

# Markar Continuous Pin and Barrel Hinges

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NOTE: Products shown in this section may not be drawn to scale



## Markar Continuous Pin and Barrel Hinges

Markar has been a leader in innovative products for the hardware industry since 1969. In 1983, Markar was the first manufacturer to produce an architectural grade, adjustable continuous pin and barrel hinge line, and that innovation continues today with quality continuous hinges and edge guards.

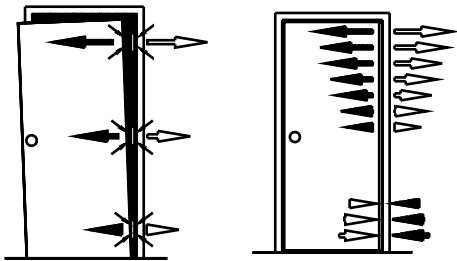
Markar leads the industry in development of fire rated continuous hinges with their flagship 300 Series Stainless Steel, 3500 Series institutional grade, and 200 Series cold rolled steel hinges. Building on customer feedback, Markar has developed over 75 standard continuous hinge models providing products for a wide variety of applications and challenges.

### Custom Designs

Whether the need is for a custom color to match a specific pallet, hospital tips for patient rooms, hardware cutouts, wide throw models, custom hole patterns, security fasteners, current transfers, monitoring switches, or medical bearings, Markar hinge modifications will enhance the fit and function of an opening (See pages 22-24). Markar hinges are available in a wide range of finishes including powder coat, anodized (for aluminum), and architectural finishes.

### Medical Bearings are Standard

Medical Bearings are standard for all Pin and Barrel hinges. You benefit from this standard offering with permanently lubricated hinges with no metal to metal contact, improving the life and overall function of the hinge.



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.

## Why Continuous Hinges?

Did you know that on a door with traditional butt hinges, 70% of the door weight is on the top hinge? The top hinge also bears the brunt of abuse when doors are opened beyond the stop device, resulting in kickback shock and eventual failure of the hinge and damage to the frame. This is why continuous hinges are recommended for heavy doors and for situations where doors are exposed to misuse.

Continuous hinges reduce the factors leading to hinge failure by distributing weight evenly so wear and tear to the frame and door is reduced significantly. In addition, continuous hinges:

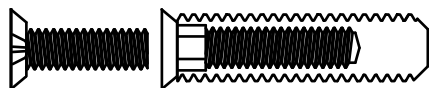
- Increase security and reduce vandalism by preventing insertion of devices between the door and frame
- Ease installation by providing simple alignment of electrical transfers and of monitoring switches
- Reduces air infiltration by creating a complete seal from top to bottom of the door at the hinge jamb

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.

## Optional Features

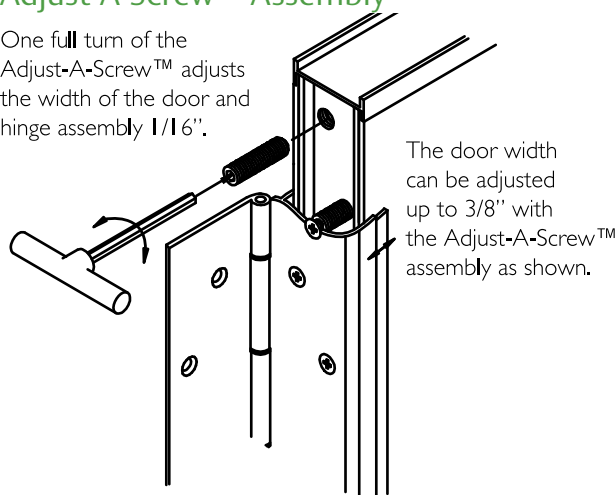
### The Unique Adjust-A-Screw™ Fastener

An optional Markar fastener available on Hinge Guard models permits up to  $\frac{3}{8}$ " 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 Adjust-A-Screw™ Fasteners.



### Adjust-A-Screw™ Assembly

One full turn of the Adjust-A-Screw™ adjusts the width of the door and hinge assembly  $\frac{1}{16}$ ".

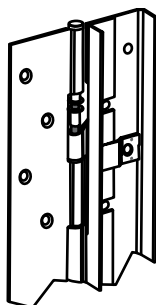


*Recommended 14 gauge reinforcements on frame and door. If using an adjustable Hinge Guard with Adjust-A-Screw, use 14 gauge reinforcements on frame and 12 gauge reinforcements on door.*

For more information, including technical memos, door clearance guides and templates visit [markar.com](http://markar.com)

## Exclusive Fiber-Reinforced Polymer Bearings

- Uniquely designed to provide clean and quiet hinge operation
- Self lubricating with high resistance to wear
- Exceeds ANSI/BHMA Grade 1 requirements
- 25 year warranty



## Windstorm Rated Hinges

Windstorm/hurricane testing on Markar continuous hinges was completed with UL, and was subsequently reviewed, passed and approved by the Florida Building Code (FBC) 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.

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

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

- 100 – 6063-T6 Aluminum
- 200 – 14 ga. Cold Rolled Carbon Steel
- 300 – 14 ga. 304 Stainless Steel
- 600 – 14 ga. 316 Stainless Steel
- 3500 – 12 ga. 304 Stainless Steel (Security Grade)



Tornado



Hurricane



## Fire Rated Continuous Hinges

Markar Stainless Steel hinges (300 Series and 3500 Series) and carbon steel hinges (200 Series) are available with two labeling options: Underwriters Laboratories Inc. or 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

Maximum Door Opening:

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

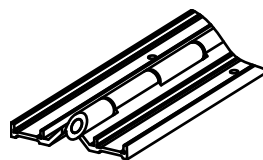
Pair of Doors: 8'0" x 10'0"



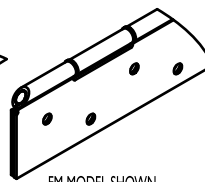
In accordance with UL10C for positive pressure.

## Behavioral Health Hinges

The Markar 200 and 300 Series Continuous Hinges with Hospital Tips are accepted by the New York State Office of Mental Health (OMH) for use in high risk areas.



FS MODEL SHOWN



FM MODEL SHOWN

## Standard Powder Coat Finishes

### 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 mil to 2.0 mil of high gloss formulation.

Adhesion (ASTM D-3359B): There is no lifting of  $\frac{1}{8}$ " 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  $\frac{1}{4}$ " 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.

### Closest US Standard & BHMA Finishes

No minimum quantity.

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

PC-7 available only on 100 & 300 series hinges

\*NOTE: The PC-7 will have an additional charge for two-step polishing process.

### Special Finishes

Polished Aluminum	US26	672
Polished Stainless	US32	629
Kynar Paint	With Color Approval	

\*NOTE: Additional setup charges will apply.

### Special Anodized Finishes

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

### Custom Powder Coat Finishes

All RAL Powder Coat finishes available. Sample color chip must accompany order. Priced at time of order.

### 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

# Hinge Numbering System

## 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 hinge
600	14 Gauge 316 stainless steel pin and barrel security hinges
900	Spring loaded stainless steel toilet partition hinges
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, $\frac{1}{8}$ " offset
02	Full surface, flush
03	Half surface, $\frac{1}{8}$ " offset
04	Half mortise, $\frac{1}{8}$ " 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
15	Edge mount, self aligning flush edge guard
21	Full surface inset, $\frac{3}{4}$ " offset
22	Edge mount hinge/guard, deep
23	Edge mount hinge/guard, deep, thru bolt
25	Edge mount swing clear
26	Edge mount hinge/guard, swing clear
27	Edge mount, safety hinge
29	Edge mount, self aligning

Other numbers are used for specific applications

## Optional Suffixes

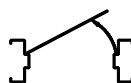
AMS	Adjustable Monitoring Switch
CTP	Current Transfer Preparation
DDP	Dutch Door Prep
EL	ElectroLynx® Wires (Specify 4, 8, or 12)
ETAP	Electrical Transfer Access Prep
EPT	Electric Power Transfer
HT	Hospital Tip
LL	Lead Lined
PC	Powder Coated
RB	Raised Barrel
WT	Wide Throw
PoE	Power over Ethernet

## Hinge Standard Lengths

### Standard Hinge Length Conversion Chart

A 6'8"	door opening	=	actual length	79 $\frac{3}{16}$ "
A 7'0"	door opening	=	actual length	83 $\frac{1}{8}$ "
A 7'2"	door opening	=	actual length	85 $\frac{1}{8}$ "
A 8'0"	door opening	=	actual length	95"
A 10'0"	door opening	=	actual length	118 $\frac{3}{4}$ "

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

# Continuous Hinge Modifications

## Special Length

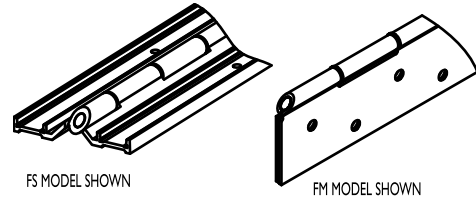
Please specify handing on all custom hinge lengths  
Some custom lengths may require two cuts due to location of screw holes

## Hospital Tip

Available on all models except spring-loaded toilet partition hinges, FS321 and FM327

Suffix hinge "-HT"

Helps provide a safe, clean environment



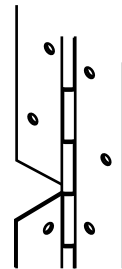
## Dutch Door Prep

Available on all hinge models

Suffix hinge "-DDP"

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 and 3500 series hinges

Markar Custom Hinge Information Form must be filled out

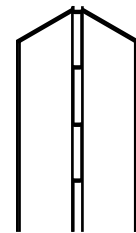
Reinforcement may be required on extreme wide throw applications

These conditions will be determined through a drawing approval process

## Blank

Holes omitted for special applications, such as welded installation

Not available on adjustable models



## Welded End Pins

End pins are tack-welded and are non-removeable

Not available on aluminum, powder coated hinges and 200 series hinges

## Plug Weld

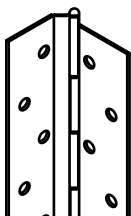
Plug welding hole prep

## Automatic Door Bottom Cut

Standard "U" shape cut accepts most automatic door bottoms

Make and model are needed

For custom cuts, specify net door height and specific drop seal



## Continuous Hinge Modifications (Cont.)

### Raised Barrel (Swaged)

Available on all edge mount, half surface, and half mortise models except on aluminum hinges

Suffix hinge "-RB"

For cased open or center pivot doors



### Standard Edge Guard Cut-Outs

The Edge Guard Order form must be filled out to properly locate the hardware cut-outs

4<sup>7</sup>/<sub>8</sub>" ASA strike

161 latch

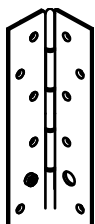
161 strike

86 mortise

Manual flush bolt

Automatic flush bolt

Fire bolt



### Security Studs

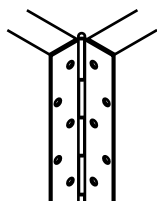
Stainless Steel security studs mounted to the frame leaf

Door leaf is drilled to accommodate studs

Three studs installed on hinges up to 7'2"

Four studs installed on hinges over 7'2"

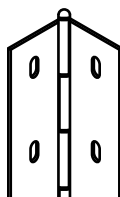
Door and frame must be specially prepared to accommodate security studs



### Sheared Leaf

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

Markar Custom Hinge Information Form must be filled out



### Custom Hole Pattern

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

Markar Custom Hinge Information Form must be filled out

### Custom Design

Markar's Engineering Department will assist you in developing custom applications to solve any of your unique door hinging problems.

Markar Custom Hinge Information Form must be filled out

### Lead Lined (Standard 4 Lbs./SQ.FT.)

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

Available on surface mounted hinges and astragal

## Continuous Hinge Modifications (Cont.)

### EL ElectroLynx® Current Transfer

EL4 For 300, 3500, 200, and 100 series edge mount only. 2 wires at 22 gauge and 2 wires at 26 gauge - with ElectroLynx® connectors (4 wire)

EL8 For 300, 3500, 200, and 100 series edge mount only. 2 wires at 22 gauge and 6 wires at 26 gauge - with ElectroLynx® connectors (8 wire)

EL12 For 300, 3500, 200, and 100 series edge mount only. 2 wires at 22 gauge and 10 wires at 26 gauge - with ElectroLynx® connectors (12 wire)

\*We recommend an Electrical Transfer Access Prep (ETAP) with all ElectroLynx® modifications

Replacement wire harness available (EL4-REPLKIT, EL8-REPLKIT & EL12-REPLKIT)

### ElectroLynx®

As part of their promise to provide innovative, fast and effective high security solutions to their customers, certain ASSA ABLOY Group brands offer ElectroLynx®, a universal quick-connect system that simplifies the electrification of the door opening.

ElectroLynx® is a registered trademark of ASSA ABLOY Inc.

### PoE (Power over Ethernet) ElectroLynx® Power and Data Transfer

PoE for most 3500, 600, 300, 200 and 100 series edge mount continuous hinges- with ElectroLynx® connectors (9 wire). Electrical Transfer Access Prep (ETAP) included.

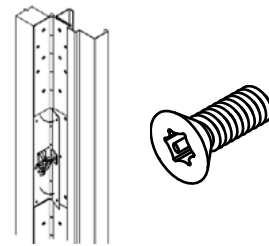
### ETAP Electrical Transfer Access Prep

Cutout prep for the AMS and EL modifications. This allows for 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



### CTP Current Transfer Prep

Centerline of hinge is standard location

Hinge leaf cutout to accommodate Markar's EPT Electric Power Transfer or other manufacturers' power transfer units

Please provide center line location (from top of hinge) and handing for all prep locations, see CTP Form on Page 79

### EPT Electric Power Transfer Units

EL-EPT Stamped steel, for up to 105° opening

EL-EPTL Stamped steel, long for 180° opening

EL-EPT-SC Stamped steel, for swing clear hinges

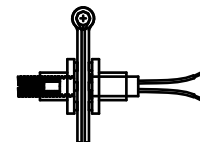
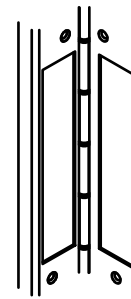
EL-CEPTx32D Cast Stainless Steel, satin

EL-CEPTx10B Cast Stainless Steel, oil rubbed bronze

12-Wire with ElectroLynx® connectors standard on all power transfer units

CTP prep is additional charge

Note: Ordering EPT unit does not constitute CTP prep on hinge



### AMS Adjustable Monitoring Switch

Rigid welded assembly gives you the ability to adjust your monitoring switch to work with all applications 300 and 3500 Series

Rating: 30v AC/DC .25 amps MAX

We recommend an Electrical Transfer Access Prep (ETAP) with this modification.

# Markar 3500 Series Stainless Steel Pin & Barrel Continuous Hinges

## Short Form Architectural Specification:

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
- .187" diameter Stainless Steel pin (rod)
- Each knuckle 2", including 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.
- 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
- Symmetrically templated hole pattern

Note: 25-Year Warranty on Continuous Pin & Barrel Hinges

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

## Markar FM3500 Edge Mount Security Hinge

### Standard Features

#### Barrel Type Hinge

.187" diameter Stainless Steel pin (rod)

Medical bearings

Stainless Steel end pins

#### Material

Heavy-duty 12 gauge (.105")

Stainless Steel

#### Finishes

US32D Satin Stainless Steel (630)

#### Hospital Tip

Standard

#### Standards

ANSI/BHMA Standard A156.26 Grade 1

#### Hole Pattern

Symmetrically templated

#### Mounting Hardware

Fasteners concealed when door is closed

Custom 12-24 x 7/16" S.S Phillips Flat Head Undercut Machine Screw

#### Capacity

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

#### Standard Sizes

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

#### Handing

Handing not required on standard hinges. Specify handing when ordering a hinge with modification

#### Fire Rating

3 hours- hollow metal doors

90 minutes- hollow metal and composite

20 minutes- wood doors



Classified in accordance with UL10C for positive pressure



Fire-rated label

#### Windstorm

Evaluated in accordance with TAS 201-94, TAS 202-94, TAS 203-94, ASTM E330, ASTM E1886, ASTM E1996 and ANSI A250.13.

### Optional Features

#### Finish

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

#### Hole Patterns

Plug weld hole pattern

Custom hole pattern

#### Fasteners

Tamper-proof security screws

#### Other Features

Custom lengths - specify in inches

Dutch door hinges - suffix "DDP"

Raised barrel - suffix "RB"

Welded End Pins

Security studs

#### Electrical Modifications

Adjustable Monitoring Switch - suffix "AMS"

Current Transfer Prep - suffix "CTP"

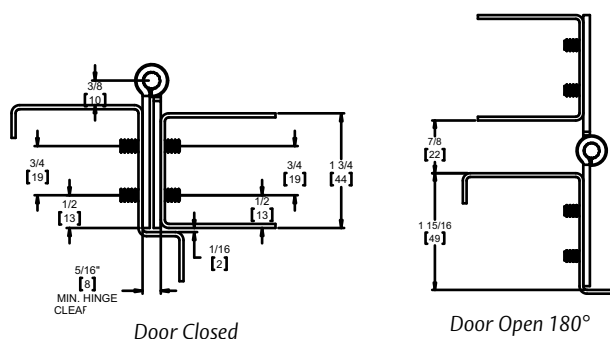
Electrical Transfer Access Prep - "ETAP"

ElectroLynx®

EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)

PoE (9 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 up to 2 1/4" thick swing-type doors. Prison doors, gates, extremely tall doors and extra heavy doors are all good candidates for Markar's 3500 Security Hinge.





