von Duprin's new-style power transfer unit.



Top of Hinge to Centerline of Cutout Distance:

6' 8" hinge = 39 3/8"

7' 0" hinge = 41 9/16"

7' 2" hinge = 42 1/2"

8' 0" hinge = 47 1/2"

Note: On hinges where the cutout is too close to the edge of the leaf (on a sheared leaf hinge, for example), the entire edge will be cut away.



ASSA ABLOY

This memo replaces "CTPN" and "CTPO" Prep Tech memos.

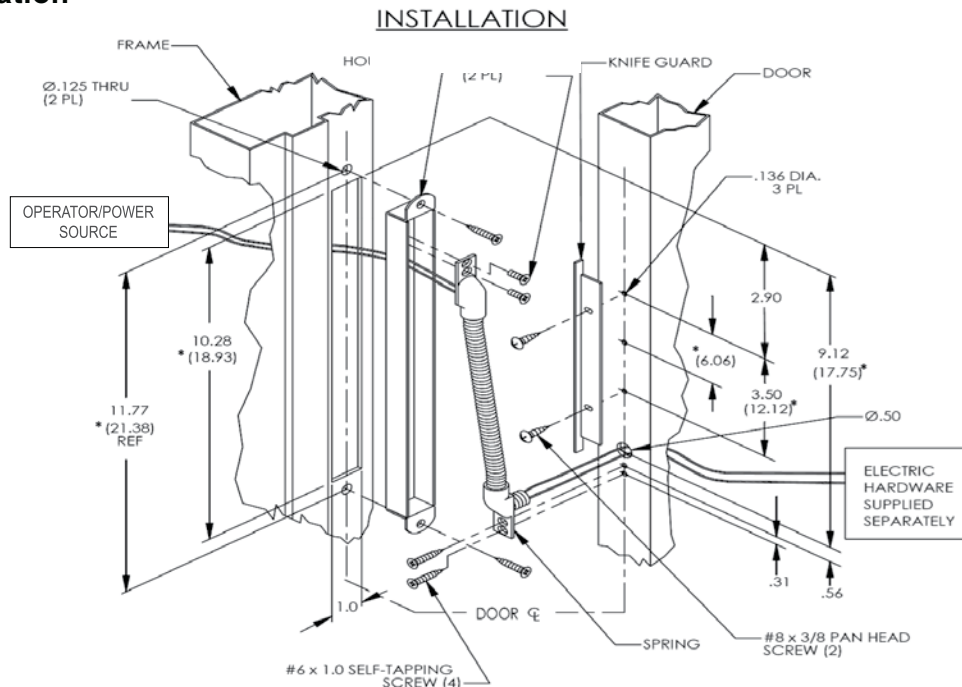
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Adams Rite 4612 Electric Power Transfer

www.markar.com

Installation



Conduit: Spring steel helix has internal diameter of approximately 5/16". This provides ample room for multiple wires of the low voltage type used with most electrical hardware.

Housing: Stamped steel, approximately 1/16" thick. Short (105° swing) version 12 3/4" long. 180° version is 21 3/8" long.

Finish: Chrome

Cast-Knife Guard: Particularly for out-swinging doors, a steel barrier fence offers extra protection against attack on the conduit by knives, shims or other tools. Guard is completely hidden when door is closed.

Function: Provides a secure and unobtrusive means of channeling electrical wiring from door frame into door itself for powering electric strikes, locks, exit bars, etc. Suitable for any door hung with butt-type hinges, continuous hinges, or pivots offset 3/4" or less.



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TECH MEMO

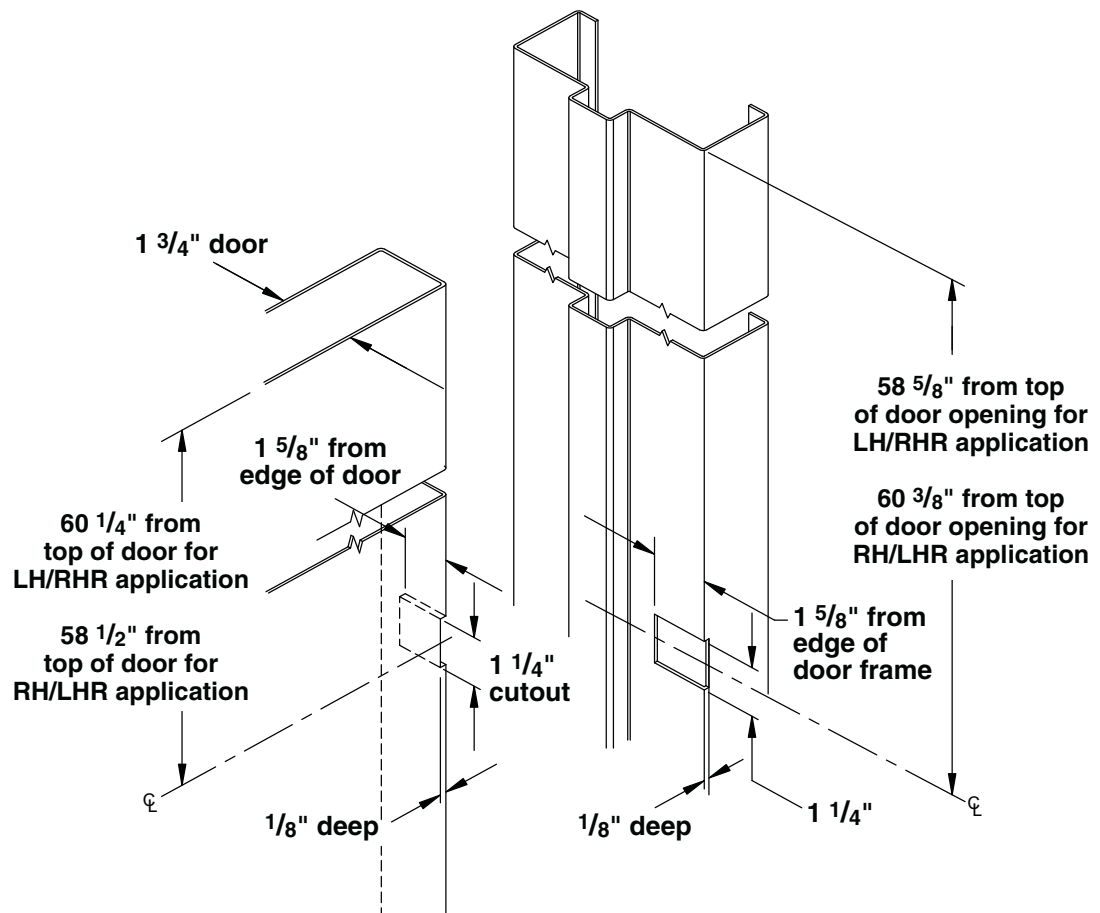
"CE" Concealed Current Transfer Preparation for 7' 200, 300 and 3500 Series Hinges for Hinges 95 $\frac{1}{16}$ " through 118 $\frac{3}{4}$ "

Frame and Door

www.markar.com

IMPORTANT: Please indicate desired handing and location when ordering custom location other than shown.

Left Hand Application Shown



Note: Dimensions are true based on industry standard of 1/8" clearance between top of door opening and top of door.



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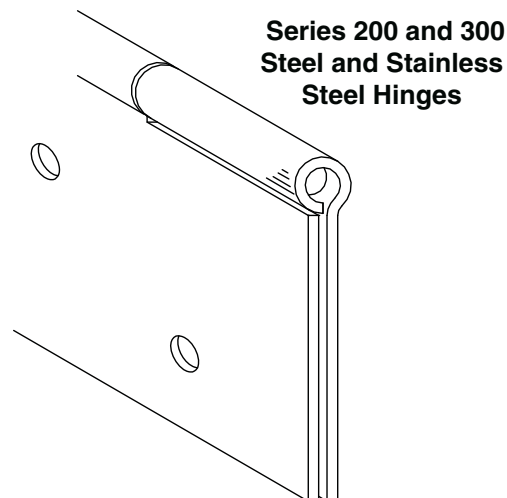
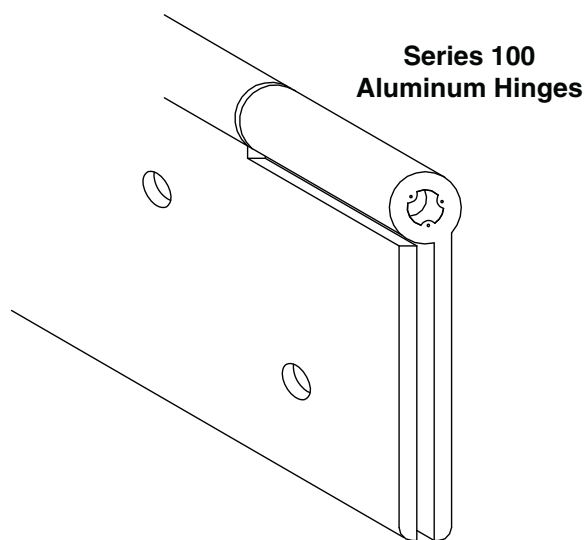
Cutting Hinges to Custom Lengths

Pin and Barrel Series 100, 200 and 300 Hinges

www.markar.com

1. Determine how much the hinge needs to be shortened.
2. Note the hand of the hinge before beginning to lay out the cut. All cuts will be done at the bottom of the hinge assembly, making sure to leave the gang hole pattern at the top.
3. Measure from the top down and scribe a cut line on the leaf at the desired length.
4. Cut the hinge length with a hacksaw, going through the leafs, barrel and pin. If necessary, use a file to remove sharp edges and deburr.
5. Slide the stainless steel pin out about 1", making sure the assembly stays together as one unit. Remove 1/4" from the end of the pin using a hacksaw and then push it back into it's original position.
6. **For 100 Series Aluminum Hinges:** Using a hammer and a center-punch, swage the aluminum material toward the center of the hole, locking the hinge pin into place – making sure it will not slide out.

For 200 and 300 Series Steel and Stainless Steel Hinges: Using vice-grips, crimp the end of the steel barrel, making sure the hinge pin will not slide out.

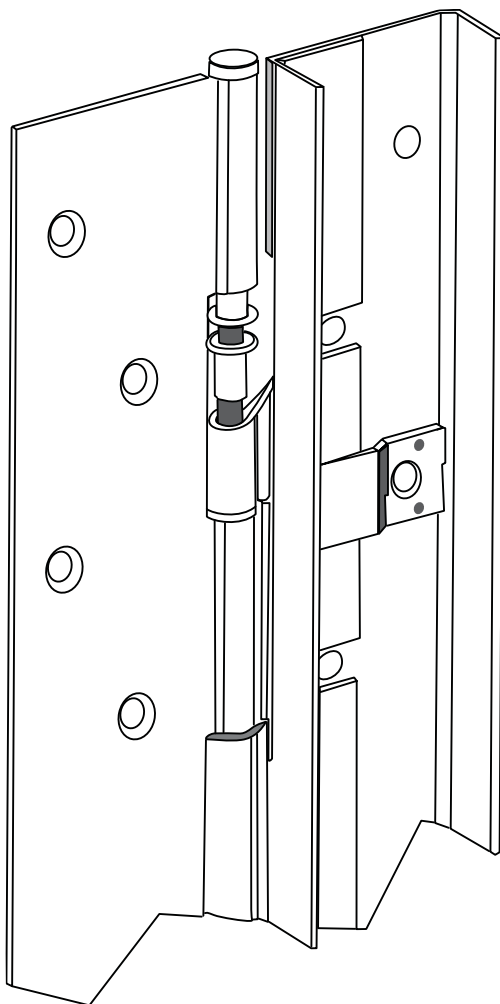


TECH MEMO

"MB" Medical Bearings for 300 Series Hinges

Specify by adding "MB" suffix to stainless steel hinge models.

www.markar.com



Patented Fiber-Reinforced Polymer Bearings:

- Self-lubricating with high resistance to wear
- Uniquely designed to provide clean and quiet hinge operation
- Exceeds ANSI/BHMA Grade 1 requirements
- Supports doors weighing up to 600 lbs.
- 25 year warranty



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Adjusta-Stud Hollow Metal vs Wood

Recommended by factory for models:

HG-105

HG-305

HG-310

HG-322

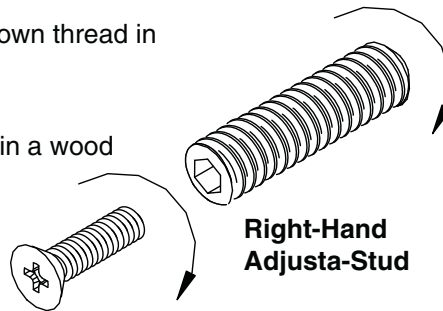
HG-326

HG-3505

www.markar.com

The right hand Adjusta-Stud is designed for use in a wood door application. The Adjusta-Stud cuts its own thread in the pre-drilled pilot hole.

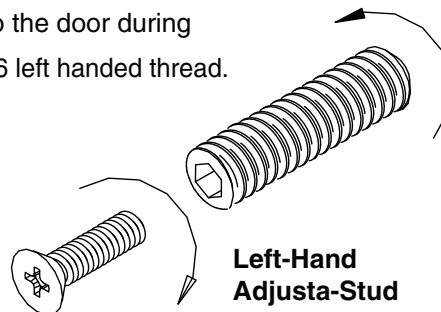
Pre-tapping of the pilot hole is not required in a wood application.



The left hand Adjusta-Stud is designed for use in a hollow metal door application.

Use of this left handed stud in a hollow metal door application will help prevent the stud from dropping into the door during hinge installation and adjustment.

Proper reinforcement must first be applied to the door during manufacturing to allow for tapping of the 3/8"-16 left handed thread.



Note: When ordering the hinges indicated above, where the Adjusta-Stud is included at no extra charge, you must indicate which type of application is preferred. The standard default will provide the right hand Adjusta-Stud.