# Markar FS3501 1/8" Inset Full Surface Security Hinge

## Standard Features

**Barrel Type Hinge**  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
**Material**  
 Heavy-duty 12 gauge (.105")  
 Stainless Steel  
**Finishes**  
 US32D Satin Stainless Steel (630)  
 Hospital Tip  
 Standard

**Standards**  
 ANSI/BHMA Standard A156.26  
 Grade 1  
**Mounting Hardware**  
 Custom 12-24 x 7/16" S.S Phillips  
 Flat Head Undercut Machine  
 Screw  
**Capacity**  
 Supports weights up to 900lbs.  
 4'0" maximum door width  
**Standard Sizes**  
 6'8", 7'0", 7'2", 8'0", 10'0"

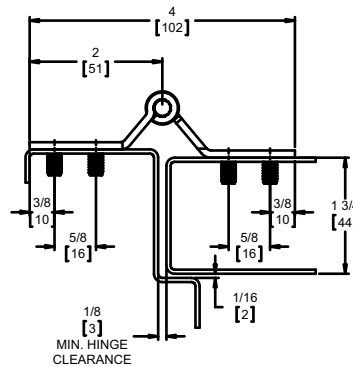
**Hole Pattern**  
 Symmetrically templated  
**Handing**  
 Specify handing  
**Fire Rating**  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite  
 20 minutes- wood doors  
 Classified in accordance with UL10C  
 for positive pressure  
 Fire-rated label

## Optional Features

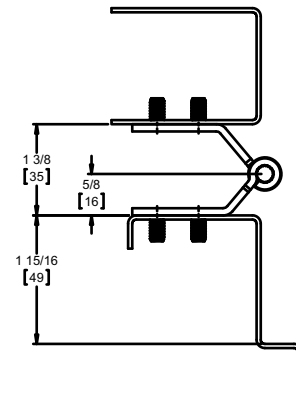
**Finish**  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
**Hole Patterns**  
 Plug weld hole pattern  
 Custom hole pattern

**Fasteners**  
 Tamper-proof security screws  
**Other Features**  
 Custom lengths – specify in inches  
 Dutch door hinges – suffix "DDP"  
 Welded End Pins

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 180°



# Markar FS3502 Flush Full Surface Security Hinge

## Standard Features

**Barrel Type Hinge**  
 .187" diameter Stainless Steel pin (rod)  
 Stainless Steel end pins  
 Medical bearings  
**Material**  
 Heavy-duty 12 gauge (.105")  
 Stainless Steel  
**Finishes**  
 US32D Satin Stainless Steel (630)  
 Hospital Tip  
 Standard  
**Standards**  
 ANSI/BHMA Standard A156.26 Grade 1

**Mounting Hardware**  
 Custom 12-24 x  $\frac{7}{16}$ " S.S Phillips Flat  
 Head Undercut Machine Screw  
**Capacity**  
 Supports weights up to 900lbs.  
 4'0" maximum door width  
**Standard Sizes**  
 6'8", 7'0", 7'2", 8'0", 10'0"  
**Hole Pattern**  
 Symmetrically templated  
**Handing**  
 Handing not required on standard  
 hinges Specify handing when  
 ordering a hinge with modification

**Fire Rating**  
 3 hours- hollow metal doors 90  
 minutes- hollow metal and composite  
 20 minutes- wood doors

 Classified in accordance with  
 UL10C for positive pressure  
 Fire-rated label

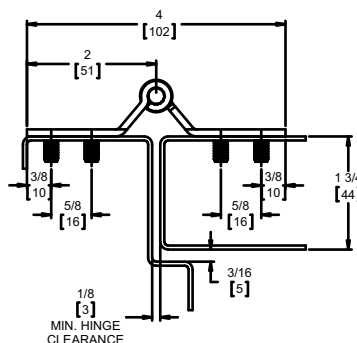
## Optional Features

**Finish**  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
**Hole Patterns**  
 Plug weld hole pattern  
 Custom hole pattern

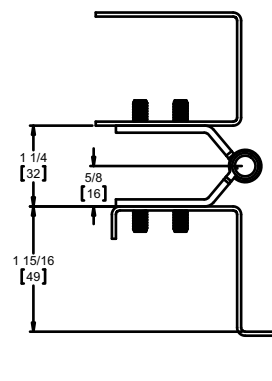
**Fasteners**  
 Tamper-proof security screws  
**Other Features**  
 Custom lengths - specify in inches  
 Dutch door hinges - suffix "DDP"  
 Welded End Pins

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.



Door Closed




Door Open 180°

# Markar HG3505 Adjustable Hinge Guard

## Standard Features

Barrel Type Hinge  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
 Material  
 Heavy-duty 12-gauge (.105") Stainless  
 Steel hinge leaves  
 14 gauge Stainless Steel angle on door leaf  
 Finishes  
 US32D Satin Stainless Steel (630)  
 Hospital Tip  
 Standard

Standards  
 ANSI/BHMA Standard A156.26  
 Grade 1  
 Mounting Hardware  
 Custom 12-24 x 7/16" S.S Phillips  
 Flat Head Undercut Machine  
 Screw  
 Capacity  
 Supports weights up to 900lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0", 10'0"

Hole Pattern  
 Symmetrically templated  
 Handing  
 Specify handing  
 Fire Rating  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and  
 composite 20 minutes- wood doors  
 Classified in accordance with UL10C for  
 positive pressure  
 Fire-rated label

## Optional Features

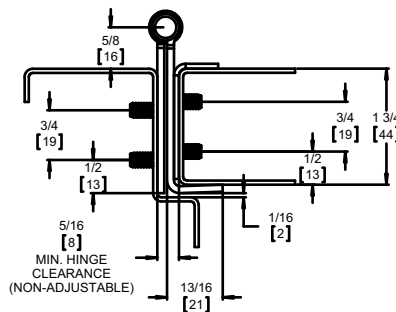
Finish  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
 Mounting Hardware  
 Tamper-proof security screws  
 Adjust-A-Screw™ for correcting alignment  
 problems up to 3/8"

Other Features  
 Custom lengths – specify in  
 inches  
 Custom hole pattern  
 Dutch door hinges – suffix "DDP"  
 Raised barrel - suffix "RB"  
 Welded end pins  
 Security studs

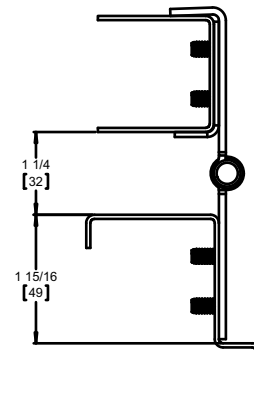
Electrical Modifications  
 Adjustable Monitoring Switch - suffix "AMS"  
 Current Transfer Prep - suffix "CTP"  
 Electronic Transfer Access Prep - suffix "ETAP"  
 ElectroLynx®  
 EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
 PoE (9 wire)



The integral hinge guard protects the door from dings and gouges from carts and gurneys while providing clean lines and aesthetic appearance. Our HG products also have fire ratings up to and including 3 hours.



Door Closed



Door Open 180°

# Markar 600 Series Stainless Steel Pin & Barrel Continuous Hinges

## Short Form Architectural Specification:

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 316 Stainless Steel
- .187" diameter Stainless Steel pin (rod)
- Exterior barrel diameter .438" ( $\frac{7}{16}$ " )
- Each knuckle 2", including 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.
- 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: 25-Year Warranty on Continuous Pin & Barrel Hinges

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

## Markar FM600 316 SS Edge Mount Hinge

### Standard Features

#### Barrel Type Hinge

.187" diameter Stainless Steel pin (rod)

Medical bearings

Stainless Steel end pins

Material

Heavy duty 14 gauge 316 stainless steel

Finishes

US32D Satin Stainless Steel (630)

Standards

ANSI/BHMA Standard A156.26 Grade 1

Hole Pattern

Symmetrically templated

#### Mounting Hardware

Fasteners concealed when door is closed

Custom 12-24 x  $\frac{11}{16}$ " S.S Phillips

Flat Head Undercut TEK Screws

Capacity

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

Standard Sizes

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

Handing

Handing not required on standard hinges. Specify handing when ordering a hinge with modification.

#### Rating

3 hours- hollow metal doors

90 minutes- hollow metal and

composite core wood fire doors

20 minutes- wood doors



Classified in accordance with UL10C for positive pressure



Fire-rated label

Windstorm

Evaluated in accordance with TAS 201-94, TAS 202-94, TAS 203-94, ASTM E330, ASTM E1886, ASTM E1996 and ANSI A250.13

### Optional Features

#### Finishes

Scratch-Resistant Powder Coated Paint

Fasteners

Tamper-proof security screws

Other Features

Custom lengths- specify in inches

Custom hole pattern

Dutch door hinges- suffix "DDP"

Hospital tips - suffix "HT"

Raised barrel - suffix "RB"

Welded end pins

Security studs.

Electrical Modifications

Adjustable Monitoring Switch - "AMS"

Current Transfer Prep - suffix "CTP"

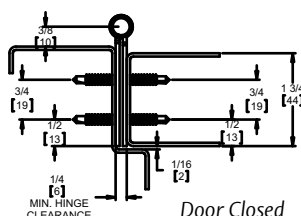
Electrical Transfer Access Prep - suffix "ETAP"

ElectroLynx®

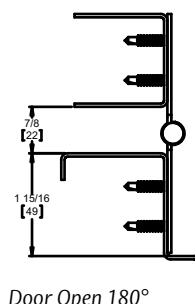
EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)

PoE (9 wire)

This superior corrosion resistant edge mounted pin & barrel hinge is used in high chloride, sodium and sulfurous acid environments. This hinge works well in marine type environments.



Door Closed



Door Open 180°

# Markar 300 Series Stainless Steel Pin & Barrel Continuous Hinges

## Short Form Architectural Specification:

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
- .187" diameter Stainless Steel pin (rod)
- Exterior barrel diameter .438" ( $\frac{7}{16}$ " )
- Each knuckle 2", including 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.
- 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: 25-Year Warranty on Continuous Pin & Barrel Hinges

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

## Markar FM300 Edge Mount Hinge

### Standard Features

Barrel Type Hinge  
.187" diameter Stainless Steel pin (rod)  
Medical bearings  
Stainless Steel end pins  
Material  
Heavy-duty 14 gauge Stainless Steel  
Finishes  
US32D Satin Stainless Steel (630)  
Standards  
ANSI/BHMA Standard A156.26 Grade 1  
Hole Pattern  
Symmetrically templated

Mounting Hardware  
Fasteners concealed when door is closed  
Custom 12-24 x  $\frac{11}{16}$ " S.S Phillips  
Flat Head Undercut TEK Screws  
Capacity  
Supports weights up to 600 lbs.  
4'0" maximum door width  
Standard Sizes  
6'8", 7'0", 7'2", 8'0", 10'0"  
Handing  
Handing not required on standard hinges. Specify handing when ordering a hinge with modification.

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



Classified in accordance with UL10C for positive pressure



Fire-rated label

Windstorm  
Evaluated in accordance with TAS 201-94, TAS 202-94, TAS 203-94, ASTM E330, ASTM E1886, ASTM E1996 and ANSI A250.13

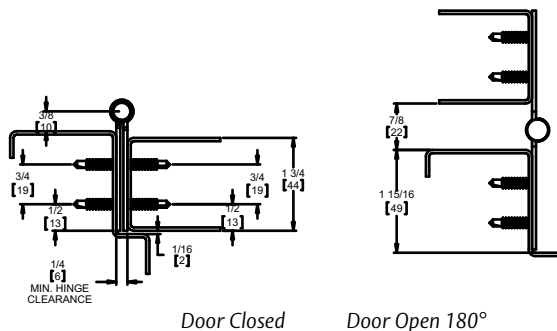
### Optional Features

Finishes  
Scratch-Resistant Powder Coated Paint  
Fasteners  
Tamper-proof security screws  
Other Features  
Custom lengths- specify in inches  
Custom hole pattern

Dutch door hinges- suffix "DDP"  
Hospital tips - suffix "HT"  
Raised barrel - suffix "RB"  
Welded end pins  
Security studs.  
Electrical Modifications  
Adjustable Monitoring Switch - "AMS"

Current Transfer Prep - suffix "CTP"  
Electrical Transfer Access Prep - suffix "ETAP"  
ElectroLynx®  
EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
PoE (9 wire)

This edge-mounted pin & barrel hinge is used on many of today's high traffic, high abuse doors. The hinge works well in locations that would normally call out for 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.





# Markar FM300WT Wide Throw Edge Mount Hinges

## Standard Features

**Barrel Type Hinge**  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
**Material**  
 Heavy-duty 14 gauge Stainless Steel  
 Heavy-duty 12 gauge support angles, where applicable  
**Finishes**  
 US32D Satin Stainless Steel (630)  
**Standards**  
 ANSI/BHMA Standard A156.26 Grade 1

**Mounting Hardware**  
 Custom 12-24 x 11/16" S.S Phillips Flat Head Undercut TEK Screws  
**Capacity**  
 Weight: Consult factory  
 4'0" maximum door width  
**Standard Sizes**  
 6'8", 7'0", 7'2", 8'0", 10'0"  
**Hole Pattern**  
 Symmetrically templated

**Handing**  
 Handing not required on standard hinges. Specify handing when ordering a hinge with modification  
**Fire Rating**  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite core wood fire doors  
 20 minutes- wood doors  
 Classified in accordance with UL10C for positive pressure  
 Fire-rated label

## Optional Features

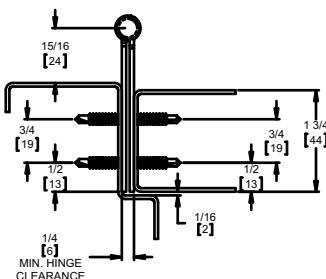
**Finishes**  
 Scratch-Resistant Powder Coated Paint  
**Fasteners**  
 Tamper-proof security screws

**Other Features**  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges- suffix "DDP"  
 Hospital tips - suffix "HT"  
 Welded end pins  
 Security studs

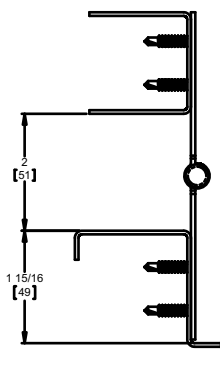
**Electrical Modifications**  
 Adjustable Monitoring Switch - suffix "AMS"  
 Current Transfer Prep - suffix "CTP"  
 Electrical Transfer Access Prep - suffix "ETAP"  
 ElectroLynx®  
 EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)

This edge-mounted pin & barrel hinge is used on many of today's high traffic, high abuse doors. The hinge works well in locations that would normally call out for 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.

FM300WT10



Door Closed

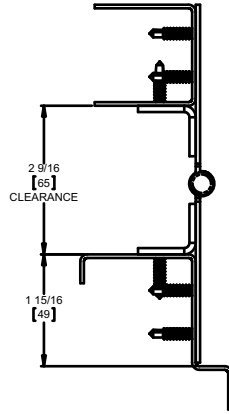
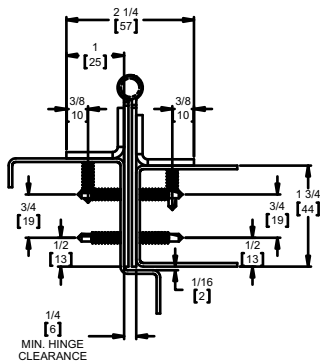


Door Open 180°

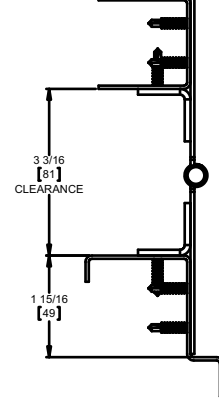
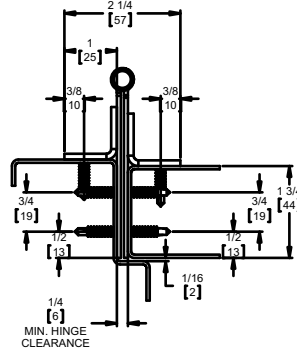
More profiles on next page

## Markar FM300WT Wide Throw Edge Mount Hinges (cont)

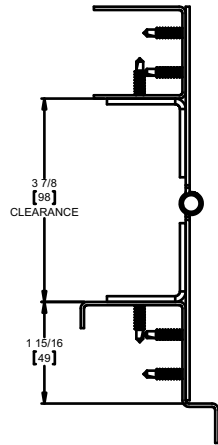
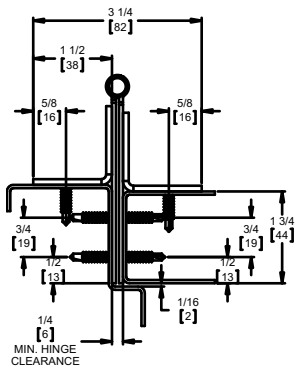
FM300WT20



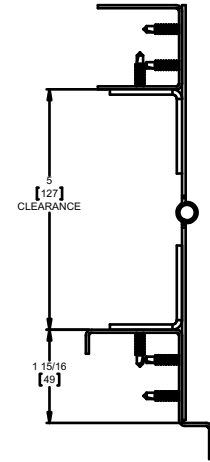
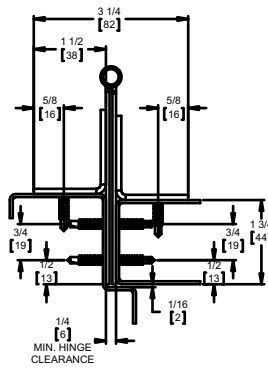
FM300WT30



FM300WT40



FM300WT50





# Markar FS301 1/8" Inset Full Surface Hinge

## Standard Features

Barrel Type Hinge  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
 Material  
 Heavy-duty 14 gauge Stainless Steel  
 Cover - extruded aluminum  
 Finishes  
 US32D Satin Stainless Steel (630)  
 Cover - brushed aluminum  
 Standards  
 ANSI/BHMA Standard A156.26 Grade 1

Mounting Hardware  
 Fasteners concealed underneath aluminum cover  
 1/4"-14 x 3/4" Security TORX  
 TEK Screws  
 Capacity  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0", 10'0"  
 Hanging  
 Not required for standard 7'0", 8'0" or 10'0". Hanging required for 6'8" and 7'2" and for most optional features listed

Fire Rating  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite core wood fire doors  
 20 minutes- wood doors

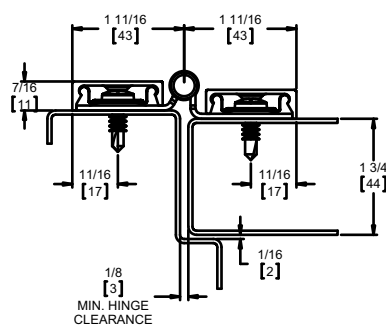
 Classified in accordance with UL10C for positive pressure  
 Fire-rated label

## Optional Features

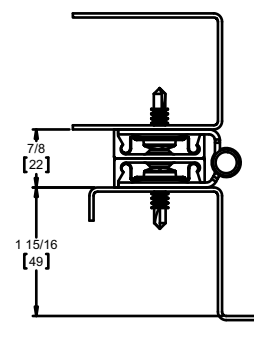
Finishes  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
 Fasteners  
 1 5/8" S.S. sleeve bolts  
 Tamper-proof security screws

Other Features  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"  
 Lead lined covers with 4 lbs. lead lining - suffix "LL"  
 Welded end pins

This surface-mounted pin & barrel continuous hinge can be used to repair or replace existing hinges on 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 180°

# Markar FS302 Full Surface Flush Mount

## Standard Features

**Barrel Type Hinge**  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
**Material**  
 Heavy-duty 14 gauge Stainless Steel  
 Cover - extruded aluminum  
**Finishes**  
 US32D Satin Stainless Steel (630)  
 Cover - brushed aluminum  
**Standards**  
 ANSI/BHMA Standard A156.26 Grade 1

**Mounting Hardware**  
 Fasteners concealed underneath aluminum cover  
 1/4" - 14 x 3/4" Security TORX  
 TEK Screws Capacity  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
**Standard Sizes**  
 6'8", 7'0", 7'2", 8'0", 10'0"  
**Hole Pattern**  
 Symmetrically templated  
**Handing**  
 Handing not required on standard hinges. Specify handing when ordering a hinge with modification

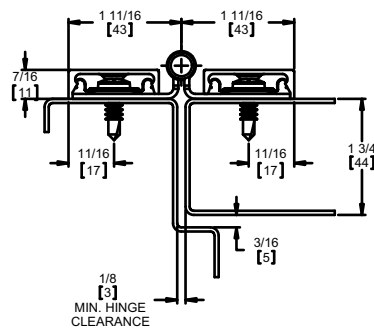
**Fire Rating**  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite core wood fire doors  
 20 minutes- wood doors  
 Classified in accordance with UL10C for positive pressure  
 Fire-rated label

## Optional Features

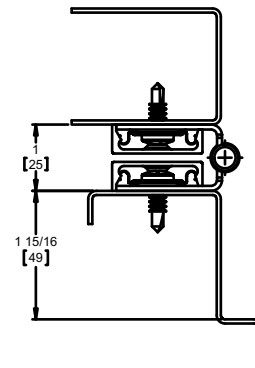
**Finishes**  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
**Fasteners**  
 1 5/8" S.S. sleeve bolts  
 Tamper-proof security screws

**Other Features**  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"  
 Lead lined covers with 4 lbs. lead lining - suffix "LL"  
 Welded end pins

This surface-mounted pin & barrel continuous hinge can be used to replace and repair existing hinges on both fire labeled and non-labeled doors. Designed for retrofit market.