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TECH MEMO

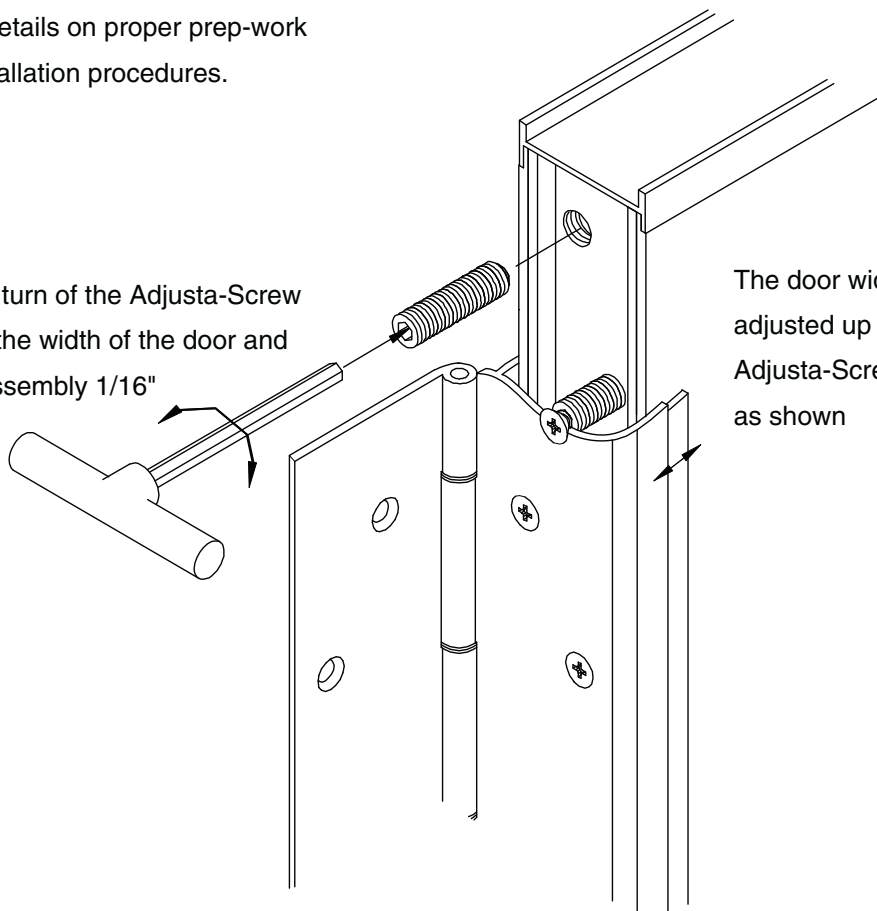
Markar's Adjusta-Screw Assembly

NOTE: You must pre-drill your door using a 5/16" bit for each fastener.

www.markar.com

Please see instruction sheets
for full details on proper prep-work
and installation procedures.

One full turn of the Adjusta-Screw
adjusts the width of the door and
hinge assembly 1/16"



The door width can be
adjusted up to 3/8" with the
Adjusta-Screw assembly
as shown



MP-7 10-32 x 3/4"

Phillips flat head
undercut stainless steel
machine screw



MP-25 1 3/8"

Adjusta-Stud fastener
with 10-32 internal thread
and hex head adjustment



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TECH MEMO

Hollow Metal Door Preparation – Hing-

Recommended by factory for models:

www.markar.com

HG-105

HG-305

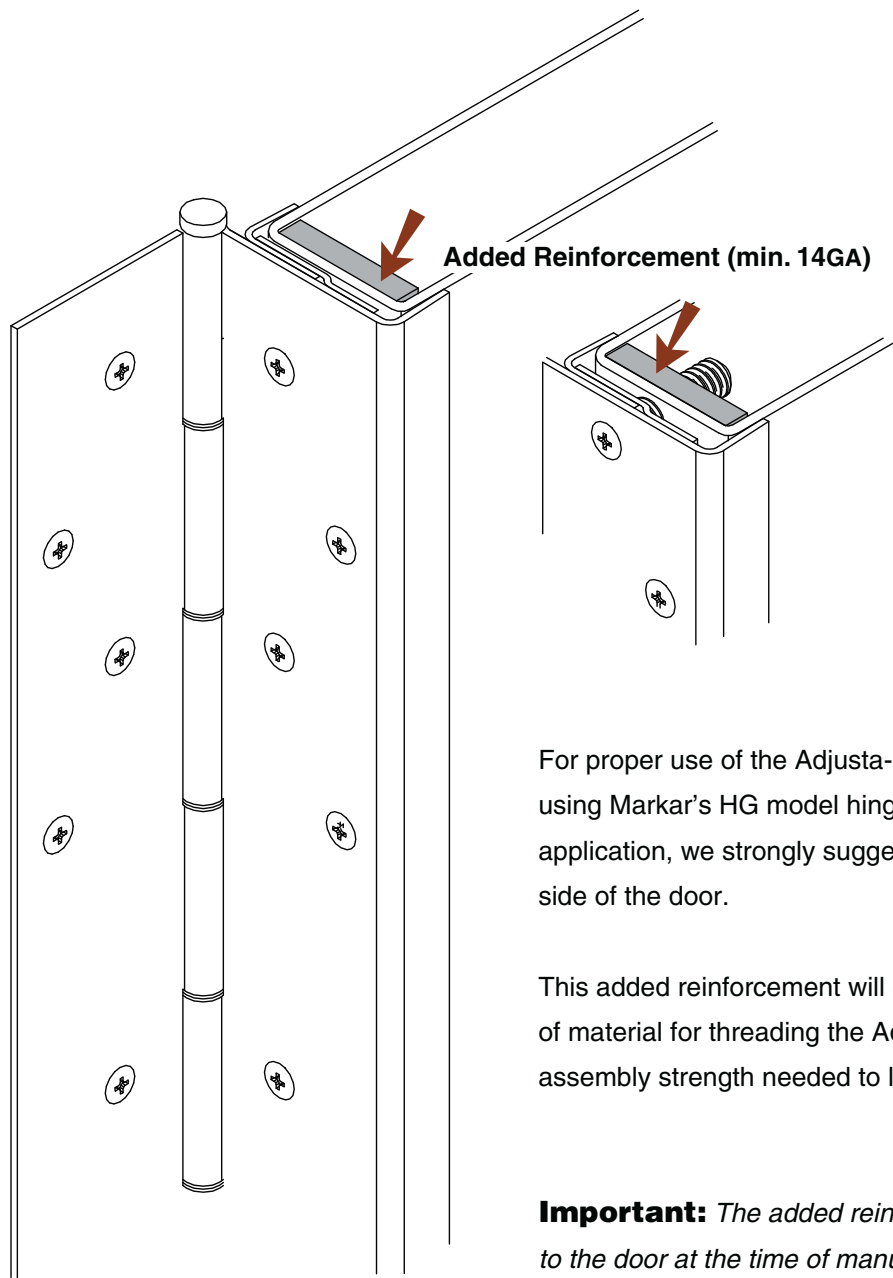
HG-310

HG-322

HG-326

HG-3505

Added Reinforcement for
Adjusta-Screw Assembly



For proper use of the Adjusta-Screw Assembly when using Markar's HG model hinges for a hollow metal door application, we strongly suggest reinforcement at the hinge side of the door.

This added reinforcement will ensure the correct amount of material for threading the Adjusta-Screw, providing the assembly strength needed to last for the life of the door.

Important: *The added reinforcement must be added to the door at the time of manufacture – please take this into consideration when ordering your doors. This added reinforcement is only appropriate for the Adjusta-Screw assembly.*



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TECH MEMO



Fire Rated Edge Guards and Astragals

Fire Rated Up to 1 1/2 Hours

www.markar.com

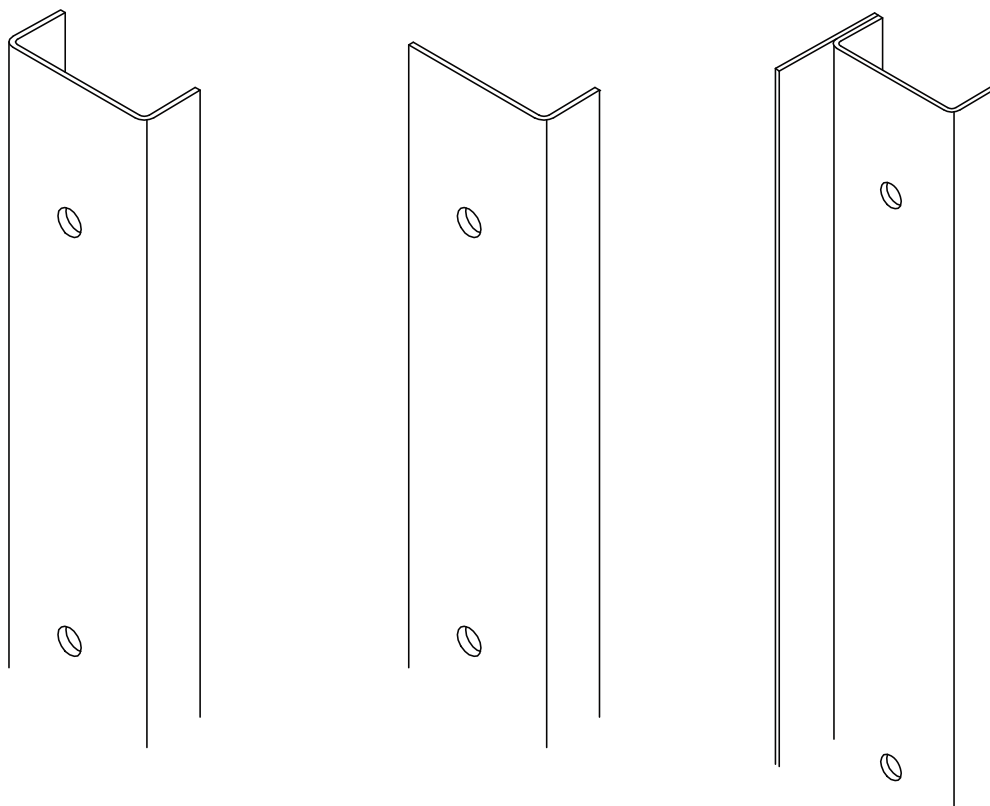
EG-308

EG-C-308

EG-T-308

Please consult factory for specific wood door applications.

May not apply to all wood doors in accordance with UBC Code Standard 7-2.



Markar's EG-308, EG-C-308 and EG-T-308 edge guards are fire rated up to 1 1/2 hours for use on wood, plastic coated, wood composite and hollow metal fire rated doors.

These edge guards are rated with Underwriters Laboratories – please see registration below for reference.



ASSA ABLOY



LISTED
Miscellaneous
Firedoor Accessory
8N60
Markar Products, Inc.
Pomona, CA



ALSO CLASSIFIED IN
ACCORDANCE WITH
IBC CODE STANDARD 7-2,
FIRE TEST OF DOOR
ASSEMBLIES FOR
POSITIVE PRESSURE

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TECH MEMO



Fire Rated Edge Guards and Astragals

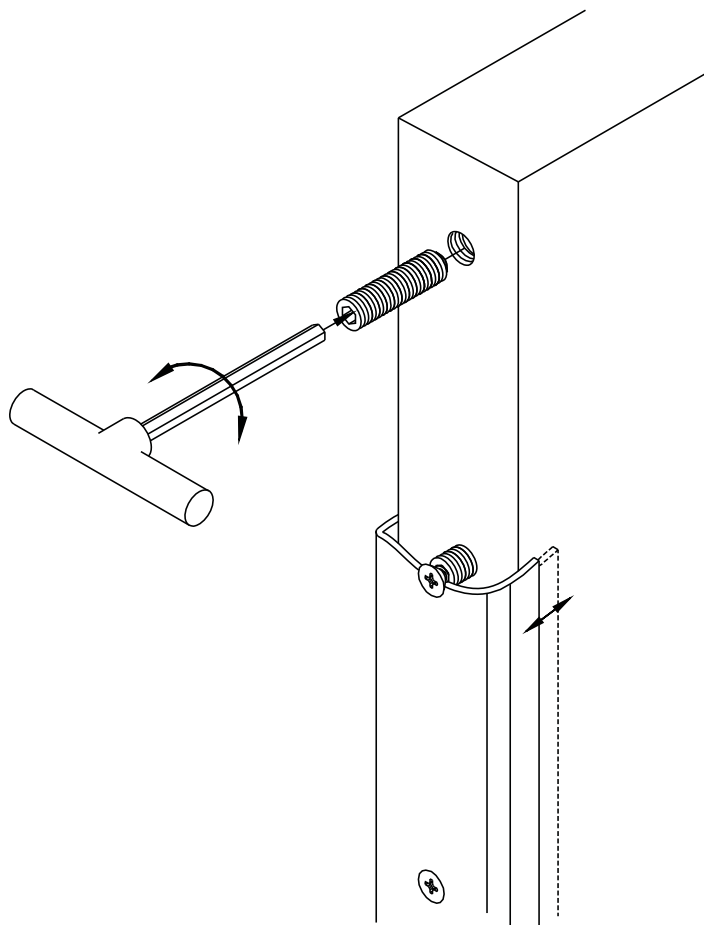
with Adjusta-Screw Fasteners

www.markar.com

May not apply to all wood doors in accordance with UBC Code Standard 7-2

Please consult factory for specific wood door applications.

U.S. Pat. Number 5,943,824



Markar's patented Adjusta-Screw assemblies are approved for use on labeled doors.

Because the edge guards can be adjusted for perfect clearance (fit), this provides a solution for many field problems experienced by wood door suppliers.

By backing the Adjusta-Screw in or out with an Allen wrench, the door edge can be adjusted up to 3/8" within the edge guard channel.

Underwriters Laboratories certification file number R15384 (N) covers Markar's edge guard models EG-208 and EG-T-208.



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Miscellaneous
Firedoor Accessory
8N60
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Pomona, CA



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Hollow Metal Door Preparation – Edge Guards

Recommended by factory for models:

www.markar.com

EG-108

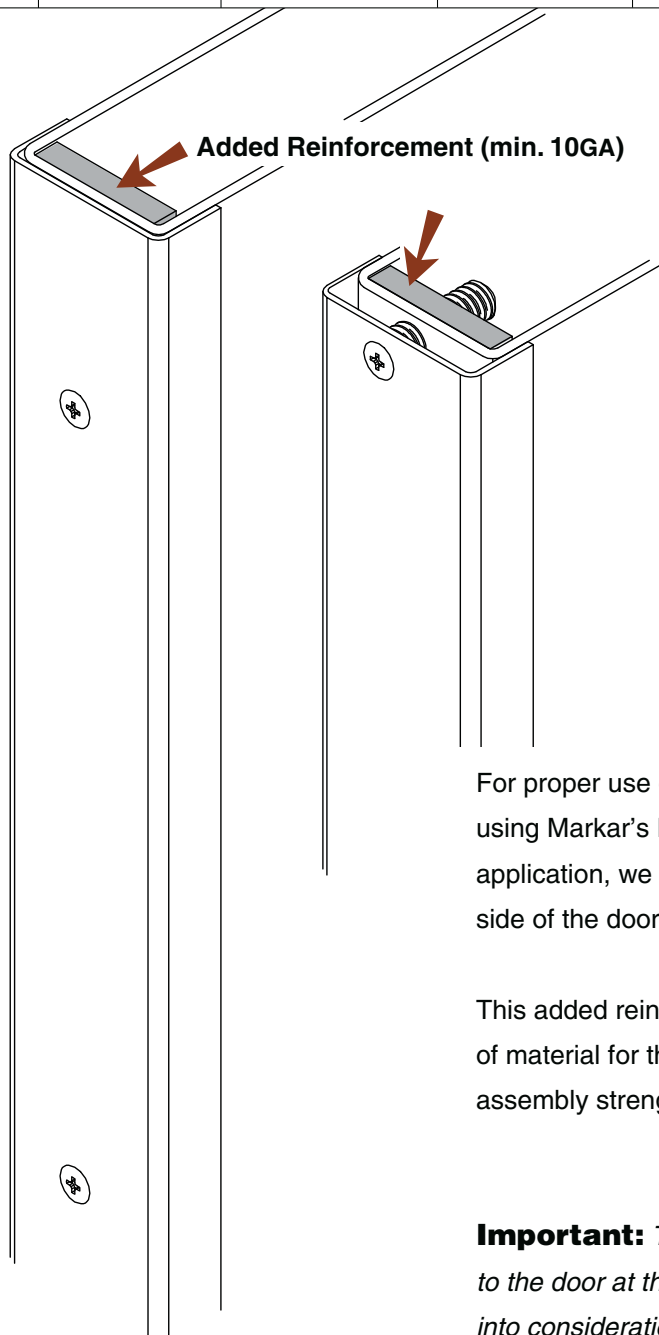
EG-208

EG-T-208

EG-308

EG-T-308

Added Reinforcement for
Adjusta-Screw Assembly



For proper use of the Adjusta-Screw Assembly when using Markar's EG model hinges for a hollow metal door application, we strongly suggest reinforcement at the hinge side of the door.