Door Closed





Door Open 180°

# Markar HS303 Half Surface Hinge

## Standard Features

**Barrel Type Hinge**  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
**Material**  
 Heavy-duty 14 gauge Stainless Steel  
 Cover - extruded aluminum  
**Finishes**  
 US32D Satin Stainless Steel (630)  
 Cover - brushed aluminum  
**Standards**  
 ANSI/BHMA Standard A156.26 Grade 1

**Mounting Hardware**  
 Fasteners concealed when door is closed  
 Custom 12-24 x 11/16" S.S Phillips Flat Head Undercut TEK Screws & 1/4-14 x 3/4" Security TORX TEK Screws  
**Capacity**  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
**Sizes**  
 6'8", 7'0", 7'2", 8'0", 10'0"  
**Hole Pattern**  
 Symmetrically templated

**Handing**  
 Not required for standard 7'0", 8'0" or 10'0". Handing required for 6'8" and 7'0" and for most optional features listed  
**Fire Rating**  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite  
 20 minutes- wood doors  
 Classified in accordance with UL10C for positive pressure  
 Fire-rated label

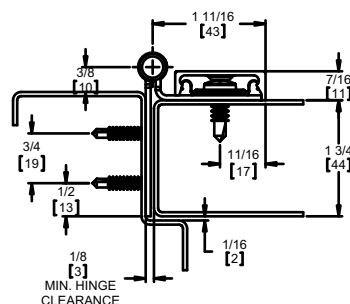
## Optional Features

**Finish**  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
**Fasteners**  
 1 5/8" S.S. sleeve bolts  
 Tamper-proof security screws

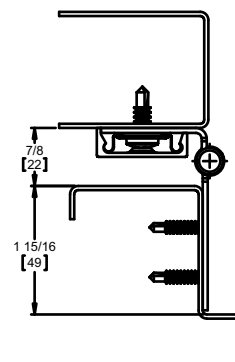
**Other Features**  
 Custom lengths - specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"  
 Raised barrel - suffix "RB"  
 Welded end pins  
 Lead lined cover with 4 lbs. lead lining - suffix "LL"

**Electrical Modifications**  
 Current Transfer Prep (frame leaf only) - suffix "CTP"

This half-surface pin & barrel continuous hinge can be used to repair or replace existing hinges on both fire 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 consult factory for instructions for unevenly-rabbetted frames.)



Door Closed



Door Open 180°

# Markar HM304 Half Mortise Hinge

## Standard Features

Barrel Type Hinge  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
 Material  
 Heavy-duty 14 gauge Stainless Steel  
 Cover - extruded aluminum  
 Finishes  
 US32D Satin Stainless Steel (630)  
 Cover - brushed aluminum  
 Standards  
 ANSI/BHMA Standard A156.26 Grade 1

Mounting Hardware  
 Fasteners concealed when door is closed  
 Custom 12-24 x  $\frac{11}{16}$ " S.S Phillips Flat Head Undercut TEK Screws &  $\frac{1}{4}$ -14 x  $\frac{3}{4}$ " Security TORX TEK Screws  
 Capacity  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0", 10'0"  
 Hole Pattern  
 Symmetrically templated

Handing  
 Not required for standard 7'0", 8'0" or 10'0". Handing required for 6'8" and 7'2" and for most optional features listed  
 Fire Rating  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite  
 20 minutes- wood doors  
 Classified in accordance with UL10C for positive pressure  
 Fire-rated label



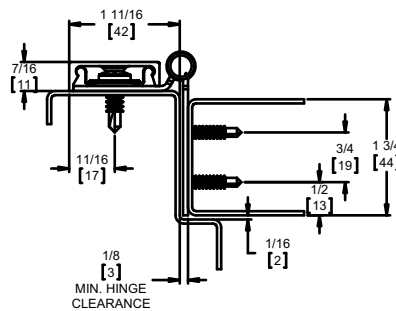
## Optional Features

Finishes  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
 Fasteners  
 Tamper-proof security screws

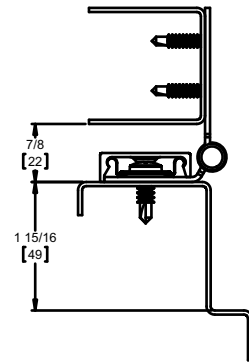
Other Features  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges- suffix "DDP"  
 Hospital tips - suffix "HT"  
 Raised barrel - suffix "RB"  
 Welded end pins

Electrical Modifications  
 Current Transfer Prep (door leaf only) - suffix "CTP"

This pin & barrel type hinge is used on wooden doors to hide splits, chips and dents from traffic abuse. The surface mounted frame leaf allows for easy retrofit installation.



Door Closed





Door Open 180°

# Markar HG305 Adjustable Hinge Guard

## Standard Features

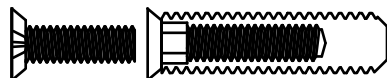
Barrel Type Hinge  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
 Material  
 Heavy-duty 14 gauge Stainless Steel  
 Finishes  
 US32D Satin Stainless Steel (630)  
 Standards  
 ANSI/BHMA Standard A156.26 Grade 1  
 Mounting Hardware  
 Fasteners concealed when door is closed  
 Custom 12-24 x  $11/16$ " S.S Phillips Flat Head Undercut TEK Screws

Capacity  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0", 10'0"  
 Hole Pattern  
 Symmetrically templated  
 Hanging  
 Not required for standard 7'0", 8'0" or 10'0". Hanging required for 6'8" and 7'2" and for most optional features listed

Fire Rating  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite  
 20 minutes- wood doors  
 Classified in accordance with UL10C for positive pressure  
 Fire-rated label  
 Windstorm  
 Products is constructed in accordance with Guidelines FEMA 320 & FEMA 361.

## Optional Features

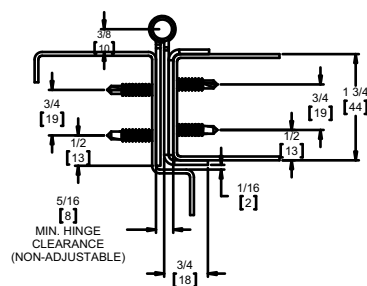
Finish  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
 Fasteners  
 Adjust-A-Screw™ for correcting frame fit problems up to  $3/8$ "



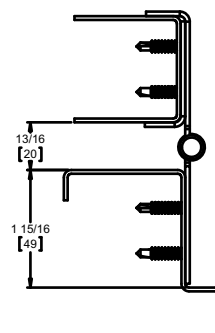
Other Features  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges- suffix "DDP"  
 Hospital tips – suffix "HT"  
 Raised barrel – suffix "RB"  
 Welded end pins  
 Security studs

Electrical Modifications  
 Adjustable Monitoring Switch - suffix "AMS"  
 Current Transfer Prep - suffix "CTP"  
 Electrical Transfer Access Prep - suffix "ETAP"  
 ElectroLynx®  
 EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
 PoE (9 wire)

The integral hinge guard protects the door from dings and gouges from carts and gurneys while providing clean lines and aesthetic appearance. Our HG products also have fire ratings up to and including 3 hours. Not only that, but the wrap-around edge guard protects the door from unsightly dents and gouges and will deflect objects, preventing further damage.



Door Closed



Door Open 180°

# Markar HG306 Hinge Guard

## Standard Features

**Barrel Type Hinge**  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
**Material**  
 Heavy-duty 14 gauge Stainless Steel  
 Cover - extruded aluminum  
**Finishes**  
 US32D Satin Stainless Steel (630)  
 Cover - brushed aluminum  
**Standards**  
 ANSI/BHMA Standard A156.26 Grade 1  
**Mounting Hardware**  
 Fasteners concealed when door is closed

Custom 12-24 x  $\frac{11}{16}$ " S.S Phillips Flat  
 Head Undercut TEK Screws &  $\frac{1}{4}$ -14 x  $\frac{3}{4}$ "  
 Security TORX TEK Screws  
**Capacity**  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
**Standard Sizes**  
 6'8", 7'0", 7'2", 8'0", 10'0"  
**Hole Pattern**  
 Symmetrically templated  
**Handing**  
 Not required for standard 7'0", 8'0" or 10'0". Handing required for 6'8" and 7'2" and for most optional features listed

**Fire Rating**  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite  
 20 minutes- wood doors



Classified in accordance with UL10C for positive pressure



Fire-rated label

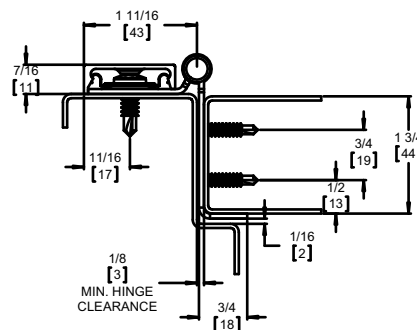
## Optional Features

**Finishes**  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
**Fasteners**  
 Tamper-proof security screws

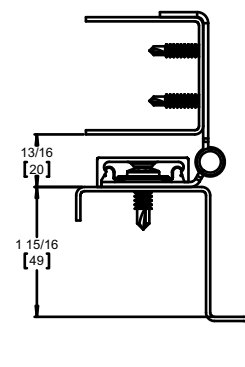
**Other Features**  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges- suffix "DDP"  
 Hospital tips - suffix "HT"  
 Raised barrel - suffix "RB"  
 Welded End Pins

**Electrical Modifications**  
 Current Transfer Prep (door leaf only) - suffix "CTP"

This hinge is used with hollow metal frames and wood or hollow metal doors. The guard that wraps the door covers up dents, scratches, and splits in the door 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 180°

# Markar FS/SC309 Full Surface Swing Clear Hinge

## Standard Features

Barrel Type Hinge  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
 Material  
 Heavy-duty 14 gauge Stainless Steel  
 Cover - extruded aluminum  
 Finishes  
 US32D Satin Stainless Steel (630)  
 Cover - brushed aluminum  
 Standards  
 ANSI/BHMA Standard A156.26 Grade 1  
 Mounting Hardware  
 Fasteners concealed when door is closed  
 Custom 12-24 x  $\frac{11}{16}$ " S.S. Phillips Flat  
 Head Undercut TEK Screws &  $\frac{1}{4}$ -14 x  $\frac{3}{4}$ "  
 Security TORX TEK Screws

Capacity  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0", 10'0"  
 Hole Pattern  
 Symmetrically templated  
 Handing  
 Not required for standard 7'0", 8'0"  
 or 10'0". Specify handing for 6'8" and  
 7'2" and for most optional features

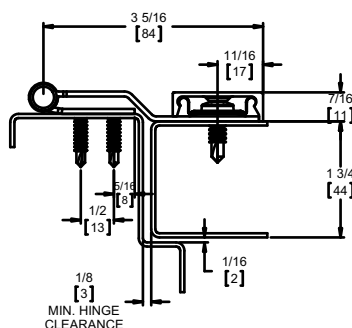
Fire Rating  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and  
 composite  
 20 minutes- wood doors  
 Classified in accordance  
 with UL10C for positive  
 pressure  
 Fire-rated label

## Optional Features

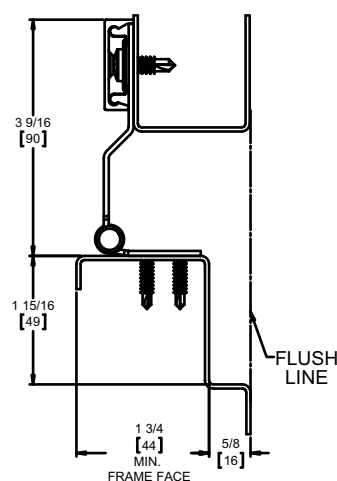
Finish  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
 Fasteners  
 Tamper-proof security screws

Other Features  
 Custom lengths- specify in inches  
 Custom hole pattern  
 $1\frac{5}{8}$ " S.S. aluminum sleeve bolts  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"  
 Lead lined cover with 4 lbs. lead lining  
 - suffix "LL"  
 Welded End Pins

This 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  $1\frac{3}{4}$ " face, and is especially useful for ADA upgrade work.



Door Closed



Door Open 90°

# Markar HG310 Swing Clear Adjustable Hinge Guard

## Standard Features

**Barrel Type Hinge**  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
**Material**  
 Heavy-duty 14 gauge Stainless Steel  
**Finishes**  
 US32D Satin Stainless Steel (630)  
**Standards**  
 ANSI/BHMA Standard A156.26 Grade 1  
**Mounting Hardware**  
 Fasteners concealed when door is closed  
 Custom 12-24 x <sup>11</sup>/<sub>16</sub>" S.S Phillips Flat Head Undercut TEK Screws

**Capacity**  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
**Standard Sizes**  
 6'8", 7'0", 7'2", 8'0", 10'0"  
**Hole Pattern**  
 Symmetrically templated  
**Handing**  
 Not required for standard 7'0", 8'0" or 10'0". Specify handing for 6'8" and 7'2" and for most optional features  
**Door Edge**  
 Square hinge edge  
 Recommend Adjust-A-Screw for beveled hinge edge

**Fire Rating**  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite core wood fire doors  
 20 minutes- wood doors



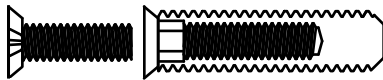
Classified in accordance with UL10C for positive pressure



Fire-rated label

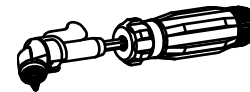
## Optional Features

**Finishes**  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
**Fasteners**  
 Tamper-proof security screws  
 Adjust-A-Screws™ for correcting frame fit problems up to <sup>3</sup>/<sub>8</sub>"



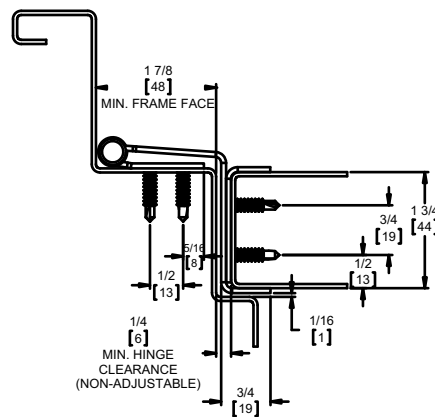
**Other Features**  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"  
 Welded End Pins

**Tools**  
 MTSP-100 Right angle skewdriver for ease of installation

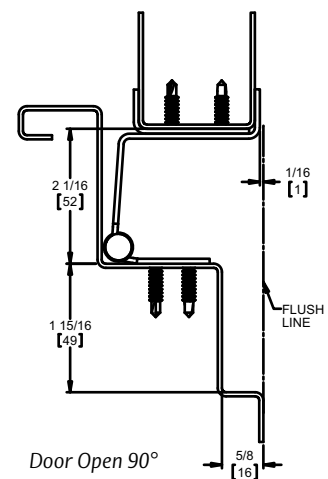


**Electrical Modifications**  
 Current Transfer Prep (door leaf only) - suffix "CTP"  
 (EL-EPT-SC Power Transfer Recommended)

The ADA-compliant 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 open position.



Door Closed



Door Open 90°

# Markar HG311 Swing Clear Hinge Guard

## Standard Features

Barrel Type Hinge  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
 Material  
 Heavy-duty 14 gauge Stainless Steel  
 Finishes  
 US32D Satin Stainless Steel (630)  
 Standards  
 ANSI/BHMA Standard A156.26 Grade 1  
 Mounting Hardware  
 Fasteners concealed when door  
 is closed  
 Custom 12-24 x  $11/16$ " S.S Phillips Flat Head  
 Undercut TEK Screws

Capacity  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0", 10'0"  
 Hole Pattern  
 Symmetrically templated  
 Handing  
 Not required for standard 7'0", 8'0"  
 or 10'0". Specify handing for 6'8" and  
 7'2" and for most optional features  
 Door Edge  
 Square hinge edge  
 For beveled hinge edge use HG310

Fire Rating  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and  
 composite core wood fire doors  
 20 minutes- wood doors



Classified in accordance  
 with UL10C for positive  
 pressure



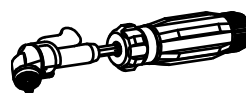
Fire-rated label

## Optional Features

Finishes  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
 Fasteners  
 Tamper-proof security screws

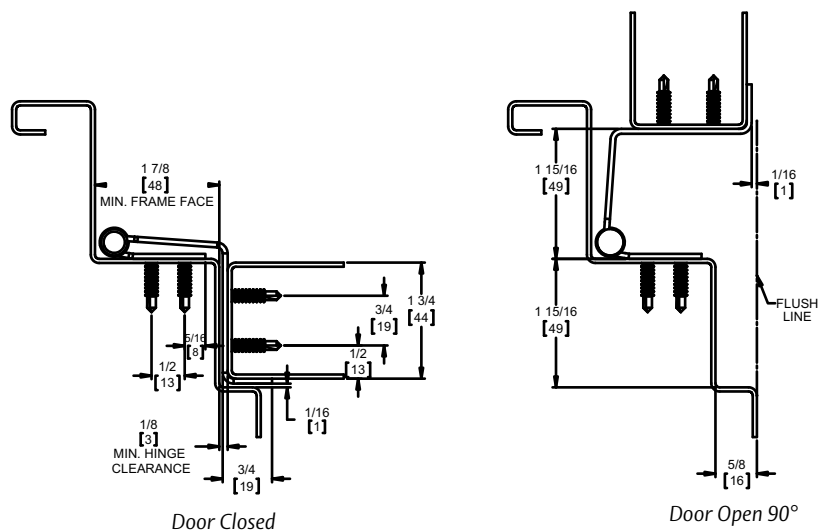
Other Features  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"  
 Welded End Pins

Tools  
 MTSP-100 Right angle skewdriver for ease  
 of installation



Electrical Modifications  
 Current Transfer Prep (door leaf only) -  
 suffix "CTP"  
 (EL-EPT-SC Power Transfer Recommended)

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



# Markar HG315 Edge Mount Hinge Guard

## Standard Features

Barrel Type Hinge  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
 Material  
 Heavy-duty 14 gauge Stainless Steel  
 Finishes  
 US32D Satin Stainless Steel (630)  
 Standards  
 ANSI/BHMA Standard A156.26 Grade 1  
 Mounting Hardware  
 Fasteners concealed when door is closed  
 Custom 12-24 x 11/16" S.S Phillips Flat Head Undercut TEK Screws

Capacity  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0", 10'0"  
 Hole Pattern  
 Symmetrically templated  
 Handing  
 Not required for standard 7'0", 8'0" or 10'0". Specify handing for 6'8" and 7'2" and for most optional features

Fire Rating  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite core wood fire doors  
 20 minutes- wood doors



Classified in accordance with UL10C for positive pressure



Fire-rated label

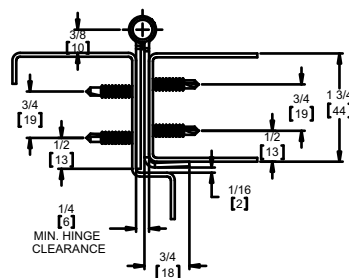
## Optional Features

Finishes  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
 Fasteners  
 Tamper-proof security screws

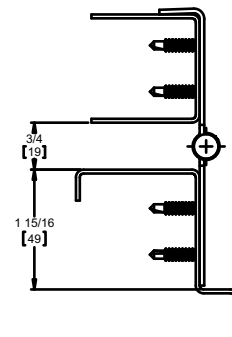
Other Features  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges- suffix "DDP"  
 Hospital tips - suffix "HT"  
 Raised barrel - suffix "RB"  
 Welded end pins  
 Security studs

Electrical Modifications  
 Adjustable Monitoring Switch - suffix "AMS"  
 Current Transfer Prep - suffix "CTP"  
 Electrical Transfer Access Prep - suffix "ETAP"  
 ElectroLynx®  
 EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
 PoE (9 wire)

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



Door Closed



Door Open 180°

# Markar FS321 Full Surface 3/4" Offset Hinge

## Standard Features

**Barrel Type Hinge**  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
**Material**  
 Heavy-duty 14 gauge Stainless Steel  
 Cover - extruded aluminum  
**Finishes**  
 US32D Satin Stainless Steel (630)  
**Standards**  
 ANSI/BHMA Standard A156.26 Grade 1  
**Mounting Hardware**  
 Fasteners concealed underneath  
 aluminum cover  
 1/4-14 x 3/4" Security TORX TEK Screws

**Capacity**  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
**Standard Sizes**  
 6'8", 7'0", 7'2", 8'0", 10'0"  
 brushed aluminum  
**Handing**  
 Not required for standard 7'0", 8'0"  
 or 10'0". Specify handing for 6'8" and  
 7'2" and for most optional features

**Fire Rating**  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and  
 composite core wood fire doors  
 20 minutes- wood doors



Classified in accordance  
 with UL10C for positive  
 pressure



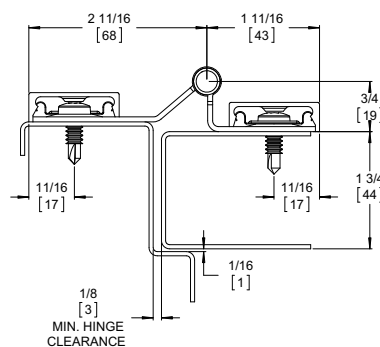
Fire-rated label

## Optional Features

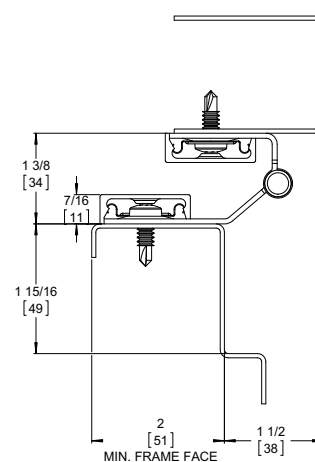
**Finishes**  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
**Fasteners**  
 Tamper-proof security screws

**Other Features**  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges- suffix "DDP"  
 Hospital tips - suffix "HT"  
 Lead lined covers with 4 lbs. lead lining  
 - suffix "LL"  
 Welded end pins

This surface mount pin & barrel model  
 was developed to work in conjunction  
 with existing 3/4" offset floor closers.  
 Where top or intermediate pivots have  
 worn and the floor closer will remain, the  
 FS321 is the solution to extending the life  
 of the opening.



Door Closed



Door Open 180°

# Markar HG322 Adjustable Hinge Guard

## Standard Features

Barrel Type Hinge  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
 Material  
 Heavy-duty 14 gauge Stainless Steel  
 Finishes  
 US32D Satin Stainless Steel (630)  
 Standards  
 ANSI/BHMA Standard A156.26 Grade 1  
 Mounting Hardware  
 Fasteners concealed when door is closed  
 Custom 12-24 x  $\frac{11}{16}$ " S.S Phillips Flat  
 Head Undercut TEK Screws

Capacity  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0", 10'0"  
 Hole Pattern  
 Symmetrically templated  
 Handing  
 Not required for standard 7'0", 8'0"  
 or 10'0". Specify handing for 6'8" and  
 7'2" and for most optional features

Fire Rating  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and  
 composite core wood fire doors  
 20 minutes- wood doors



Classified in accordance  
 with UL10C for positive  
 pressure



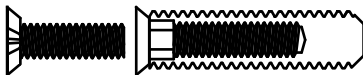
Fire-rated label

## Optional Features

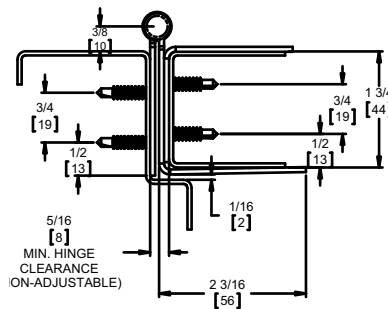
Finishes  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated  
 Paint  
 Fasteners  
 Tamper-proof security screws  
 Adjust-A-Screw™ for correcting frame  
 fit problems up to  $\frac{3}{8}$ "

Other Features  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges- suffix "DDP"  
 Hospital tips - suffix "HT"  
 Raised barrel - suffix "RB"  
 Special sheared leaf  
 Welded end pins  
 Security studs

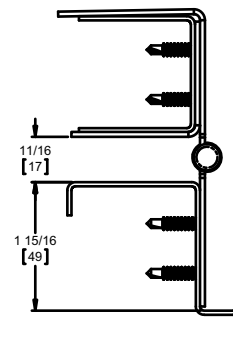
Electrical Modifications  
 Adjustable Monitoring Switch - suffix "AMS"  
 Current Transfer Prep - suffix "CTP"  
 Electrical Transfer Access Prep - suffix "ETAP"  
 ElectroLynx®  
 EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
 PoE (9 wire)



Occasionally the need arises for an extended door wrap. Markar meets this need with the HG322. All the features of the HG305 Hinge/Guard plus 2" extensions.



Door Closed



Door Open 180°

# Markar HG323 Edge Mount Hinge Guard

## Standard Features

Barrel Type Hinge  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
 Material  
 Heavy-duty 14 gauge Stainless Steel  
 Finishes  
 US32D Satin Stainless Steel (630)  
 Standards  
 ANSI/BHMA Standard A156.26 Grade 1  
 Mounting Hardware  
 Fasteners concealed when door is closed  
 Custom 12-24 x  $\frac{11}{16}$ " S.S Phillips Flat Head Undercut TEK Screws &  $\frac{1}{4}$ -20 x  $1\frac{5}{8}$ " Thru Bolt Stainless Steel

Capacity  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0", 10'0"  
 Hole Pattern  
 Symmetrically templated  
 Handing  
 Not required for standard 7'0", 8'0" or 10'0". Specify handing for 6'8" and 7'2" and for most optional features

Fire Rating  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite core wood fire doors  
 20 minutes- wood doors



Classified in accordance with UL10C for positive pressure



Fire-rated label

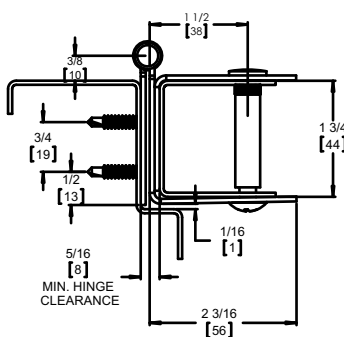
## Optional Features

Finishes  
 US32 Bright Stainless Steel (629)  
 Scratch-Resistant Powder Coated Paint  
 Fasteners  
 Tamper-proof security screws

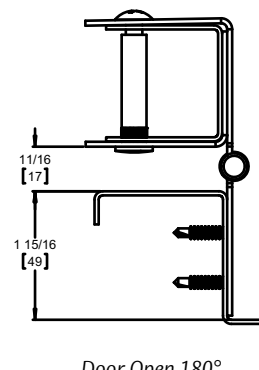
Other Features  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"  
 Raised barrel - suffix "RB"  
 Special sheared leaf

Electrical Modifications  
 Adjustable Monitoring Switch – suffix "AMS"  
 Current Transfer Prep – suffix "CTP"  
 Electrical Transfer Access Prep - suffix "ETAP"  
 ElectroLynx®  
 EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
 PoE (9 wire)

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 180°

# Markar FM/SC325 Edge Mount Swing Clear Hinge

## Standard Features

Barrel Type Hinge  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
 Material  
 Heavy-duty 14 gauge Stainless Steel  
 Finishes  
 US32D Satin Stainless Steel (630)  
 Standards  
 ANSI/BHMA Standard A156.26 Grade 1  
 Mounting Hardware  
 Fasteners concealed when door is closed  
 Custom 12-24 x 11/16" S.S Phillips  
 Flat Head Undercut TEK Screws

Handing  
 Not required for standard 7'0", 8'0" or 10'0". Specify handing for 6'8" and 7'2" and for most optional features  
 Capacity  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0", 10'0"  
 Hole Pattern  
 Symmetrically templated  
 Door Edge  
 Square hinge edge

Fire Rating  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite core wood fire doors  
 20 minutes- wood doors  
 Classified in accordance with UL10C for positive pressure  
 Fire-rated label

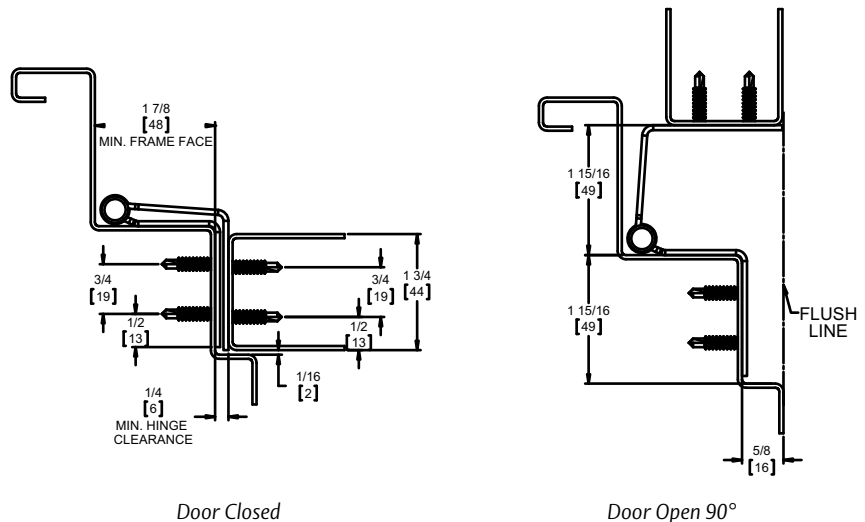
## Optional Features

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

Other Features  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"  
 Welded end pins

Electrical Modifications  
 Adjustable Monitoring Switch - suffix "AMS"  
 Current Transfer Prep - suffix "CTP"  
 (EL-EPT-SC Power Transfer Recommended)

This 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 7/8" face, and is especially useful for ADA upgrade work.





# Markar HG326 Swing Clear Adjustable Hinge Guard

## Standard Features

Barrel Type Hinge  
.187" diameter Stainless Steel pin (rod)  
Medical bearings  
Stainless Steel end pins  
Material  
Heavy-duty 14 gauge Stainless Steel  
Finishes  
US32D Satin Stainless Steel (630)  
Standards  
ANSI/BHMA Standard A156.26 Grade 1  
Mounting Hardware  
Custom 12-24 x 1<sup>11</sup>/<sub>16</sub>" S.S Phillips Flat  
Head Undercut TEK Screws

Capacity  
Supports weights up to 600 lbs.  
4'0" maximum door width  
Standard Sizes  
6'8", 7'0", 7'2", 8'0", 10'0"  
Hole Pattern  
Symmetrically templated  
Door Edge  
Square hinge edge  
Recommend Adjust-A-Screw for  
beveled hinge edge  
Handing  
Not required for standard 7'0", 8'0"  
or 10'0". Specify handing for 6'8" and  
7'2" and for most optional features

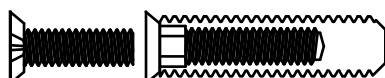
Fire Rating  
3 hours- hollow metal doors  
90 minutes- hollow metal and  
composite core wood fire doors  
20 minutes- wood doors  
 Classified in accordance  
with UL10C for positive  
pressure  
 Fire-rated label

## Optional Features

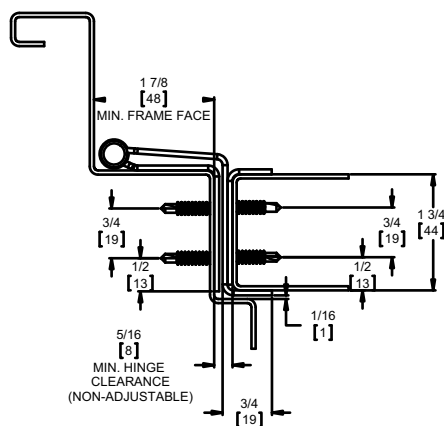
Finishes  
US32 Bright Stainless Steel (629)  
Scratch-Resistant Powder Coated Paint  
Other Features  
Custom lengths- specify in inches  
Custom hole pattern  
Dutch door hinges- suffix "DDP"  
Hospital tips - suffix "HT"  
Welded end pins

Fasteners  
Tamper-proof security screws  
Adjust-A-Screw™ for correcting  
frame fit problems up to 3/8"

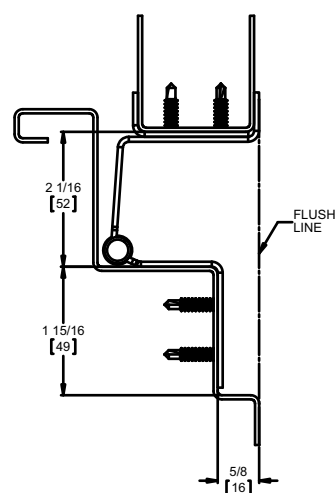
Electrical Modifications  
Current Transfer Prep - suffix "CTP"  
(EL-EPT-SC Power Transfer Recommended)



The incorporated edge guard protects the door from unsightly dents and gouges while also protecting the hinge from vandalism.



Door Closed



Door Open 90°

# Markar FM327 Edge Mount Safety Hinge

## Standard Features

**Barrel Type Hinge**  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
**Material**  
 Heavy-duty 14 gauge Stainless Steel  
**Finishes**  
 US32D Satin Stainless Steel (630)  
**Standards**  
 ANSI/BHMA Standard A156.26 Grade 1  
**Mounting Hardware**  
 Custom 12-24 x  $11/16$ " S.S Phillips Flat  
 Head Undercut TEK Screws

**Capacity**  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
**Standard Sizes**  
 6'8", 7'0", 7'2", 8'0", 10'0"  
**Hole Pattern**  
 Symmetrically templated  
**Handing**  
 Not required for standard 7'0", 8'0"  
 or 10'0". Specify handing for 6'8" and  
 7'2" and for most optional features  
**Door Edge**  
 Square hinge edge

**Fire Rating**  
 This hinge is not fire rated

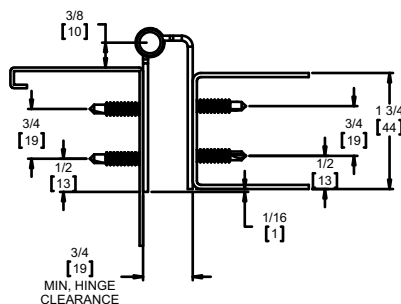
## Optional Features

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

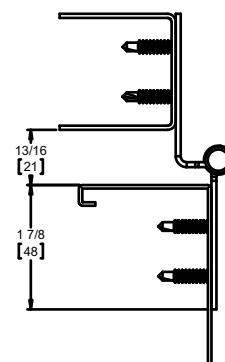
**Other Features**  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Welded end pins

**Fasteners**  
 Tamper-proof security screws

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 pin & barrel 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 180°

# Markar HG329 Swing Clear Hinge Guard for Square Edge Door

## Standard Features

Barrel Type Hinge  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
 Material  
 Heavy-duty 14 gauge Stainless Steel  
 Finishes  
 US32D Satin Stainless Steel (630)  
 Standards  
 ANSI/BHMA Standard A156.26 Grade 1  
 Mounting Hardware  
 Fasteners concealed when door is closed  
 Custom 12-24 x  $11/16$ " S.S Phillips Flat Head Undercut TEK Screws

Capacity  
 Supports weights up to 600 lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0", 10'0"  
 Door Edge  
 Square hinge edge  
 For beveled hinge edge use HG326  
 Hole Pattern  
 Symmetrically templated  
 Specify handing

Fire Rating  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite core wood fire doors  
 20 minutes- wood doors  
 Classified in accordance with UL10C for positive pressure  
 Fire-rated label

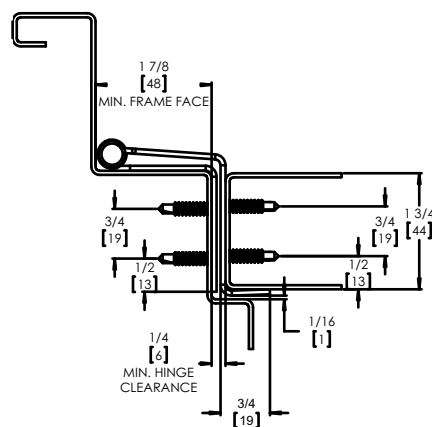
## Optional Features

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

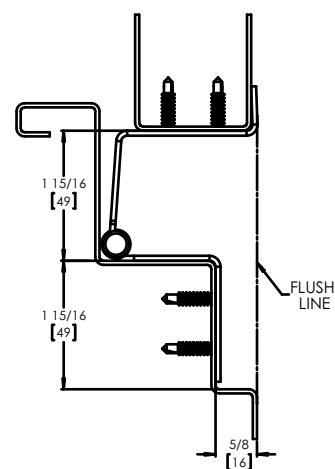
Other Features  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges- suffix "DDP"  
 Hospital tips - suffix "HT"  
 Welded end pins  
 Fasteners  
 Tamper-proof security screws

Electrical Modifications  
 Adjustable Monitoring Switch - suffix "AMS"  
 Current Transfer Prep - suffix "CTP"  
 (EL-EPT-SC Power Transfer Recommended)

The incorporated edge guard protects the door from unsightly dents and gouges while also protecting the hinge from vandalism.