This added reinforcement will ensure the correct amount of material for threading the Adjusta-Screw, providing the assembly strength needed to last for the life of the door.

Important: *The added reinforcement must be added to the door at the time of manufacture – please take this into consideration when ordering your doors. This added reinforcement is only appropriate for the Adjusta-Screw assembly.*



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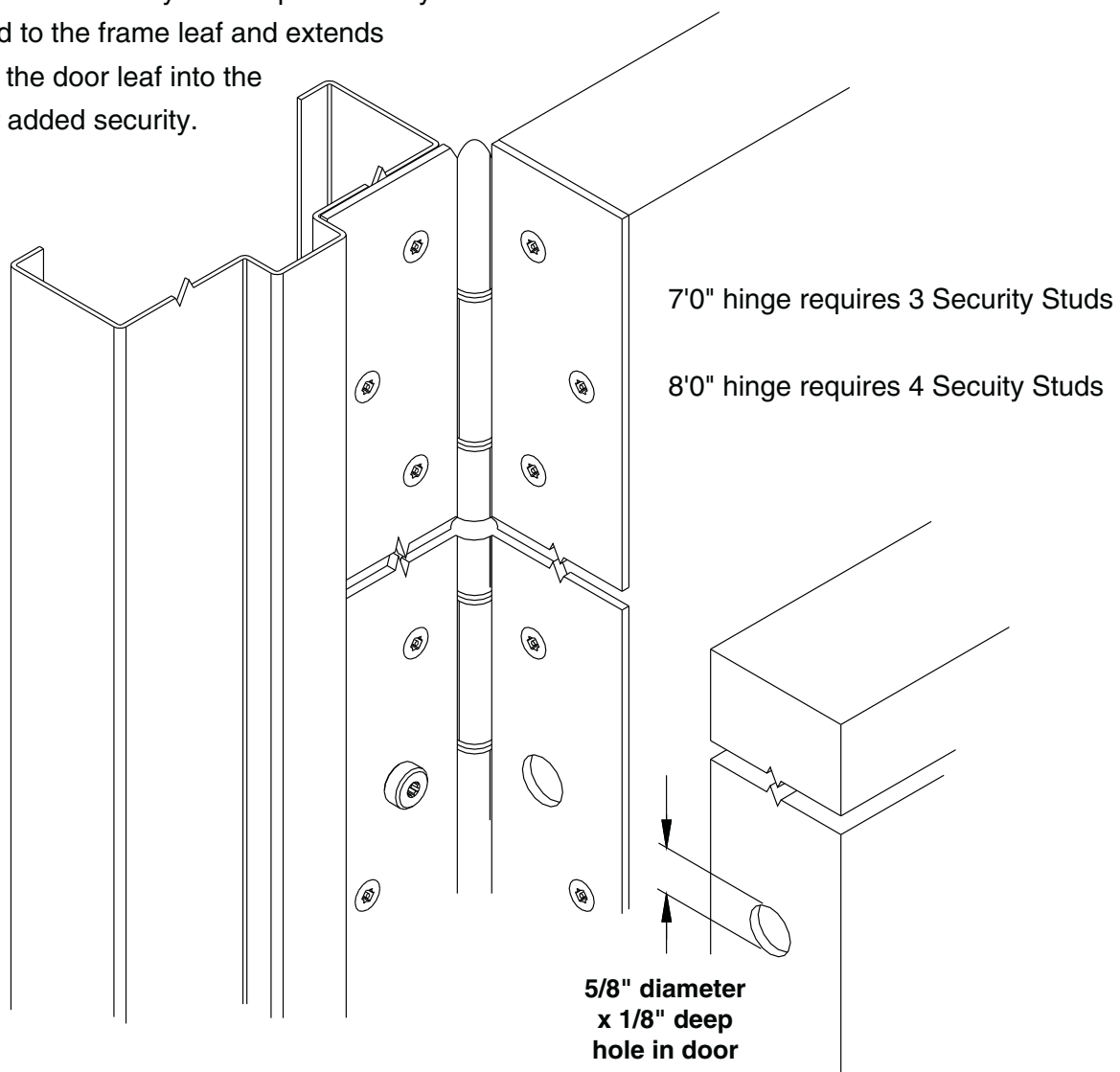
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FM-3500 Security Stud Option

See Security Stud Locations Tech Memo for exact locations

www.markar.com

The 1/2" diameter x 1/4" projected 304 stainless Security Stud is permanently mounted to the frame leaf and extends through the door leaf into the door for added security.



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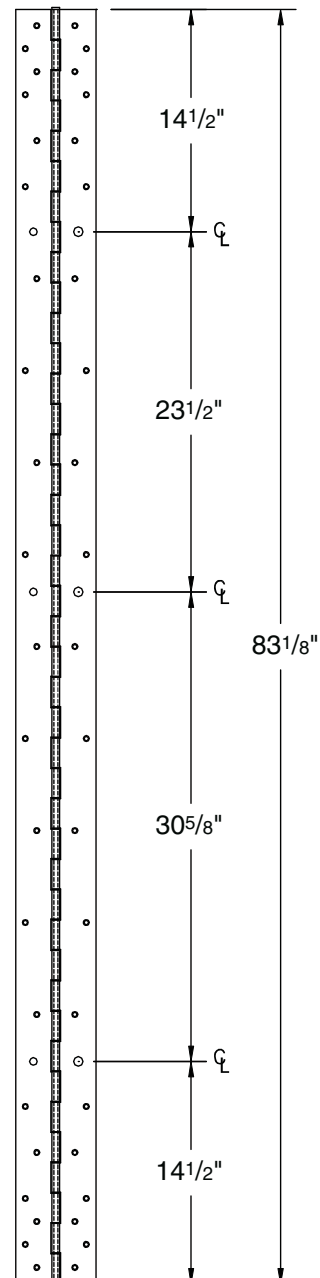
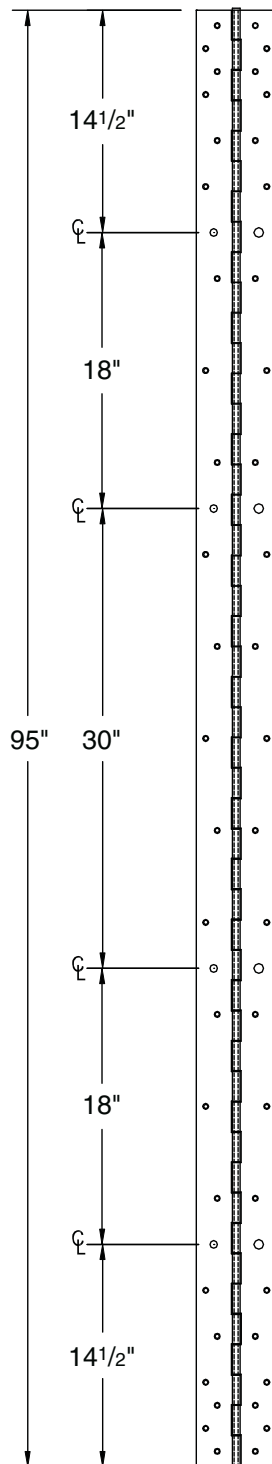
A 5/8" x 1/8" hole is required
to receive the Security Stud