Door Closed



Door Open 90°



# Markar FM338 Edge Mount Hinge (1<sup>3</sup>/<sub>8</sub>" Thick Door)

## Standard Features

**Barrel Type Hinge**  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
**Material**  
 Heavy-duty 14 gauge Stainless Steel  
**Finishes**  
 US32D Satin Stainless Steel (630)  
**Standards**  
 ANSI/BHMA Standard A156.26 Grade 1  
**Hole Pattern**  
 Symmetrically templated

**Mounting Hardware**  
 Fasteners concealed when door is closed  
 Custom 12-24 x <sup>11</sup>/<sub>16</sub>" S.S Phillips  
 Flat Head Undercut TEK Screws  
**Capacity**  
 Supports weights up to 300 lbs.  
 4'0" maximum door width  
**Standard Sizes**  
 6'8", 7'0", 7'2", 8'0", 10'0"  
**Handing**  
 Handing not required on standard hinges. Specify handing when ordering a hinge with modification

**Fire Rating**  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite core wood fire doors  
 20 minutes- wood doors

 Classified in accordance with UL10C for positive pressure  
 Fire-rated label

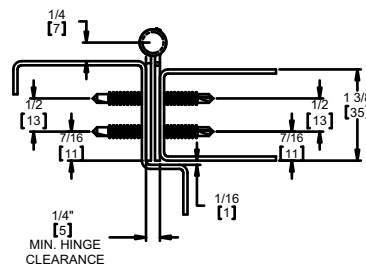
## Optional Features

**Finishes**  
 Scratch-Resistant Powder Coated Paint  
**Fasteners**  
 Tamper-proof security screws

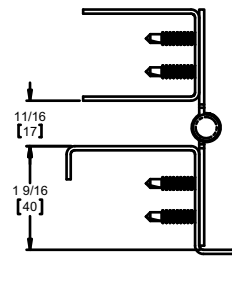
**Other Features**  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges- suffix "DDP"  
 Hospital tips - suffix "HT"  
 Raised barrel - suffix "RB"  
 Welded end pins  
 Security studs

**Electrical Modifications**  
 Adjustable Monitoring Switch - suffix "AMS"  
 Electrical Transfer Access Prep - suffix "ETAP"  
 ElectroLynx®  
 EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
 PoE (9 wire)

This edge-mounted pin & barrel hinge is used on many of today's high traffic, high abuse doors. This hinge is designed to work with 1<sup>3</sup>/<sub>8</sub>" thick doors



Door Closed



Door Open 180°

# Markar FM344 Edge Mount Hinge

## Standard Features

**Barrel Type Hinge**  
 .187" diameter Stainless Steel pin (rod)  
 Medical bearings  
 Stainless Steel end pins  
**Material**  
 Heavy-duty 14 gauge Stainless Steel  
**Finishes**  
 US32D Satin Stainless Steel (630)  
**Standards**  
 ANSI/BHMA Standard A156.26 Grade 1  
**Hole Pattern**  
 Symmetrically templated

**Mounting Hardware**  
 Fasteners concealed when door is closed  
 Custom 12-24 x  $\frac{11}{16}$ " S.S Phillips Flat Head Undercut TEK Screws  
**Capacity**  
 Supports weights up to 300 lbs.  
 4'0" maximum door width  
**Standard Sizes**  
 6'8", 7'0", 7'2", 8'0", 10'0"  
**Handing**  
 Handing not required on standard hinges. Specify handing when ordering a hinge with modification

**Fire Rating**  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite core wood fire doors  
 20 minutes- wood doors  
 Classified in accordance with UL10C for positive pressure  
 Fire-rated label  
**Windstorm**  
 Evaluated in accordance with TAS 201-94, TAS 202-94, TAS 203-94, ASTM E330, ASTM E1886, ASTM E1996 and ANSI A250.13

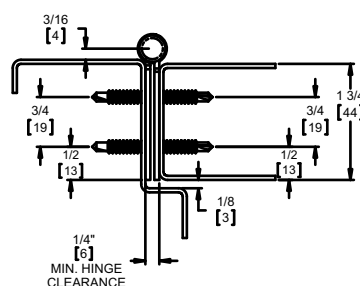
## Optional Features

**Finishes**  
 Scratch-Resistant Powder Coated Paint  
**Fasteners**  
 Tamper-proof security screws

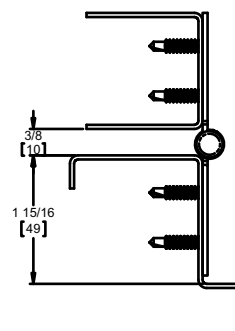
**Other Features**  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges- suffix "DDP"  
 Hospital tips - suffix "HT"  
 Raised barrel - suffix "RB"  
 Welded end pins  
 Security studs

**Electrical Modifications**  
 Adjustable Monitoring Switch - suffix "AMS"  
 Current Transfer Prep - suffix "CTP"  
 Electrical Transfer Access Prep - suffix "ETAP"  
 ElectroLynx®  
 EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
 PoE (9 wire)

This edge-mounted pin & barrel hinge is used on many of today's high traffic, high abuse doors. This hinge is great for  $1\frac{3}{4}$ " thick door where the hinge barrel is close to the frame and door face



Door Closed



Door Open 180°

# Markar EG308 Adjustable Edge Guard

## Standard Features

**Material**  
Heavy-duty 16 gauge stainless steel

**Finishes**  
US32D Satin Stainless Steel (630)

**Mounting Hardware**  
Fasteners concealed when door is closed

**Included fasteners are:**  
Custom 12-24 x 1 1/16" S.S. Phillips Flat Head Undercut TEK Screws  
Custom 12-24 x 1 1/2" S.S. Phillips Flat Head Particle Board Screws

**Standard Sizes**  
6'8", 7'0", 7'2", 8'0", 10'0"

**Door Edge**  
Specify square or beveled edge when ordering (beveled edge standard)

**Fire Rating**  
3 hours- hollow metal doors  
90 minutes- hollow metal and composite  
20 minutes- wood doors



**Fire-rated label**

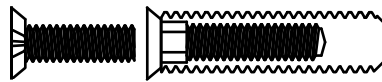
MAY NOT APPLY TO ALL WOOD DOORS. PLEASE CONSULT FACTORY FOR SPECIFIC WOOD DOOR APPLICATIONS.

## Optional Features

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

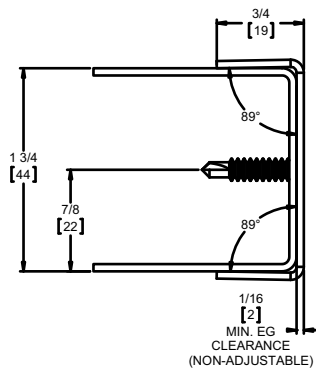
**Hardware Cutouts**  
(Edge Guard order form must be filled out)  
Flush bolts  
ASA strike  
Deadlock strike and latch  
86 edge  
Hospital latch  
161 cutout

**Fasteners**  
Tamper-proof security screws  
Adjust-A-Screw™ for correcting frame fit problems up to 3/8"

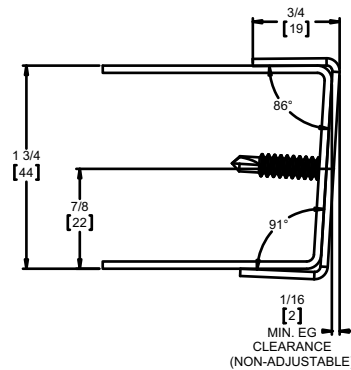


**Other Features**  
Custom lengths - specify in inches  
Staggered hole pattern for lead lined doors  
Custom cutouts  
Dutch door application - suffix "DDP"

This fire-labeled edge guard is used in conjunction with the HG305 Hinge/Guard for a balanced aesthetic look. It also provides protection for the leading edge of the door.



Square edge door



Bevel edge door

# Markar EGC308 Single Return Edge Guard

## Standard Features

### Material

Heavy-duty 16 gauge  
stainless steel

### Finishes

US32D Satin Stainless Steel (630)

### Mounting Hardware

Fasteners concealed when door  
is closed

Included fasteners are:

Custom 12-24 x 11/16" S.S. Phillips

Flat Head Undercut TEK Screws

Custom 12-24 x 1 1/2" S.S. Phillips

Flat Head Particle Board Screws

### Standard Sizes

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

### Door Edge

Specify square or beveled edge  
when ordering (beveled edge  
standard)

### Fire Rating

3 hours- hollow metal doors

90 minutes- hollow metal and

composite

20 minutes- wood doors



Fire-rated label

MAY NOT APPLY TO ALL  
WOOD DOORS. PLEASE CONSULT  
FACTORY FOR SPECIFIC WOOD  
DOOR APPLICATIONS.

## Optional Features

### Finish

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

### Hardware Cutouts

(Edge Guard order form must be filled out)

Flush bolts

ASA strike

Deadlock strike and latch

86 edge

Hospital latch

161 cutout

### Fasteners

Tamper-proof security screws

### Other Features

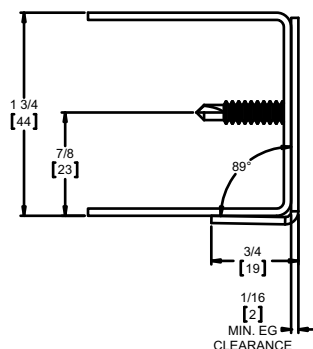
Custom lengths - specify in inches

Staggered hole pattern for lead  
lined doors

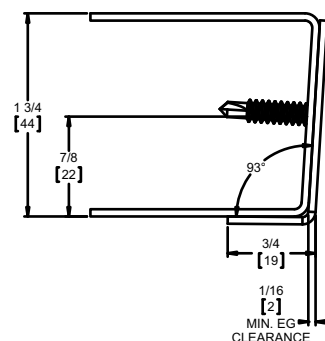
Custom cutouts

Dutch door application - suffix "DDP"

This fire-labeled edge guard works with  
the HG315 Hinge/Guard. It provides  
protection to the leading edge of the  
door, while maintaining the door's  
aesthetic appearance in the closed  
position.



Square edge door



Bevel edge door

# Markar EGT308 Adjustable Edge Guard with Astragal

## Standard Features

**Material**  
Heavy-duty 16 gauge stainless steel

**Finishes**  
US32D Satin Stainless Steel (630)

**Mounting Hardware**  
Fasteners concealed when door is closed  
Included fasteners are:  
Custom 12-24 x 1<sup>1</sup>/<sub>16</sub>" S.S Phillips Flat Head Undercut TEK Screws  
Custom 12-24 x 1<sup>1</sup>/<sub>2</sub>" S.S. Phillips Flat Head Particle Board Screws

**Standard Sizes**  
6'8", 7'0", 7'2", 8'0", 10'0"

**Door Edge**  
Specify square or beveled edge when ordering (beveled edge standard)

**Fire Rating**  
3 hours- hollow metal doors  
90 minutes- hollow metal and composite  
20 minutes- wood doors



Fire-rated label

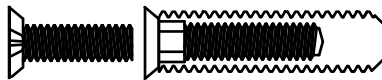
MAY NOT APPLY TO ALL WOOD DOORS. PLEASE CONSULT FACTORY FOR SPECIFIC WOOD DOOR APPLICATIONS.

## Optional Features

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

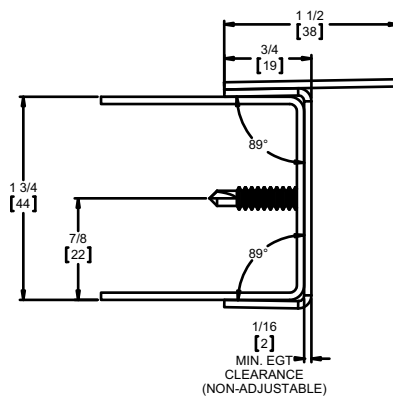
**Hardware Cutouts**  
(Edge Guard order form must be filled out)  
Flush bolts  
ASA strike  
Deadlock strike and latch  
86 edge  
Hospital latch  
161 cutout

**Fasteners**  
Tamper-proof security screws  
Adjust-A-Screw™ for correcting frame fit problems up to 3/8"

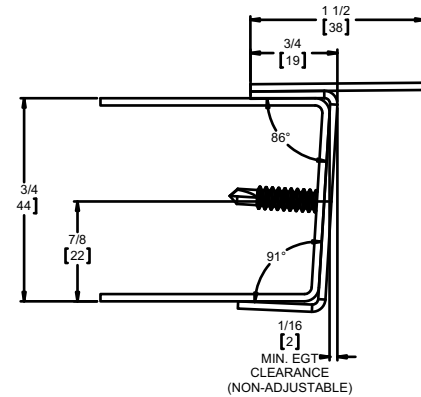


**Other Features**  
Custom lengths - specify in inches  
Staggered hole pattern for lead lined doors  
Custom cutouts  
Dutch door application - suffix "DDP"  
Lead lined astragal with 4 lbs. lead lining - suffix "LL"

The integral overlapping astragal of the EGT308 provides additional security by protecting the latch protector. It is ideal for exterior pairs of doors or doors that require added protection from vandalism.

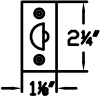
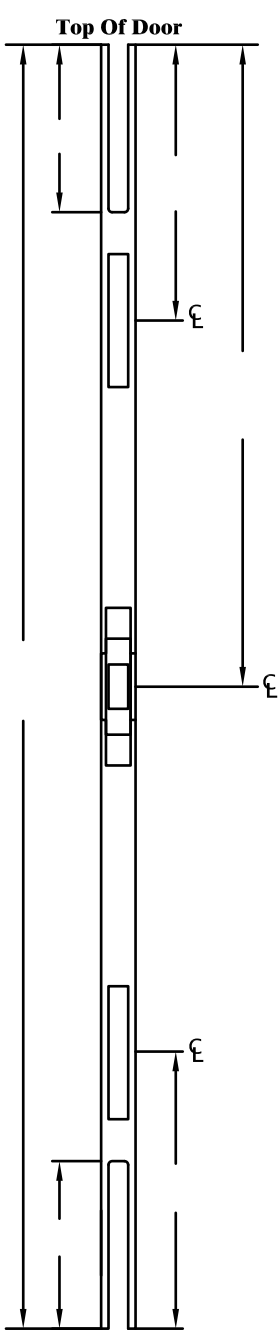



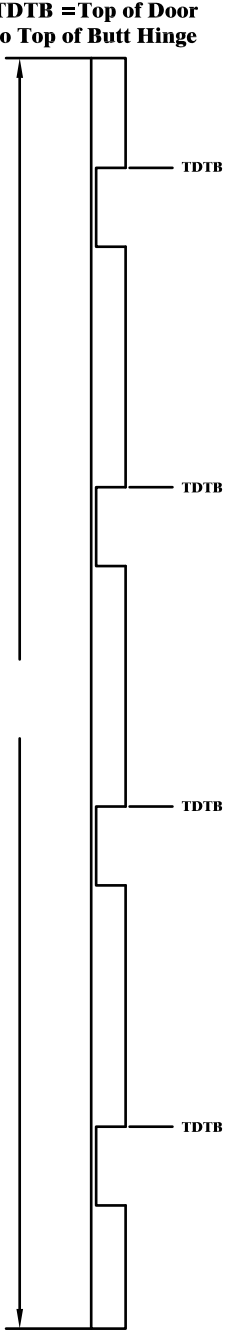
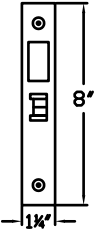
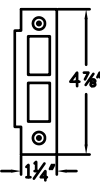
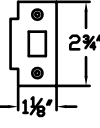
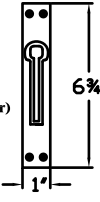
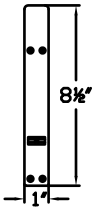
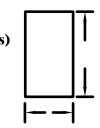


Square edge door



Bevel edge door

# Markar Edge Guard Order Form

<input type="checkbox"/> <b>161 Latch Bolt</b> Auto Flush Bolts 	<b>Top Of Door</b> 	<input type="checkbox"/> For use on 1 3/4" door <input type="checkbox"/> For use on 1 7/8" door <input type="checkbox"/> For use on ____" door  <input type="checkbox"/> EG308  <input type="checkbox"/> EGT308  <input type="checkbox"/> EGC308   <b>QUANTITY:</b> _____  <u>DOOR EDGE</u> <input type="checkbox"/> BEVEL (standard if not specified) <input type="checkbox"/> SQUARE  <u>HANDING</u> <input type="checkbox"/> LH/ RHR ACTIVE <input type="checkbox"/> RH/LHR ACTIVE <input type="checkbox"/> LH/RHR INACTIVE <input type="checkbox"/> RH/LHR INACTIVE  <u>Butt Hinge Size</u> <input type="checkbox"/> 4 1/2" x 4 1/2" <input type="checkbox"/> 5" x 5" <input type="checkbox"/> Custom  <u>DOOR TAG INFO</u> _____ _____ _____ _____ _____ <u>Special Instructions</u> _____ _____ _____ _____ _____	<b>TDTB = Top of Door to Top of Butt Hinge</b> 	
<input type="checkbox"/> <b>86 Mortise Lock</b> 		<input type="checkbox"/> ASA Strike 	<input type="checkbox"/> 161 Strike 	<input type="checkbox"/> <b>Manual Flush Bolt</b> Auto Flush Bolt (Hollow Metal Door) 
<input type="checkbox"/> <b>Auto Flush Bolt</b> (Wood Door) <small>REINFORCING SUPPORT STRIP CAN BE REMOVED AT THE CUSTOMER'S DISCRETION IF NEEDED</small> 		<input type="checkbox"/> <b>Custom</b> (Specify Dimensions) Lead-time will vary 	<input type="checkbox"/> <b>Fire Bolt</b> (Specify Hole Size) _____	

Customer:	I, THE UNDERSIGNED, APPROVE THE DESIGN AND DIMENSIONS AS SHOWN ON THIS PRINT, AND AUTHORIZE THE FABRICATION OF THESE EDGE GUARDS AS INDICATED.	
P.O. No.	Signed: _____	

# Markar 200 Series Carbon Steel Pin & Barrel Continuous Hinges

## Short Form Architectural Specification:

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
- .187" diameter stainless steel pin (rod)
- Each knuckle 2", including nylon bearing at each separation for a quiet, smooth, self-lubricating operation
- Finish: Zinc Plated  
Optional Finish: Scratch-Resistant Powder Coated Paint
- 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/BHMA Standard A 156.26 Grade 1
- Symmetrically templated hole pattern

NOTE: 25-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

## Markar FM200 Edge Mount Hinge

### Standard Features

**Barrel Type Hinge**  
.187" diameter stainless steel pin (rod)  
**Medical bearings**  
Stainless steel end pins  
**Material**  
Heavy-duty 14 gauge 1012 carbon steel  
**Finishes**  
Zinc Plated  
**Standards**  
ANSI/BHMA Standard A156.26 Grade 1

**Mounting Hardware**  
No exposed mounting fasteners  
Custom 12-24 x <sup>11</sup>/<sub>16</sub>" S.S Phillips  
Flat Head Undercut TEK Screws  
**Capacity**  
Supports weights up to 600lbs.  
4'0" maximum door width  
**Standard Sizes**  
6'8", 7'0", 7'2", 8'0", 10'0"  
**Handing**  
Handing not required on standard hinges. Specify handing when ordering a hinge with modification

**Fire Rating**  
3 hours- hollow metal doors  
90 minutes- hollow metal and composite core wood fire doors  
20 minutes- wood doors  
 Classified in accordance with UL10C for positive pressure  
 Fire-rated label  
**Windstorm**  
Evaluated in accordance with TAS 201-94, TAS 202-94, TAS 203-94, ASTM E330, ASTM E1886, ASTM E1996 and ANSI A250.13

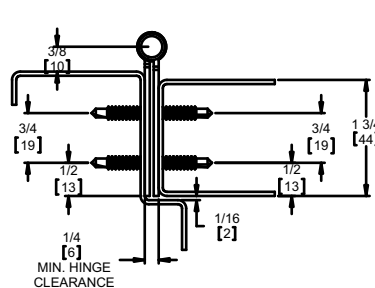
### Optional Features

**Finish**  
Scratch-Resistant Powder Coated Paint  
**Fasteners**  
Tamper-proof security screws

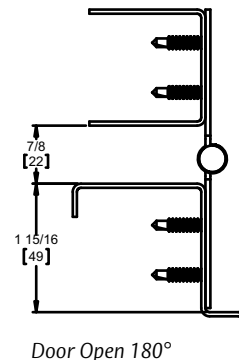
**Other Features**  
Custom lengths - specify in inches  
Custom hole pattern  
Dutch door hinges - suffix "DDP"  
Hospital tips - suffix "HT"  
Raised barrel - suffix "RB"

**Electrical Modifications**  
Current Transfer Prep (frame leaf only) - suffix "CTP"  
ElectroLynx®  
EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
PoE (9 wire)

This edge-mounted pin & barrel hinge is used on many 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. It can be used on both fire labeled and non-labeled openings.



Door Closed





Door Open 180°

# Markar FS201 1/8" Inset Full Surface Hinge

## Standard Features

**Barrel Type Hinge**  
 .187" diameter stainless steel pin (rod)  
 Medical bearing  
 Stainless steel end pins  
**Material**  
 Heavy-duty 14 gauge 1012 carbon steel  
**Finishes**  
 Zinc Plated  
**Standards**  
 ANSI/BHMA Standard A156.26 Grade 1  
**Mounting Hardware**  
 No exposed mounting fasteners  
 1/4-14 x 3/4 Security TORX TEK Screws

**Capacity**  
 Supports weights up to 600lbs.  
 4'0" maximum door width  
**Standard Sizes**  
 6'8", 7'0", 7'2", 8'0", 10'0"  
**Handing**  
 Not required for standard 7'0", 8'0" or 10'0". Specify handing for 6'8" and 7'2" and for most optional features

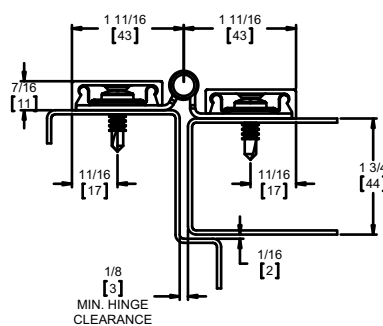
**Fire Rating**  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite core wood fire doors  
 20 minutes- wood doors  
 Classified in accordance with UL10C for positive pressure  
 Fire-rated label

## Optional Features

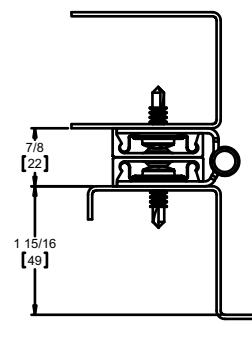
**Finish**  
 Scratch-Resistant Powder Coated Paint  
**Fasteners**  
 1 3/8" S.S. sleeve bolts  
 Tamper-proof security screws

**Other Features**  
 Custom lengths - specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"  
 Lead-lined cover with 4 lbs. lead lining - suffix "LL"

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



Door Closed



Door Open 180°

# Markar FS202 Full Surface Flush Mount Hinge

## Standard Features

Barrel Type Hinge  
 .187" diameter stainless steel pin (rod)  
 Medical bearing  
 Stainless steel end pins  
 Material  
 Heavy-duty 14 gauge 1012 carbon steel  
 Finishes  
 Zinc Plated  
 Standards  
 ANSI/BHMA Standard A156.26 Grade 1  
 Mounting Hardware  
 No exposed mounting fasteners  
 1/4-14 x 3/4 Security TORX  
 TEK Screws

Capacity  
 Supports weights up to 600lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0", 10'0"  
 Decorative Fastener Covers  
 Aluminum  
 Handing  
 Not required for standard 7'0",  
 8'0" or 10'0". Specify handing  
 for 6'8" and 7'2" and for most  
 optional features

Fire Rating  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and  
 composite core wood fire doors  
 20 minutes- wood doors



Classified in accordance  
 with UL10C for positive  
 pressure

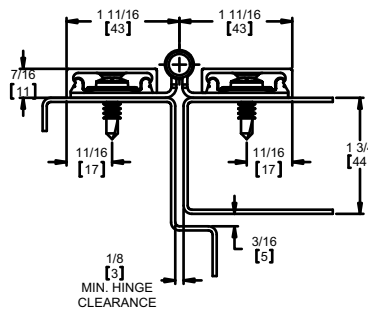
Fire-rated label

## Optional Features

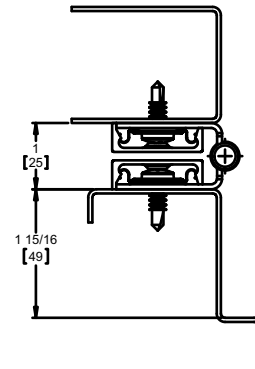
Finish  
 Scratch-Resistant Powder Coated Paint  
 Fasteners  
 1 5/8" S.S. sleeve bolts  
 Tamper-proof security screws

Other Features  
 Custom lengths - specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"  
 Lead-lined cover with 4 lbs. lead  
 lining - suffix "LL"

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



Door Closed



Door Open 180°

# Markar HS203 Half Surface

## Standard Features

**Barrel Type Hinge**  
 .187" diameter stainless steel pin (rod)  
 Medical bearings  
 Stainless steel end pins  
**Material**  
 Heavy-duty 14 gauge 1012 carbon steel  
 Cover - extruded aluminum  
**Finishes**  
 Zinc Plated  
 Cover - Mill Finish  
**Standards**  
 ANSI/BHMA Standard A156.26 Grade 1  
**Mounting Hardware**  
 No exposed mounting fasteners  
 Custom 12-24 x  $11/16$ " S.S Phillips Flat Head  
 Undercut TEK Screws  
 $1/4$ -14 x  $3/4$  Security TORX TEK Screws

**Capacity**  
 Supports weights up to 600lbs.  
 4'0" maximum door width  
**Standard Sizes**  
 6'8", 7'0", 7'2", 8'0", 10'0"  
**Hole Pattern**  
 Symmetrically templated  
**Handing**  
 Not required for standard 7'0",  
 8'0" or 10'0". Specify handing  
 for 6'8" and 7'2" and for most  
 optional features

**Fire Rating**  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and  
 composite  
 20 minutes- wood doors



Classified in accordance  
 with UL10C for positive  
 pressure



Fire-rated label

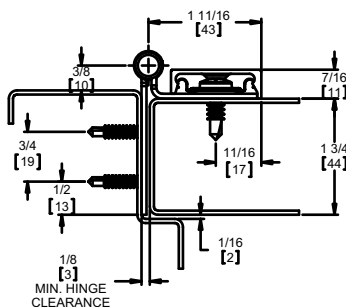
## Optional Features

**Finishes**  
 Scratch-Resistant Powder Coated Paint  
**Fasteners**  
 $1\frac{3}{8}$ " steel sleeve bolts  
 Tamper-proof security screws

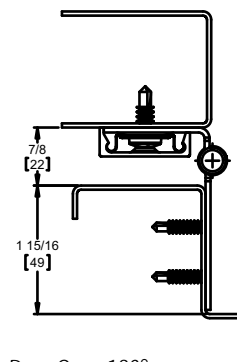
**Other Features**  
 Custom lengths - specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"  
 Raised barrel - suffix "RB"  
 Lead-lined cover with 4 lbs. lead  
 lining - suffix "LL"

**Electrical Modifications**  
 Current Transfer Prep (frame leaf only)  
 - suffix "CTP"

This half-surface pin & barrel continuous hinge can be used to repair and replace existing hinges on 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 contact the factory for instructions for unevenly-rabbetted frames.)



Door Closed



Door Open 180°

# Markar HM204 Half Mortise Hinge

## Standard Features

Barrel Type Hinge  
 .187" diameter stainless steel pin (rod)  
 Medical bearings  
 Stainless steel end pins  
 Material  
 Heavy-duty 14 gauge 1012 carbon steel  
 Cover - extruded aluminum  
 Finishes  
 Zinc Plated  
 Cover - Mill Finish  
 Standards  
 ANSI/BHMA Standard A156.26 Grade 1

Mounting Hardware  
 Fasteners concealed when door is closed  
 Custom 12-24 x  $\frac{11}{16}$ " S.S Phillips Flat Head Undercut TEK Screws  
 $\frac{1}{4}$ "-14 x  $\frac{3}{4}$ " Security TORX TEK Screws  
 Capacity  
 Supports weights up to 600lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0", 10'0"  
 Hole Pattern  
 Symmetrically templated

Handing  
 Not required for standard 7'0", 8'0" or 10'0". Handing required for 6'8" and 7'2" and for most optional features listed

Fire Rating  
 3 hours- hollow metal doors  
 90 minutes- hollow metal and composite  
 20 minutes- wood doors



Classified in accordance with UL10C for positive pressure



Fire-rated label

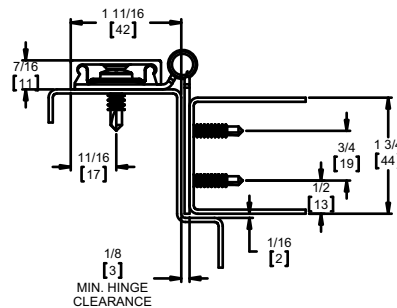
## Optional Features

Finishes  
 Scratch-Resistant Powder Coated Paint  
 Fasteners  
 Tamper-proof security screws

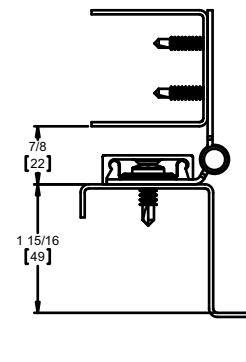
Other Features  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges- suffix "DDP"  
 Hospital tips - suffix "HT"  
 Raised barrel - suffix "RB"  
 Welded end pins

Electrical Modifications  
 Current Transfer Prep (door leaf only)  
 - suffix "CTP"

This pin & barrel type hinge is used on wooden doors to hide splits, chips and dents from traffic abuse. The surface mounted frame leaf allows for easy retrofit installation.



Door Closed



Door Open 180°

# Markar 100 Series Aluminum Pin & Barrel Continuous Hinges

## Short Form Architectural Specification:

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
- .187" diameter stainless pin (rod)
- Each knuckle 2", including 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.  
Other finishes available upon request.
- All hinges shall be furnished with manufacturer's recommended hardware pack per specific model application
- Exterior barrel diameter .515" (1/2")
- Material thickness less than .125"
- 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: 25-Year Warranty on all Continuous Pin & Barrel Hinges

## Markar FM100 Edge Mount Hinge

### Standard Features

Barrel Type Hinge  
.187" diameter stainless steel pin (rod)  
Medical bearings  
Aluminum end pins  
Material  
6063-T6 aluminum alloy  
Finishes  
Clear Anodized (628)  
Dark Bronze Anodized (313)

Standards  
ANSI/BHMA Standard A156.26 Grade 2  
Mounting Hardware  
Fasteners concealed when door is closed  
Custom 12-24 x 11/16" S.S Phillips Flat Head Undercut TEK Screws  
Capacity  
Supports weights up to 600lbs.  
4'0" maximum door width

Standard Sizes  
6'8", 7'0", 7'2", 8'0"  
Hole Pattern  
Symmetrically templated  
Handing  
Handing not required on standard hinges. Specify handing when ordering a hinge with modification  
Windstorm  
Evaluated in accordance with TAS 201-94, TAS 202-94, TAS 203-94, ASTM E330, ASTM E1886, ASTM E1996 and ANSI A250.13.

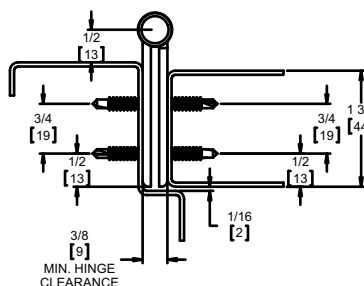
### Optional Features

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

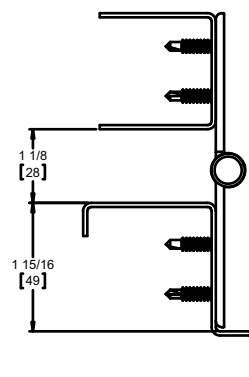
Other Features  
Custom lengths - specify in inches  
Custom hole pattern  
Dutch door hinges - suffix "DDP"  
Hospital tips - suffix "HT"

Electrical Modifications  
Current Transfer Prep - suffix "CTP"  
Electrical Transfer Access Prep - suffix "ETAP"  
ElectroLynx®  
EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
PoE (9 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 180°

# Markar FS101 1/8" Inset Full Surface Hinge

## Standard Features

Barrel Type Hinge  
 .187" diameter stainless steel pin (rod)  
 Medical bearings  
 Aluminum end pins  
 Material  
 6063-T6 aluminum alloy  
 Finishes  
 Clear Anodized (628)  
 Dark Bronze Anodized (313)

Standards  
 ANSI/BHMA Standard A156.26 Grade 2  
 Mounting Hardware  
 No exposed mounting fasteners  
 1/4-14 x 3/4" Security TORX TEK Screws  
 Capacity  
 Supports weights up to 600lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0"

Locking Security Covers  
 Brushed aluminum finish  
 Handing  
 Not required for standard 7'0" and 8'0". Handing required for 6'8" and 7'2" and for most optional features listed

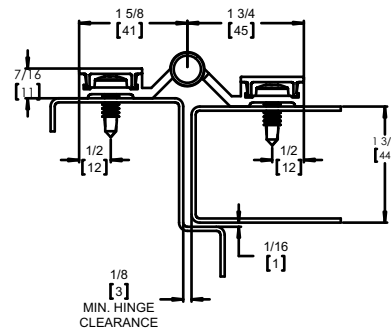
## Optional Features

Finishes  
 Light Bronze Anodized (311)  
 Black Anodized (315)  
 Scratch-Resistant Powder Coated Paint  
 Fasteners  
 1 5/8" aluminum sleeve bolts  
 Tamper-proof security screws

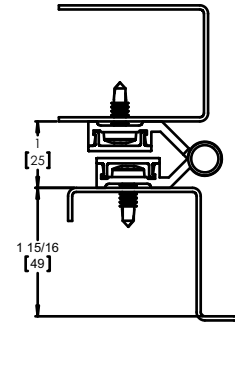
Other Features  
 Custom lengths - specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"  
 Lead lined cover with 4 lbs. lead lining - suffix "LL"

Electrical Modifications  
 Electrical Transfer Access Prep - suffix ETAP  
 ElectroLynx®  
 EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
 PoE (9 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 180°

# Markar FS102 Full Surface Flush Mount Hinge

## Standard Features

Barrel Type Hinge  
 .187" diameter stainless steel pin (rod)  
 Medical bearings  
 Aluminum end pins  
 Material  
 6063-T6 aluminum alloy  
 Finishes  
 Clear Anodized (628)  
 Dark Bronze Anodized (313)

Standards  
 ANSI/BHMA Standard A156.26 Grade 2  
 Mounting Hardware  
 Fasteners concealed when door is closed  
 $\frac{1}{4}$ -14 x  $\frac{3}{4}$ " Security TORX TEK Screws  
 Capacity  
 Supports weights up to 600lbs.  
 4'0" maximum door width

Standard Sizes  
 6'8", 7'0", 7'2", 8'0"  
 Locking Security Covers  
 Brushed aluminum finish  
 Handing  
 Not required for standard 7'0" or 8'0".  
 Handing required for 6'8" and 7'0" and for most optional features listed

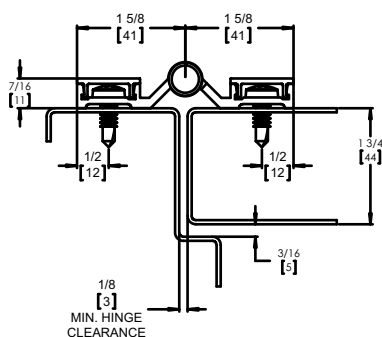
## Optional Features

Finish  
 Light Bronze Anodized (311)  
 Black Anodized (315)  
 Scratch-Resistant Powder Coated Paint  
 Fasteners  
 $1\frac{5}{8}$ " aluminum sleeve bolts  
 Tamper-proof security screws

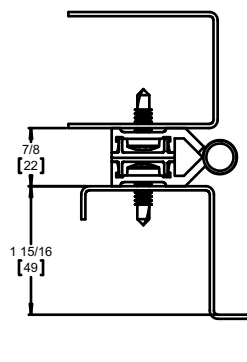
Other Features  
 Custom lengths - specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"  
 Lead lined cover with 4 lbs. lead lining  
 - suffix "LL"

Electrical Modifications  
 Electrical Transfer Access Prep - suffix ETAP  
 ElectroLynx®  
 EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
 PoE (9 wire)

For flush-mounted doors. This surface-mounted pin & barrel type continuous hinge is for flush-mounted doors 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 180°

# Markar HS103 Half Surface Hinge

## Standard Features

Barrel Type Hinge  
 .187" diameter stainless steel pin (rod)  
 Medical bearings  
 Aluminum end pins  
 Material  
 6063-T6 aluminum alloy  
 Finishes  
 Clear Anodized (628)  
 Dark Bronze Anodized (313)  
 Standards  
 ANSI/BHMA Standard A156.26 Grade 2

Mounting Hardware  
 Fasteners concealed when door is closed  
 Custom 12-24 x  $11/16$ " S.S Phillips Flat Head Undercut TEK Screws &  $1/4$ -14 x  $3/4$ " Security TORX TEK Screws  
 Capacity  
 Supports weights up to 600lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0"

Locking Security Covers  
 Brushed aluminum finish  
 Handing  
 Not required for standard 7'0" or 8'0".  
 Specify handing for 6'8" and 7'2" and for most optional features

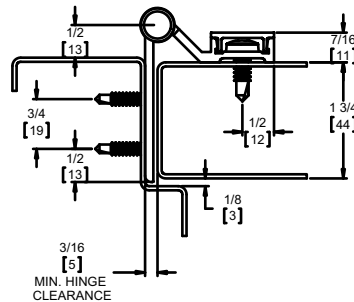
## Optional Features

Finish  
 Light Bronze Anodized (311)  
 Black Anodized (315)  
 Scratch-Resistant Powder Coated Paint  
 Fasteners  
 $1\frac{5}{8}$ " aluminum sleeve bolts  
 Tamper-proof security screws

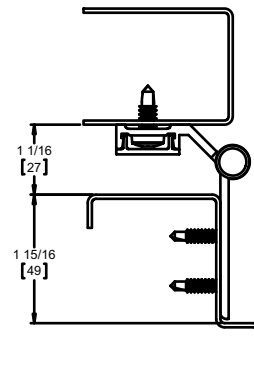
Other Features  
 Custom lengths- specify in inches  
 Custom hole pattern  
 Dutch door hinges- suffix "DDP"  
 Hospital tips – suffix "HT"  
 Lead lined cover with  $1/16$ " lead lining - suffix "LL"

Electrical Modifications  
 Current Transfer Prep (frame leaf only) - suffix "CTP"  
 Electrical Transfer Access Prep - suffix ETAP  
 ElectroLynx®  
 EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
 PoE (9 wire)

This half-surface aluminum pin & barrel 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 edge mounted on the frame mounted on the frame and surface mounted on the door.



Door Closed



Door Open 180°

# Markar HM104 Half Mortise Hinge

## Standard Features

**Barrel Type Hinge**  
 .187" diameter stainless steel pin (rod)  
 Medical bearings  
 Aluminum pins  
**Material**  
 6063-T6 aluminum alloy  
**Finishes**  
 Clear Anodized (628)  
 Dark Bronze Anodized (313)  
**Standards**  
 ANSI/BHMA Standard A156.26 Grade 2

**Mounting Hardware**  
 Fasteners concealed when door is closed  
 Custom 12-24 x  $\frac{1}{16}$ " S.S Phillips Flat Head Undercut TEK Screws &  $\frac{1}{4}$ -14 x  $\frac{3}{4}$ " Security TORX TEK Screws  
**Capacity**  
 Supports weights up to 600lbs.  
 4'0" maximum door width  
**Standard Sizes**  
 6'8", 7'0", 7'2", 8'0"

**Locking Security Covers**  
 Brushed aluminum finish  
**Handing**  
 Not required for standard 7'0" or 8'0".  
 Specify handing for 6'8" and 7'2" and for most optional features

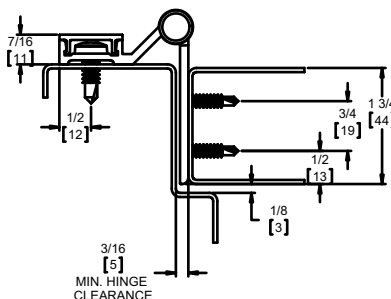
## Optional Features

**Finish**  
 Light Bronze Anodized (311)  
 Black Anodized (315)  
 Scratch-Resistant Powder Coated Paint  
**Fasteners**  
 $1\frac{5}{8}$ " aluminum sleeve bolts  
 Tamper-proof security screws

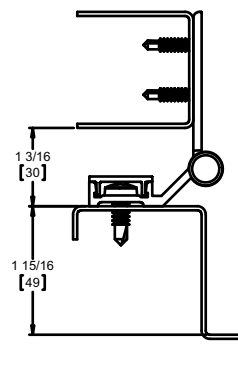
**Other Features**  
 Custom lengths - specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"

**Electrical Modifications**  
 Current Transfer Prep (door leaf only) - suffix "CTP"  
 Electrical Transfer Access Prep - suffix ETAP  
 ElectroLynx®  
 EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
 PoE (9 wire)

This pin & barrel type hinge is used on wooden doors to hid splits, chips and dents from traffic abuse. The surface mounted frame leaf allows for easy installation.