TECH MEMO

FM-3500 Security Stud Locations for 8' and 7'

A 5/8" x 1/8" hole is required in the door to receive the security stud

www.markar.com

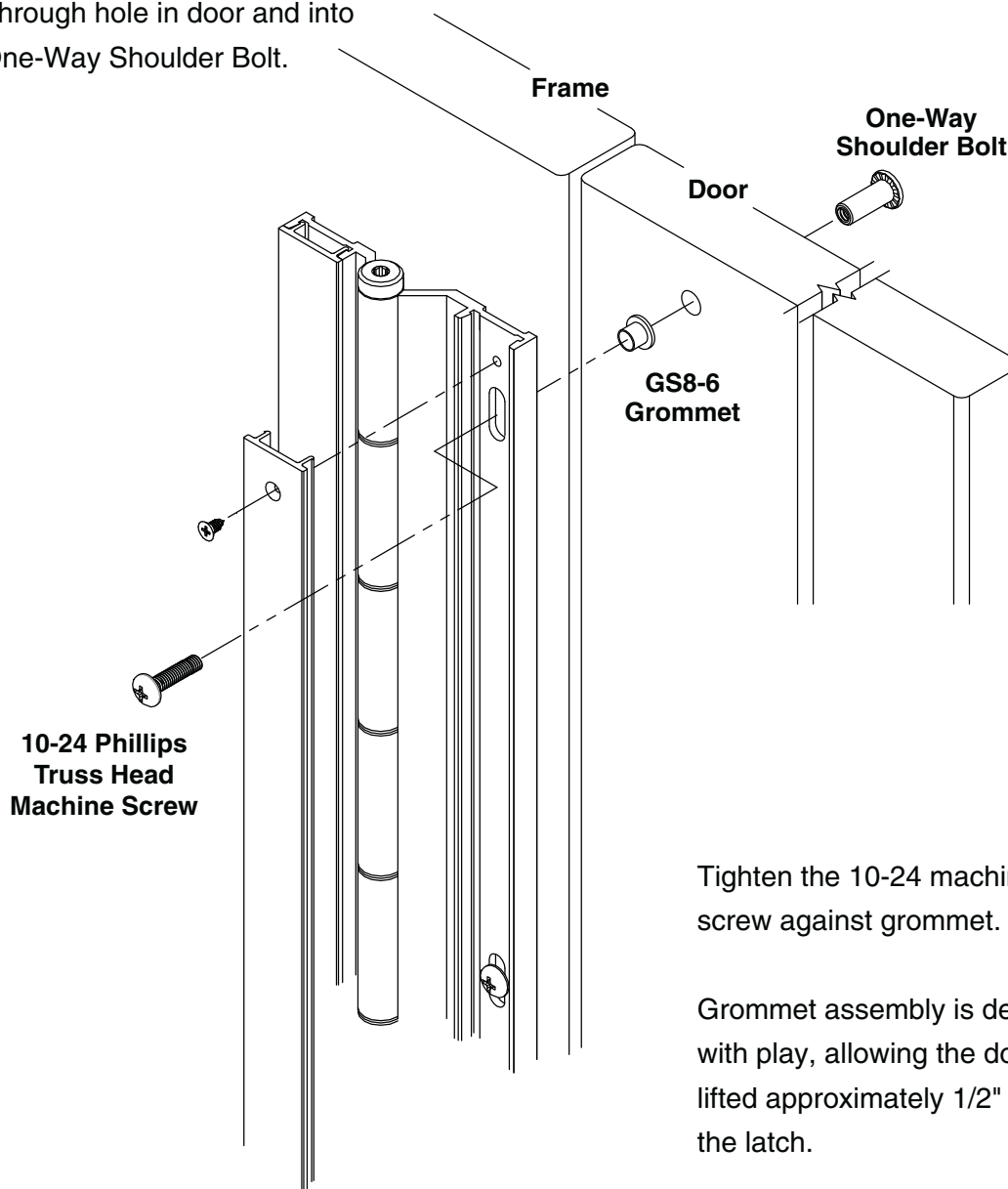


TECH MEMO

400 Series Toilet Partition Safety Lift Feature

www.markar.com

Place the 10-24 Phillips Truss Head Machine Screw through slot in hinge, continuing through hole in door and into the 10-24 One-Way Shoulder Bolt.



Tighten the 10-24 machine screw against grommet.

Grommet assembly is designed with play, allowing the door to be lifted approximately 1/2" to clear the latch.



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TECH MEMO

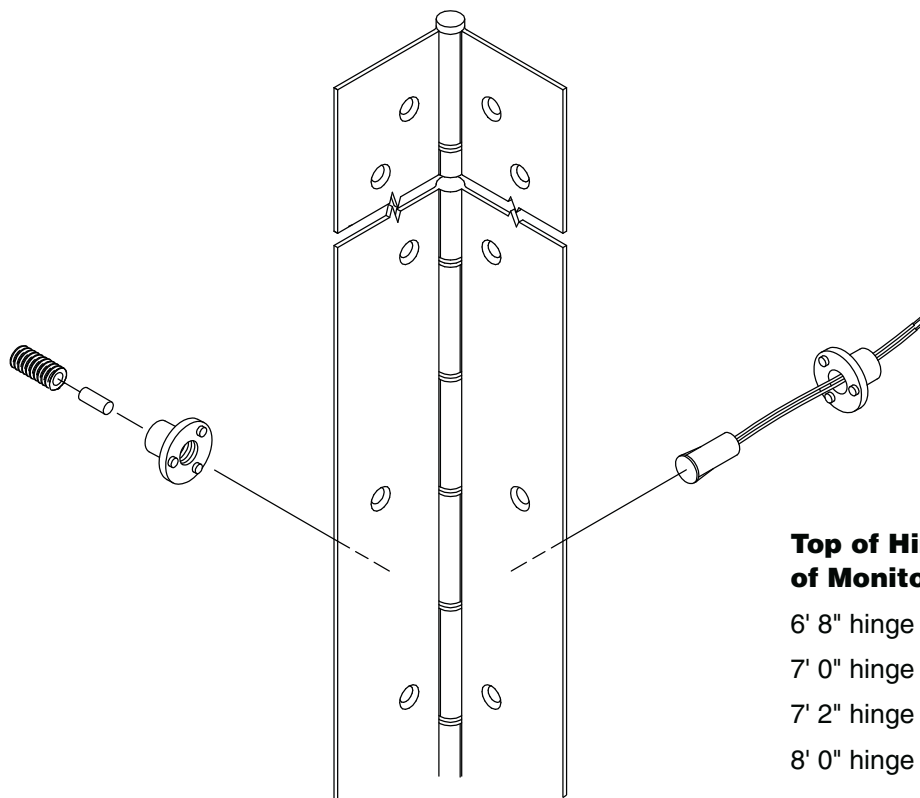
AMS Adjustable Concealed Monitoring Switch

Specify by suffixing "AMS" to the hinge model number.

www.markar.com

IMPORTANT: Please indicate centerline dimension from top of hinge when custom location is desired.

U.S. Pat. Pending



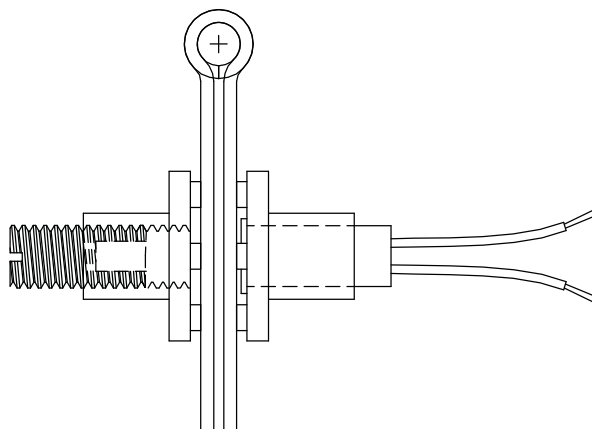
Top of Hinge to Centerline of Monitoring Switch:

6' 8" hinge = 35 3/8"

7' 0" hinge = 37 9/16"

7' 2" hinge = 38 1/2"

8' 0" hinge = 43 1/2"



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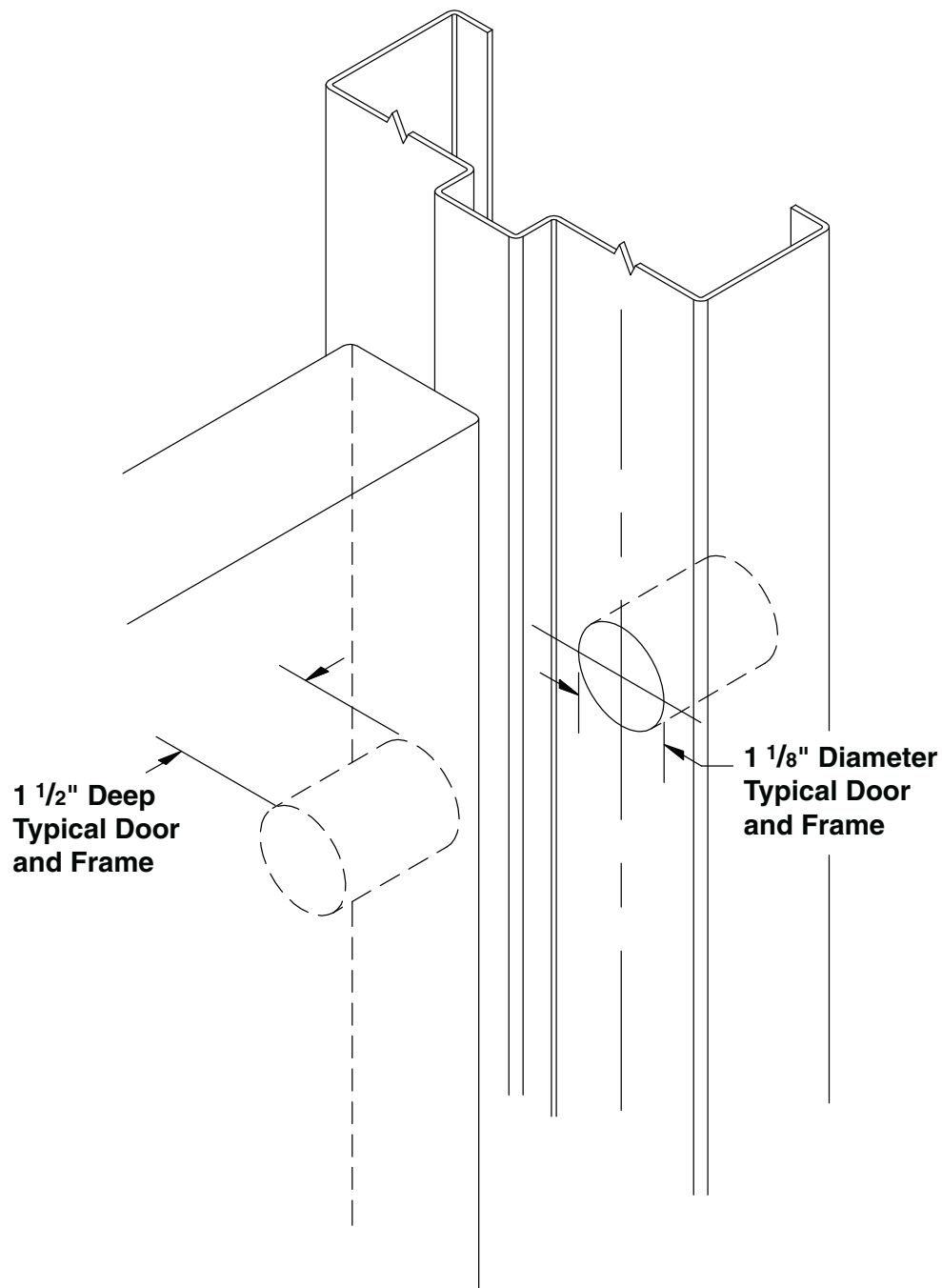
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"AMS" Adjustable Concealed Monitoring Switch

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"ES" Exposed Monitoring Switch

For hinge series:

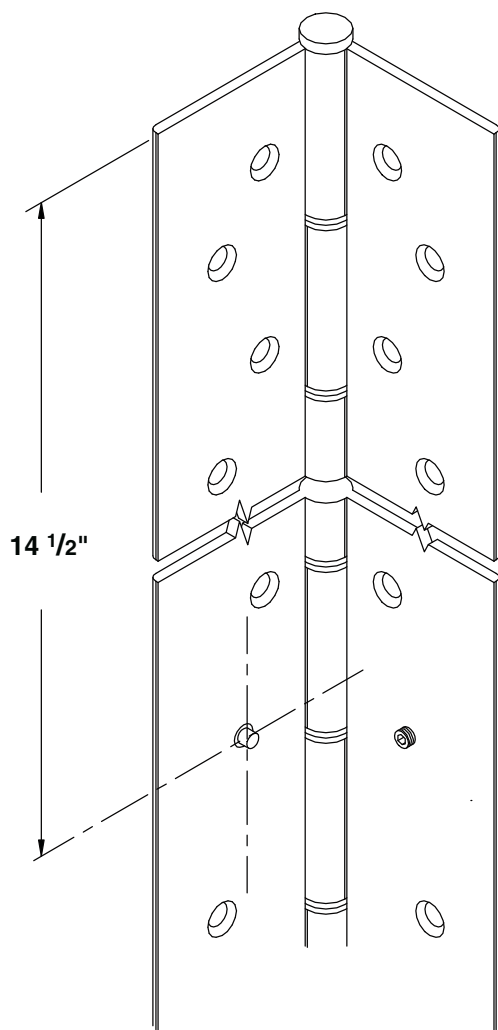
100

200

300

3500

www.markar.com



The contact switch comes with three 28 gauge wire leads attached.

Add an "ES" suffix to the hinge's model number to specify this option.

Rating:

250 amps, 30 watts,
non-inductive at 120 volts

or

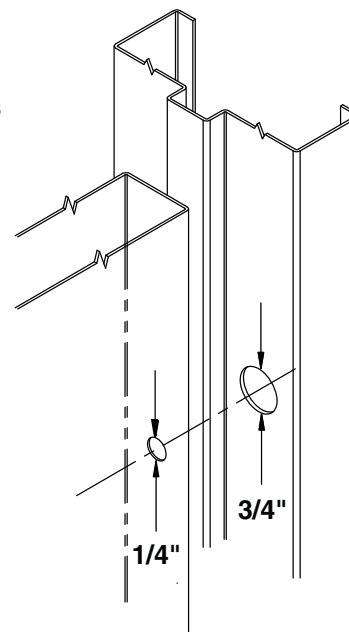
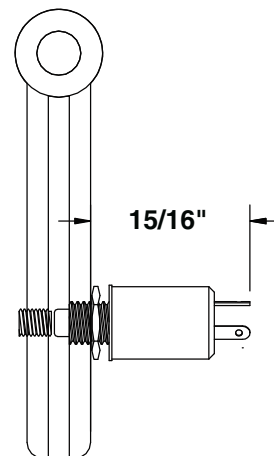
1 amp, 30 watts at 28 volts

Wiring:

Black – common

White – normally open

Red – normally closed



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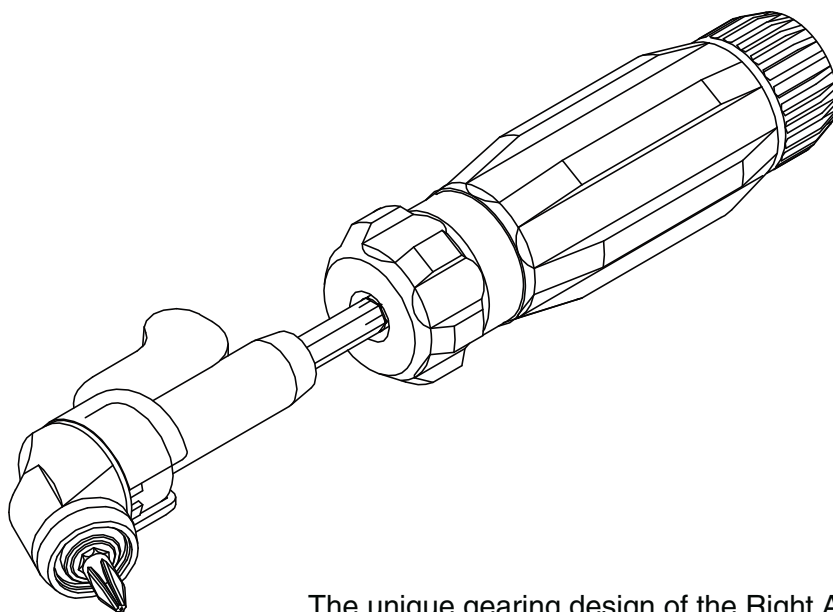
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MT-SP-100 Right Angle Drive Skewdriver

Especially helpful for installing Markar HG-310 and HG-311 models.

www.markar.com



The unique gearing design of the Right Angle Drive Skewdriver provides conventional action on hard-to-reach fasteners while the adjustable stabilizer wing provides extra stability in high torque and restricted locations.

The MT-SP-100 Skewdriver is built to last with heavy-duty construction, die-cast housing and hardened steel gears.



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TECH MEMO

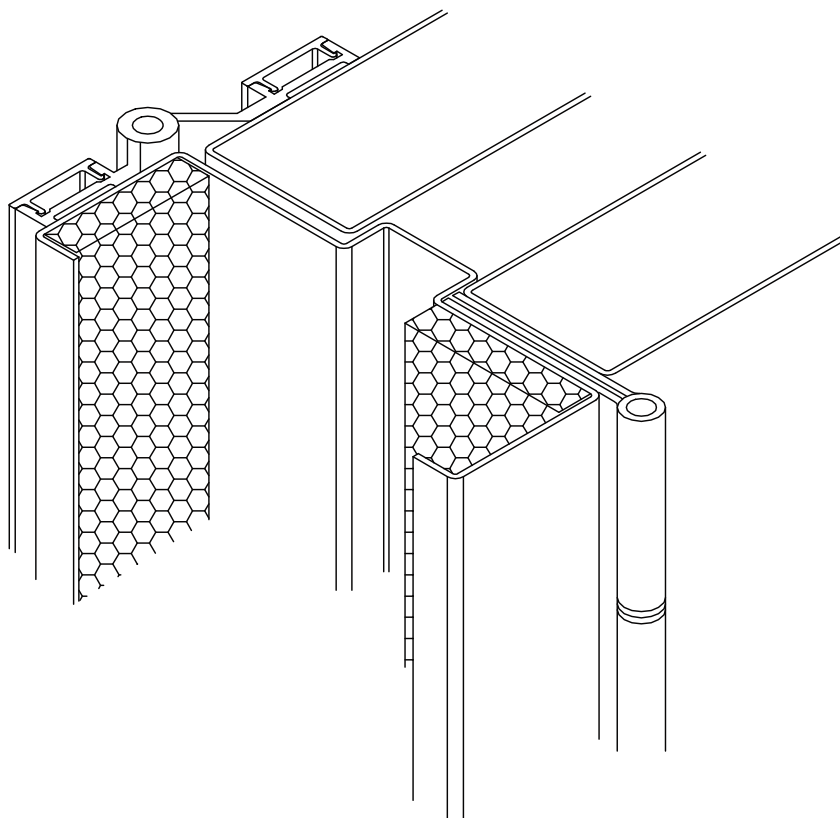
Preventing Mortar from Breaking Drills and Taps

Coordinate with the anchoring and hollow metal supplier before installation.

www.markar.com

Dulling and breaking of taps and drills can be avoided by coordinating efforts with anchoring and hollow metal suppliers before installation begins.

Markar recommends placing a 1/4" or 3/8" strip of expanded polystyrene insulation on the back of the hollow metal frames (as illustrated below). When the frames are grouted in, the foam backer will allow drilling and tapping without dulling or breaking. (Making you a hero with installers and contractors!)



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Markar Continuous Hinges

FBC 10057.1 (2007)www.markar.com

Markar Continuous Hinges: Durable . . . No matter which way the wind blows.

Markar Architectural Products is proud to announce that windstorm/hurricane testing on Markar continuous hinges was recently completed with UL, and was subsequently reviewed, passed and approved by the Florida Building Code Commission in January of 2008. There were three categories of testing conducted on the hinges: an Impact Test (TAS 201), Static Load/Cyclical Test (TAS 202), and a Water and Leakage Test (TAS 203). Markar excelled in all three categories of testing.

The TAS 201 Impact Test is a missile/projectile test where a 2 x 4 piece of lumber is shot from a cannon about 25 feet away from the door, at an average speed of 80 mph – generating approximately 350 ft.-lbs. of force. This is done to see if the door actually moves out of the opening. Since the hinge is an integral part of a door opening, the projectile is shot toward the hinge, or toward the locking mechanism – anywhere the personnel performing the test think they can get the door to move out of the opening.

After this first test, if the door is secure to the eye, the TAS 202 Static Load/Cyclical Test is performed. This test is designed to emulate a hurricane – basically wind pressure pulls the door in from the opening, and pushes it out of the opening at a +/-70 lbs of pressure to see if the door will warp or if any of the components will fail. An inferior hinge will cause the door to pull out of the opening, or create a situation where a door can't be opened – a critical life safety issue.

At that point, if the door and hinge still have no failures visible to the naked eye, the TAS 203 test is performed, which is a water and leakage test. In this test, a water hose is placed on the outside of the door, toward the top. A reverse blower is switched on, which sucks from the inside – artificially trying to draw water into the building via the door. If there are any failures, they are easy to spot, since the water will seep in.

The TAS 203 is the test most manufacturers fail, but Markar hinges easily passed all three tests on the first attempt. It is notable that the passing results were even achieved with 1100 Series Aluminum Hinges – Markar's entry grade model.

Based on this performance, the FBC approved all Markar hinges in the following series:

(Up to openings of 4'0 x 8'0 singles and 8'0 x 8'0 pairs)

- 100 – Aluminum
- 200 – Cold Rolled Carbon Steel
- 300 – Stainless Steel
- 3500 – Stainless Steel (Security Grade)
- 1100 – Aluminum

Markar hinges are made to last for years, regardless of the weather.

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