Door Closed



Door Open 180°

# Markar HG105 Adjustable Hinge Guard

## Standard Features

Barrel Type Hinge  
 .187" diameter stainless steel pin (rod)  
 Medical bearings  
 Aluminum end pins  
 Material  
 6063-T6 aluminum alloy  
 Finishes  
 Clear Anodized (628)  
 Dark Bronze Anodized (313)  
 Standards  
 ANSI/BHMA Standard A156.26 Grade 2

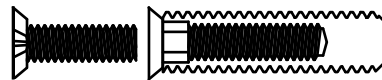
Mounting Hardware  
 No exposed mounting fasteners when door is closed  
 Custom 12-24 x 1 1/16" S.S Phillips Flat Head Undercut TEK Screws  
 Capacity  
 Supports weights up to 600lbs.  
 4'0" maximum door width  
 Standard Sizes  
 6'8", 7'0", 7'2", 8'0"

Hole Pattern  
 Symmetrically templated  
 Handing  
 Not required for standard 7'0" or 8'0".  
 Handing required for 6'8" and 7'2" and for most optional features listed

## Optional Features

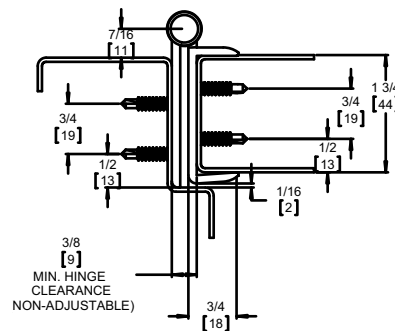
Finishes  
 Light Bronze Anodized (311)  
 Black Anodized (315)  
 Scratch-Resistant Powder Coated Paint  
 Other Features  
 Custom lengths - specify in inches  
 Custom hole pattern  
 Dutch door hinges - suffix "DDP"  
 Hospital tips - suffix "HT"

Fasteners  
 Tamper-proof security screws  
 Adjust-A-Screw™ for correcting frame fit problems up to 3/8"

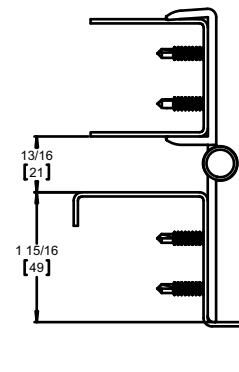


Electrical Modifications  
 Current Transfer Prep - suffix "CTP"  
 ElectroLynx®  
 EL4 (4 wire), EL8 (8 wire), EL12 (12 wire)  
 PoE (9 wire)

This pin & barrel edge-mounted hinge can be used in conjunction with automatically operated aluminum doors that have heavy cart traffic. Ideal for both commercial and institutional doors, shipping and receiving doors, as well as storefronts where door edge protection is critical.



Door Closed



Door Open 180°

# Markar EG108 Adjustable Edge Guard

## Standard Features

**Material**  
 6063-T6 aluminum alloy  
**Finishes**  
 Clear Anodized (628)  
 Dark Bronze Anodized (313)  
**Standards**  
 ANSI/BHMA Standard A156.26 Grade 2

**Mounting Hardware**  
 Fasteners concealed when door is closed  
 Custom 12-24 S.S Phillips Flat Head Undercut TEK Screws  
 Custom 12-24 x 1 1/2" S.S. Phillips Flat Head Particle Board Screws

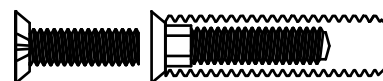
**Standard Sizes**  
 6'8", 7'0", 7'2", 8'0"  
**Hole Pattern**  
 Symmetrically templated  
 Non-handed  
**Door Edge**  
 Square edge

## Optional Features

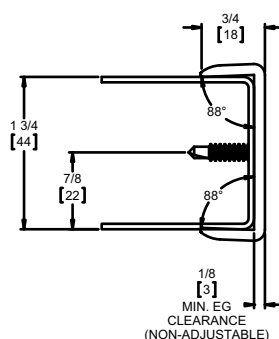
**Finishes**  
 Light Bronze Anodized (311)  
 Black Anodized (315)  
 Scratch-Resistant Powder Coated Paint  
**Other Features**  
 Custom lengths - specify in inches  
 Custom cutouts  
 Staggered hole pattern for lead lined doors  
 Dutch door application - suffix "DDP"

**Hardware Cutouts**  
 (Edge Guard order form must be filled out)  
 Flush bolts  
 ASA strike  
 Deadlock strike and latch  
 86 edge  
 Hospital latch  
 161 cutout

**Fasteners**  
 Tamper-proof security screws  
 Adjust-A-Screw™ for correcting frame fit problems up to 3/8"



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 HG105 Hinge/Guard it provides a balanced, aesthetic look.



Door Closed

# Markar 1000 Series Aluminum Pin & Barrel Continuous Hinges

## Short Form Architectural Specification:

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
- .250" diameter stainless pin (rod)
- Each knuckle 4", including nylon bearing at each separation for a quiet, smooth, self-lubricating operation
- Finish: Clear Anodized (628)  
Optional Finish: Light Bronze Anodized (311), Dark Bronze Anodized (313) Black Anodized (315), Scratch-Resistant Powder Coated Paint. Other finishes available upon request.
- All hinges shall be furnished with manufacturer's recommended hardware pack per specific model application
- Exterior barrel diameter .750" ( $\frac{3}{4}$ ")
- Hinges certified ANSI/BHMA Standard A 156.26 Grade 1
- Symmetrically templated hole pattern

NOTE: 25-Year Warranty on all Continuous Pin & Barrel Hinges

## Markar DSH1000 Double Swing Hinge

### Standard Features

Barrel Type Hinge  
.250" diameter stainless steel pin (rod)  
Medical bearings  
Material  
6063-T6 aluminum alloy  
Finishes  
Clear Anodized (628)

Standards  
ANSI/BHMA Standard A156.26 Grade 1  
Mounting Hardware  
12-24 x  $\frac{11}{16}$ " Torx Flat Head Undercut TEK Screws  
#12-8 Torx Flat Head Particle Board Screw  
Capacity  
Supports weights up to 600lbs. 4'0" maximum door width

Standard Sizes  
7'0", 8'0"  
Hole Pattern  
Symmetrically templated  
Handing  
Handing not required  
CMS Compliant  
Eliminating additional ligature points ensures compliance for reimbursement through CMS (Centers for Medicare and Medicaid Services)

### Optional Features

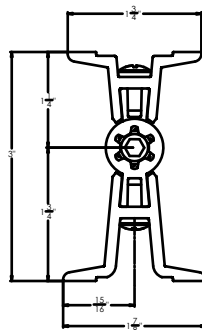
Finishes  
Light Bronze Anodized (311)  
Dark Bronze Anodize (313)  
Black Anodized (315)  
Scratch-Resistant Powder Coated Paint

Other Features  
Custom lengths - specify in inches  
Custom hole pattern

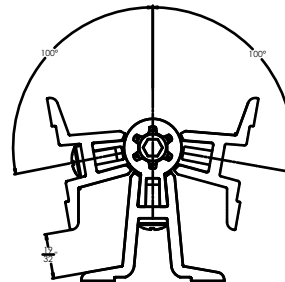
Electrical Modifications  
ElectroLynx®  
SER4 (4 wire), SER8 (8 wire), SER12 (12 wire)

This door edge mounted aluminum pin & barrel type hinge has a unique feature that allows the door to swing in either direction up to 100°. When used in conjunction with Pemko Emergency Release Stop (ERS) provides an anti-barricade system

*The Double Swing Hinge and Emergency Release Stop are accepted by the **New York State Office of Mental Health (OMH)** for use in high risk areas.*



Door Closed



Door Open 100° Either Direction

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

## Short Form Architectural Specification:

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

- Supports weights up to 80 lbs. 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)
- 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

## Markar FM900 Edge Mount

### Standard Features

Spring-Loaded Barrel Type Hinge  
.25" diameter stainless steel pin with stainless steel spring mechanism  
Torx tip cap to adjust spring tension  
Split nylon bearings

#### Material

Heavy-duty 14 gauge stainless steel

#### Finishes

US32D Satin Stainless Steel (630)

#### Torx Adjusting Screw

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

#### Mounting Hardware

Custom 12-24 x 11/16" S.S Phillips Flat Head Undercut TEK Screws

#### Capacity

Close door weighing up to 80 lbs.

#### Sizes

54", 57"

#### Non-Handed

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

For Doors over 3'0" consult factory

USA patent no. 4823437

Canadian patent no. 1303804

### Optional Features

#### Finishes

US32 Bright Stainless Steel (629)

Scratch-Resistant Powder Coated Paint

#### Fasteners

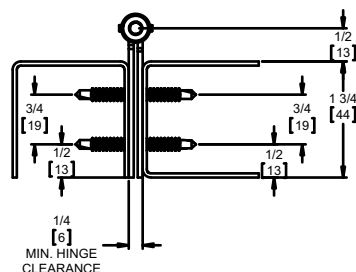
Tamper-proof security screws

#### Other Features

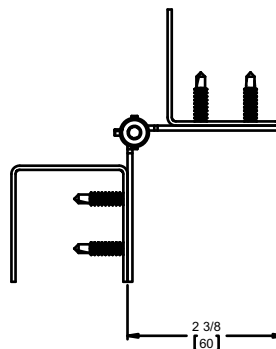
Custom lengths -Custom sizes 24" to 72" available

Custom hole pattern

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



Door Closed



Door Open 90°

## Markar FS902 Flush Full Surface Hinge

### Standard Features

Spring-Loaded Barrel Type Hinge  
 .25" diameter stainless steel pin with  
 stainless steel spring mechanism  
 Torx tip cap to adjust spring tension  
 Split nylon bearings

#### Material

Heavy-duty 14 gauge stainless steel  
 Covers - extruded aluminum

#### Finishes

US32D Satin Stainless Steel (630)  
 Covers - Brushed Aluminum

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

#### Mounting Hardware

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

#### Capacity

Close door weighing up to 80 lbs.

#### Sizes

54", 57"

#### Non-Handed

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

For Doors over 3'0" consult factory

USA patent no. 4823437

Canadian patent no. 1303804

### Optional Features

#### Finishes

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

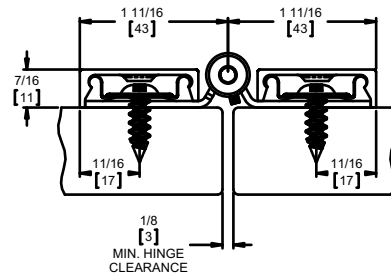
#### Fasteners

Tamper-proof security screws

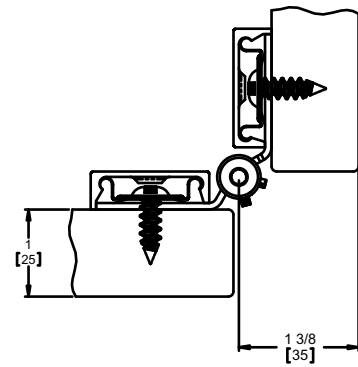
Ideal for damp or corrosive  
 environments, Markar's stainless steel  
 toilet partition hinge adds years of life  
 to your high-quality partition.

#### Other Features

Custom lengths - Custom sizes  
 24" to 72" available  
 Custom hole pattern



Door Closed



Door Open 90°

## Markar FS910 Flush Full Surface Hinge

### Standard Features

Spring-Loaded Barrel Type Hinge  
 .25" diameter stainless steel pin with  
 stainless steel spring mechanism  
 Torx tip cap to adjust spring tension  
 Split nylon bearings

#### Material

Heavy-duty 14 gauge stainless steel

#### Finishes

US32D Satin Stainless Steel (630)

#### Torx Adjusting Screw

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

#### Mounting Hardware

Custom 12-24 x 11/16" S.S Phillips  
 Flat Head Undercut TEK Screws

#### Capacity

Close door weighing up to 80 lbs.

#### Sizes

54", 57"

#### Non-Handed

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

For Doors over 3'0" consult factory

USA patent no. 4823437

Canadian patent no. 1303804

### Optional Features

#### Finishes

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

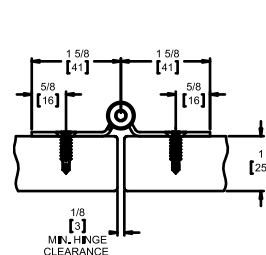
#### Fasteners

Tamper-proof security screws

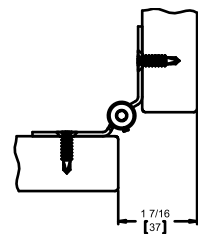
#### Other Features

Custom lengths - Custom sizes  
 24" to 72" available Custom hole  
 pattern

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



Door Open



Door Open

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# Markar 400 Series Spring Loaded Pin & Barrel Type Continuous Aluminum Hinges

## Short Form Architectural Specification:

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

- Supports weights up to 80 lbs. 3'0" maximum width
- Material to be extruded aluminum 6063-T6 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). Other finishes available upon request.
- Adjustable, tamper resistant Torx Head end caps
- Non-handed
- Exterior barrel diameter .515" (1/2")
- Material thickness less than .125"
- Removable roll pin for spring loaded adjustment
- Symmetrically templated hole pattern

NOTE: 10-Year Warranty

## Markar FM400 Edge Mount Hinge

### Standard Features

Spring-Loaded Barrel Type Hinge  
.25" diameter stainless steel pin with stainless steel spring mechanism  
Torx tip cap to adjust spring tension  
Split nylon bearings  
Material  
6063-T6 aluminum alloy  
Finishes  
Clear Anodized (628)

Torx Adjusting Screw  
Adjust tension on door to close tightly for out-swinging ADA compliance  
Mounting Hardware  
Custom 12-24 x 11/16" S.S Phillips Flat Head Undercut TEK Screws  
Capacity  
Close door weighing up to 80 lbs.

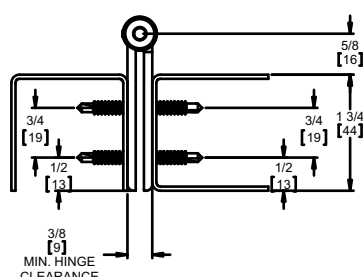
Sizes  
54", 57"  
Non-Handed  
Use the same hinge for right- or left-handed doors  
For Doors over 3'0" consult factory  
USA patent no. 4823437  
Canadian patent no. 1303804

### Optional Features

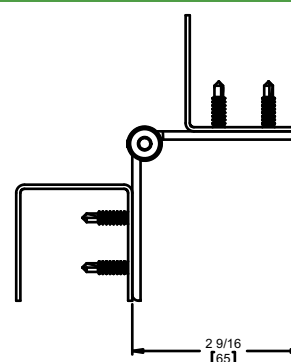
Fasteners  
Tamper-proof security screws  
Finishes  
Scratch-Resistant Powder Coated Paint  
Light Bronze Anodized (311)  
Black Anodized (315)

Other Features  
Custom lengths - Custom sizes  
24" to 72" available  
Custom hole pattern  
Lift-up safety feature

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°

# Markar FS402 Flush Full Surface Hinge

## Standard Features

Spring-Loaded Barrel Type Hinge  
 .25" diameter stainless steel pin with stainless steel spring mechanism  
 Torx tip cap to adjust spring tension  
 Split nylon bearings

Material  
 6063-T6 aluminum alloy  
 Covers - extruded aluminum

Finishes  
 Clear Anodized (628)  
 Torx Adjusting Screw  
 Adjust tension on door to close tightly for out-swinging ADA compliance

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

Capacity  
 Close door weighing up to 80 lbs.  
 Sizes  
 54", 57"  
 Non-Handed  
 Use the same hinge for right- or left-handed doors  
 For Doors over 3'0" consult factory  
 USA patent no. 4823437  
 Canadian patent no. 1303804

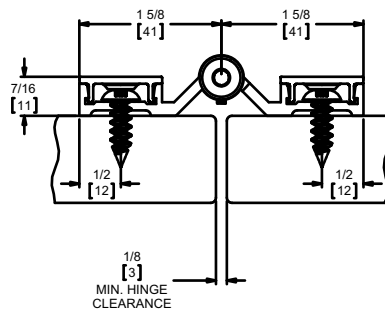
## Optional Features

Fasteners  
 Tamper-proof security screws

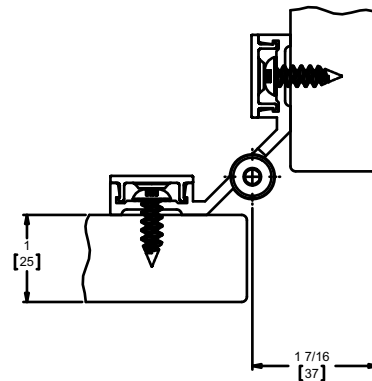
Finishes  
 Scratch-Resistant Powder Coated Paint  
 Light Bronze Anodized (311)  
 Black Anodized (315)

Other Features  
 Custom lengths - Custom sizes  
 24" to 72" available  
 Custom hole pattern  
 Lift-up safety feature

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°

## Markar B1921 & B1923 Full Surface Reinforcing Pivots

This full-surface reinforcing pivot adds years of life to openings where the hinges or hinge reinforcements have failed. An economical way to solve door sag problems, reinforcing pivots take the load off the top hinge and transfer it to screws that will not pull out.

### Material:

Heavy Duty  $\frac{3}{16}$ " (.187) Cold-Rolled Steel

### Finish:

Zinc Plated (US2G)

### Mounting:

8 ea.  $\frac{1}{4}$ -20 x  $\frac{3}{4}$ " Phillips flat head machine screws

8 ea. #14 x  $1\frac{1}{4}$ " Phillips flat head sheet metal screws

2 ea.  $\frac{1}{4}$ -20 x  $1\frac{3}{4}$ " Sleeve bolts

### Capacity:

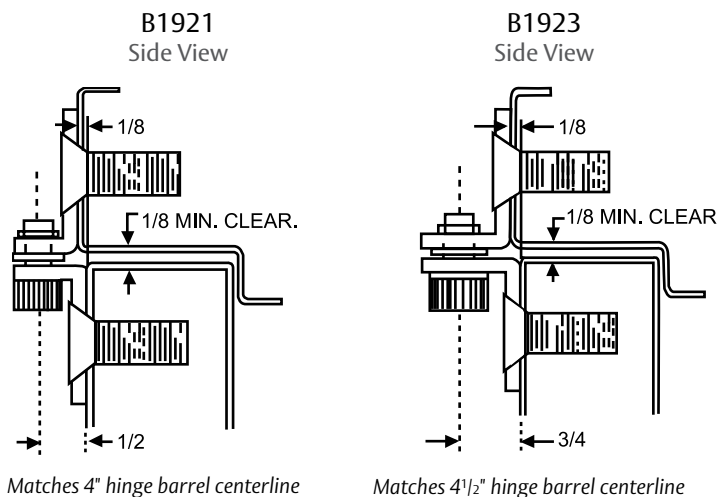
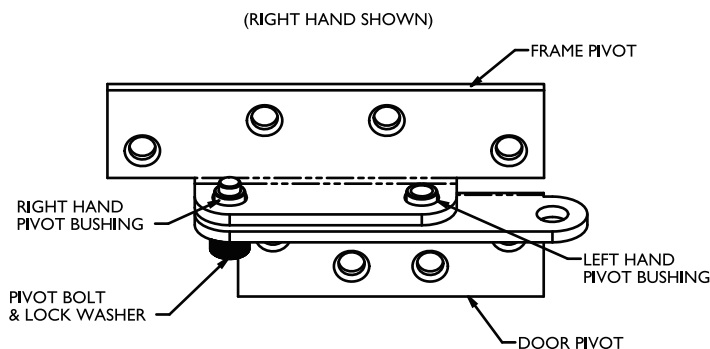
Supports Weights up to 300 lbs.

### Hole Pattern:

Symmetrically

### Hanging:

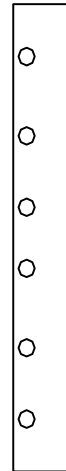
Non-handed



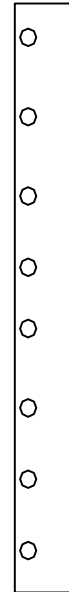
B1921	The B1921 pivot is designed with a $\frac{1}{2}$ " offset to match the pivot point of a 4" wide butt hinge.
B1923	The B1923 pivot is designed with a $\frac{3}{4}$ " offset to match the pivot point of a $4\frac{1}{2}$ " wide butt hinge.

## Markar Flat Astragals

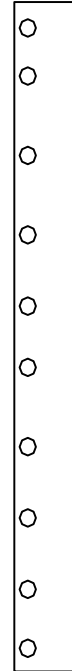
- For 6'8", 7'0", and 8'0" doors
- Holes are countersunk and equally spaced
- 1/8" x 2" galvanized steel
- 1-pkg. # 6 x 1" F.H.S.M. screws
- Finish – galvanized steel
- Available with thru-bolt option– nine-pack (ZTB-KIT9) or eleven-pack (ZTB-KIT11)



FA68



FA70



FA80

## Markar Universal Screw Packs – Edge Mount Hinges

### For hinge models FM100

Screw type	Aluminum	Bronze	6'8"-7'0"-7'2"	8'0"	10'0"
12-24 x <sup>11</sup> / <sub>16</sub> " Phillips flat head undercut self-drilling Tek screw	TKS1267SP10SS	TKS1267SP10BLR	42	46	54

### For hinge models FM200, FM300, HG311, HG315, FM/SC325, FM327, HG329, FM338, FM344

Screw type	Stainless Steel	6'8"-7'0"-7'2"	8'0"	10'0"
12-24 x <sup>11</sup> / <sub>16</sub> " Phillips flat head undercut self-drilling Tek screw	TKS1267SP10SS	42	46	54

### For hinge/guard model HG105

Screw type	Aluminum	Bronze	6'8"-7'0"-7'2"	8'0"	10'0"
12-24 x <sup>11</sup> / <sub>16</sub> " Phillips flat head undercut self-drilling Tek screw	TKS1267SP10SS	TKS1267SP10BLR	42	46	54
Adjust-A-Screw™ option	Aluminum	Bronze	6'8"-7'0"-7'2"	8'0"	10'0"
10-32 x <sup>3</sup> / <sub>4</sub> " Phillips flat head undercut machine screw	MS10075SS	MS10075SS	21	23	27
<sup>1</sup> / <sub>8</sub> " Adjust-A-Screw™ with 10-32 internal thread	M26-0031-01	M26-0031-01	21	23	27

### For hinge/guard models HG305, HG310, HG322, HG326,

Screw type	Stainless Steel	6'8"-7'0"-7'2"	8'0"	10'0"
12-24 x <sup>11</sup> / <sub>16</sub> " Phillips flat head undercut self-drilling Tek screw	TKS1267SP10SS	42	46	54
Adjust-A-Screw™ option	Stainless Steel	6'8"-7'0"-7'2"	8'0"	10'0"
10-32 x <sup>3</sup> / <sub>4</sub> " Phillips flat head undercut machine screw	MS10075SS	21	23	27
<sup>1</sup> / <sub>8</sub> " Adjust-A-Screw™ with 10-32 internal thread	M26-0031-01	21	23	27

### For hinge/guard model HG323

Screw type	Stainless Steel	6'8"-7'0"-7'2"	8'0"	10'0"
12-24 x <sup>11</sup> / <sub>16</sub> " Phillips flat head undercut self-drilling Tek screw	TKS1267SP10SS	21	23	27
<sup>1</sup> / <sub>4</sub> -20 X <sup>3</sup> / <sub>4</sub> " Truss Head Phillips machine screw	MS14075TSS	9	9	11
<sup>1</sup> / <sub>4</sub> -20 x 1 <sup>5</sup> / <sub>8</sub> " sleeve bolt	TB1420SS	9	9	11

### For edge/guard model EG108

Screw type	Aluminum	Bronze	6'8"-7'0"-7'2"	8'0"	10'0"
12 x 1 <sup>1</sup> / <sub>2</sub> Phillips flat head undercut sheet metal screw	PBS12150SP10SS	PBS12150SP10BL	8	10	12
#12-24 x <sup>11</sup> / <sub>16</sub> " Phillips flat head undercut self-drilling Tek Screw	TKS1267SP10SS	TKS1267SP10BL	8	10	12

### For edge/guard models EG308, EGC308, & EGT308

Screw type	Stainless Steel	6'8"-7'0"-7'2"	8'0"	10'0"
#12 x 1 <sup>1</sup> / <sub>2</sub> Phillips flat head undercut sheet metal screw	PBS12150SP10SS	8	10	12
#12-24 x <sup>11</sup> / <sub>16</sub> " Phillips flat head undercut self-drilling Tek Screw	TKS1267SP10SS	8	10	12

### For security hinge models FM3500, FS3501, & FS3502

Screw type	Stainless Steel	6'8"-7'0"-7'2"	8'0"	10'0"
12-24 x <sup>7</sup> / <sub>16</sub> " flat head undercut machine screw	MS1244SP10SS	42	46	54

## Markar Universal Screw Packs – Full Surface Hinges

### For models FS101, FS102

Screw type	Aluminum	Bronze	6'8"-7'0"-7'2"	8'0"	10'0"
1/4-14 x 3/4" Torx pan head self-drilling Tek screw	TORX-TKS14075R	TORX-TKS14075R	32	36	40
#8 x 3/4" Phillips flat head Tek screw	TKS8075Z	S323-08R12-663	4	4	4

### For models FS201, FS202, FS301, FS302, FS321

Screw type	Stainless Steel	6'8"-7'0"-7'2"	8'0"	10'0"
1/4-14 x 3/4" Torx pan head self-drilling Tek screw	TORX-TKS14075R	32	36	40
606 Cover clips	M22-0130-01	10	12	16
#8 x 3/4" Phillips flat head Tek screw	TKS8075Z	4	4	4

### For swing clear model FS/SC309

Screw type	Stainless Steel	6'8"-7'0"-7'2"	8'0"	10'0"
12-24 x 11/16" Phillips flat head undercut self-drilling Tek screw	TKS1267SP10SS	22	24	28
1/4-14 x 3/4" Torx Phillips pan head self-drilling Tek screw	TORX-TKS14075R	16	18	20
606 Cover clips	M22-0130-01	5	6	8
#8 x 3/4" Phillips flat head Tek screw	TKS8075Z	2	2	2

## Universal Screw Packs – Half Surface & Half Mortise Hinges

### For hinge models HS103 & HM104

Screw type	Aluminum	Bronze	6'8"-7'0"-7'2"	8'0"	10'0"
1/4-14 x 3/4" Torx pan head self-drilling Tek screw	TORX-TKS14075R	TORX-TKS14075R	16	18	10
12-24 x 11/16" Phillips flat head undercut self-drilling Tek screw	TKS1267SP10SS	TKS1267SP10BLR	21	23	27
#8 x 3/4" Phillips flat head Tek screw	TKS8075Z	S323-08R12-663	2	2	2

### For hinge models HS203 & HM204

Screw type	Stainless Steel	6'8"-7'0"-7'2"	8'0"	10'0"
1/4-14 x 3/4" Torx pan head self-drilling Tek screw	TORX-TKS14075R	14	16	20
12-24 x 11/16" Phillips flat head undercut self-drilling Tek screw	TKS1267SP10SS	21	23	27
606 Cover clips	M22-0130-01	5	6	8
#8 x 3/4" Phillips flat head sheet metal screw	TKS8075Z	2	2	2











### For hinge models HS303, HM304, & HG306

Screw type	Stainless Steel	6'8"-7'0"-7'2"	8'0"	10'0"
1/4-14 x 3/4" Torx pan head self-drilling Tek screw	TORX-TKS14075R	14	16	20
12-24 x 3/16" Phillips flat head undercut self-drilling Tek screw	TKS1267SP10SS	21	23	27
606 Cover clips	M22-0130-01	5	6	8
#8 x 3/4" Phillips flat head sheet metal screw	TKS8075Z	2	2	2

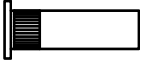
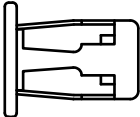

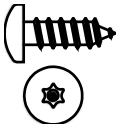
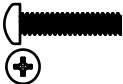
# Markar Universal Screw Packs – Toilet Partition Hinges

For hinge models FM400			
Screw type	Stainless Steel	54"	57"
12-24 x <sup>11</sup> / <sub>16</sub> " Phillips flat head undercut zinc self-drilling Tek screw	TKS1267SP10SS	26	26
<sup>3</sup> / <sub>32</sub> " x <sup>3</sup> / <sub>8</sub> " Stainless Steel roll pin	RLPN33238SS	1	1
For hinge model FS402			
Screw type	Stainless Steel	54"	57"
<sup>1</sup> / <sub>4</sub> -14 x <sup>3</sup> / <sub>4</sub> " Torx button head sheet metal screw	TORX-TKS14075R	12	12
#8 x <sup>3</sup> / <sub>4</sub> " TORX flat head self-drilling Tek screw	TORX-TKS8075Z	4	4
<sup>3</sup> / <sub>32</sub> " x <sup>3</sup> / <sub>8</sub> " Stainless Steel roll pin	RLPN33238SS	1	1
For hinge models FM900			
Screw type	Stainless Steel	54"	57"
#12-24 x <sup>11</sup> / <sub>16</sub> " Phillips flat head undercut self-drilling Tek screw	TKS1267SP10SS	26	26
<sup>3</sup> / <sub>32</sub> " x <sup>3</sup> / <sub>8</sub> " Stainless Steel roll pin	RLPN33238SS	1	1
For hinge model FS902			
Screw type	Stainless Steel	54"	57"
<sup>1</sup> / <sub>4</sub> -14 x <sup>3</sup> / <sub>4</sub> " Torx button head sheet metal screw	TORX-TKS14075R	12	12
606 Cover clips	M22-0130-01	6	6
#8 x <sup>3</sup> / <sub>4</sub> " TORX flat head self-drilling Tek screw	TORX-TKS8075Z	4	4
<sup>3</sup> / <sub>32</sub> " x <sup>3</sup> / <sub>8</sub> " Stainless Steel roll pin	RLPN33238SS	1	1
For hinge models FS910			
Screw type	Stainless Steel	54"	57"
#12-24 x <sup>11</sup> / <sub>16</sub> " Phillips flat head undercut self-drilling Tek screw	TKS1267SP10SS	26	26
<sup>3</sup> / <sub>32</sub> " x <sup>3</sup> / <sub>8</sub> " Stainless Steel roll pin	RLPN33238SS	1	1


## Markar Fasteners

	Product Number	Description	Properties
		Custom 12-24 x <sup>11</sup> / <sub>16</sub> " Phillips Flat Head Undercut Self-Drilling Screw	
	TKS1267SP10SS	For attaching Edge Mounted hinge leaves	Stainless Steel Phillips
	TORX-TKS1267SP10SS	For attaching Edge Mounted hinge leaves	Stainless Steel Torx
<hr/>			
	TKS8075Z	#8 x <sup>3</sup> / <sub>4</sub> " Flat Head Self Drilling Tek Screw	Zinc Phillips
	S323-08R12-663	For attaching 100, 200, and 300 series covers	Bronze Phillips
	TORX-TKS8075Z	For attaching 100, 200, and 300 series covers	Zinc Torx
<hr/>			
	PBS12150SP10BLR	Custom #12 x 1 <sup>1</sup> / <sub>2</sub> " Flat Head Undercut Particle Board Screw	Bronze Phillips
	PBS12150SP10SS	For edge mounting to wood	Stainless Steel Phillips
	TORX-PBS12150SP10SS	For edge mounting to wood	Stainless Steel Torx
<hr/>			
	MS1244SP10SS	Custom 12-24 x <sup>7</sup> / <sub>16</sub> " Flat Head Undercut Machine Screw	Stainless Steel Phillips
	TORX-MS1244SP10SS	Used with 3500 series hinges for mounting to metal	Stainless Steel Torx
			
<hr/>			
	MS10075SS	10-32 x <sup>3</sup> / <sub>4</sub> " Flat Head Machine Screw	Stainless Steel Phillips
	TORX-MS10075SS	Used with Adjust-A-Screw	Stainless Steel Torx
			

## Markar Fasteners

	Product Number	Description	Properties
	TB1420SS	1/4"-20 x 1 5/8" Sleeve Bolt For surface mounting to wood	Stainless Steel
	M26-0030	10-24 Security Button Head Barrel Nut For surface mount toilet partition hinges Consult factory for pricing and availability	Stainless Steel
	TORX-BHMS1075SS	10-24 x 3/4" Button Head Security Torx For surface mount toilet partition hinges Consult factory for pricing and availability	Stainless Steel
	M26-0015-02	18 SJN 1/4"-20 Molly Jack Nut 7/16" hole	Zinc
	M26-0031-01	1 3/8" Adjust-A-Screw™ with 10-32 Internal Thread and Hex Head Adjustment Used with MS10075SS screw Note: 5/16" pilot hole required for 3/8" - 16 tap	
	TORX-TKS14075R	1/4"-14 x 3/4" T-27 Torx Button Head Sheet Metal Screw	Ruspert Coat Torx
	S222-416R16-603	1/4"-20 x 1" Pan Head Machine Screw For surface mounting to metal	Zinc Phillips

## Markar Tools, Parts and Accessories

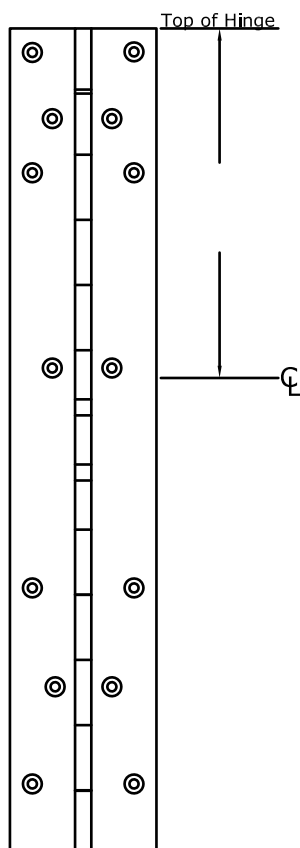
	Product Number	Description
		MT-T20, 27, & 15 Torx Driver Bit
	TORXBIT20	Used on TORX-MS1244SP10SS, TORX-PBS12150SP10SS and TORX-MS10075SS
	TORXBIT27	Used on TORX-TKS14075R16 and to adjust 400 and 900 series spring-loaded hinges
	TORXBIT15	Used on TORX-TKS8075Z
	RLPN33238SS	Knurl Pin Replacement pin 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
	MTSP100	Right Angle Skewdriver Used for installing HG310 & HG311 Hinge/Guards
	M29-0011-02	Installer Rod For 8S-JN 1/4-20 nuts For installing Molly Jack Nuts with MT1956 installer
	M29-0012-01	Molly Jack Nut Installer Used for installing Molly Jack Nuts. Includes 1/4-20 installer rod
	MP-UBOX	Hinge Carton Please Specify: • Length • Dimension: 1" x 3" or 1 1/2" x 3"

To process order, please circle handing illustrated below.

## Markar Current Transfer Prep (CTP) Information Form

In order to assign an accurate ship date and begin production of your order, please provide us with the information requested. We appreciate your cooperation and time to assist us in providing you with the type of product that will meet our requirements.

ALL PT LOCATIONS ARE REQUIRED FROM TOP OF DOOR TO CENTERLINE OF PREP



Company Name: \_\_\_\_\_  
 Contact Name: \_\_\_\_\_  
 P.O.#: \_\_\_\_\_  
 Job Name: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_  
 Fax Number: \_\_\_\_\_

### CTP (Power Transfer Model)

- ☐ Pemko/Markar EL-CEPT
- ☐ Pemko/Markar EL-EPT \*\*\*
- ☐ Pemko/Markar EL-EPTL \*\*\*
- ☐ Pemko/Markar EL-EPT-SC
- ☐ Securitron CEPT
- ☐ Securitron EPT/Adams Rite 4612-1 \*\*\*
- ☐ Securitron EPTL/Adams Rite 4612-2 \*\*\*
- ☐ Securitron EPT-SC/Adams Rite 4612-SC
- ☐ Von Duprin EPT-2 & EPT-10
- ☐ Precision \*\*\*
- ☐ Other (Template Needed) \_\_\_\_\_

### Specify Hinge Leaf to Recieve Mortise Prep \*\*\* (needed)

- ☐ Frame Leaf
- ☐ Door Leaf

Hinge Length: \_\_\_\_\_

RHR/LH: \_\_\_\_\_

LHR/RH: \_\_\_\_\_

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Order acknowledgement will be sent after all information requirements are met to determine a ship date

## Cutting Pin & Barrel Hinges to Custom Lengths

- Step 1** The following instructions will apply to all Markar pin and barrel hinges except for toilet partition hinges. The general instructions apply for the 100, 200, 300 and 3500 series hinges. Follow option **A** for specific directions related to 100 series aluminum hinges and option **B** or **C** for specific directions related to 200, 300 & 3500 series steel and stainless steel hinges.
- Step 2** Determine the amount the hinge needs to be shortened. Note the hand of the hinge before beginning to lay out your cut. All cuts should be done at the bottom of your hinge assembly so that the gang hole pattern is at the top.
- Step 3** Measure from the top of the hinge down and mark a cut line at the desired length.
- For 200, 300 & 3500 series hinges, follow the instructions below
- If less than  $\frac{3}{4}$ " of knuckle is remaining follow option **B**
  - If  $\frac{3}{4}$ " or more of knuckle is remaining follow option **C**

- Step 4** Cut the hinge to length with a hacksaw or horizontal band saw, going through each hinge leaf, barrel and rod. If necessary, use a file to remove sharp edges and deburr.
- Step 5** Slide the stainless steel rod out approximately 1" making sure the assembly stays together as one unit.
- **A B** Remove  $\frac{1}{4}$ " from the rod using hacksaw and then push back into it's original position.
  - **C** Remove  $\frac{3}{4}$ " from the rod using a hacksaw and then push back into it's original position.
- Step 6** Follow instructions below based on option used.
- **A** Using a hammer and a center-punch, swage the aluminum material towards the center of the hole locking the hinge pin into place making sure it will not slide out.
  - **B** Using a pair of vice-grips, crimp the end of the steel barrel making sure the hinge pin will not slide out.
  - **C** Remove the end of the pin from the scrap hinge and insert it into the bottom of hinge using hammer.

