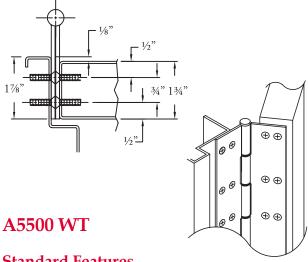
Innovation, Quality, **Customer Service...**

Full Concealed



Standard Features

- Full concealed, heavy duty
- 12 gauge 304 grade stainless steel material
- 1/8" door inset
- Wide throw for applications that need extra clearance for the door or the frame - 5" maximum from center of barrel to edge of hinge leaf
- The use of a caster on the lock side of tall or heavier doors is recomended to help carry to offset load
- 48" door width maximum
- 600 lbs. door weight maximum
- **Fasteners**: 12-24 x ¹/₂" undercut machine screws. stainless steel
- **Lengths**: 78-34", 83-1/8", 85" and 95"
- Finishes: US32D Satin Stainless Steel or US32 **Bright Stainless Steel**
- Fire Rating tested and certified by UL® (U.S.A. and Canada) on 4'0" x 10'0" fire rated doors, based on the following
 - 20 minutes wood doors
 - 90 minutes hollow metal and composite core wood fire doors
 - 3 hours hollow metal doors

5/8" 17/8" 3/4" 3/4" A505 **Standard Features** Full concealed, heavy duty

- No door inset, flush mount
- Door edge guard on both faces of door
- 48" door width maximum
- 600 lbs. door weight maximum
- Fasteners: 10-24 x %" undercut, self-drilling, thread-forming tek machine screws, stainless steel and #10 x 1-1/4" undercut wood screws, stainless steel
- **Lengths**: 78-¾", 83-½", 85", 95" and 118-¾"
- Finishes: US32D Satin Stainless Steel or US32 **Bright Stainless Steel**
- Fire Rating tested and certified by UL® (U.S.A. and Canada) on 4'0" x 10'0" fire rated doors, based on the following
 - 20 minutes wood doors
 - 90 minutes hollow metal and composite core wood fire doors
 - 3 hours hollow metal doors

Options Available

See pages G-6 to G-7 for modification availability and details

Options Available

See pages G-6 to G-7 for modification availability and details





Electrical Options

"TW" - Concealed Electrical Thru-Wire

Transfers power from the frame to the door in a discreet manner.

- TW4 (4) 30 AWG wires
- TW8 (8) 30 AWG wires
- TW12 (12) 30 AWG wires

"EZ" - Concealed Electrical Thru-Wire with Molex® Connectors

Transfers power from the frame to the door in a discreet manner. Molex® plug-in connectors provided for installation ease.

- EZ4 (4) 30 AWG wires with Molex® connectors
- EZ8 (8) 30 AWG wires with Molex® connectors
- EZ12 (12) 30 AWG wires with Molex® connectors

"M" - Moveable Electrical Access Prep

Hinge is supplied as one complete piece (pin and barrel are continuous), but both hinge leaves are cut to allow access to the electrical section without having to uninstall the hinge.

"PT"- Cut-out Prep for Power Transfer

Hinge is prepped for the use electrical power transfer to be used – must specify which model power transfer unit being used. See ABH Electrical Power Transfer section in the catalog for available models (sold separately).

"AMS" - Adjustable Monitoring Switch

Adjustable button switch is installed in the frame leaf to monitor the door position. Specify handing.

"CT" Concealed Electrical Thru-Wire and Monitor Switch

Monitor switch is installed in the frame leaf to monitor the door position while the wires transfer power from the frame to the door in a discreet manner.

- CT4 (4) 30 AWG wires
- CT8 (8) 30 AWG wires
- CT12 (12) 30 AWG wires

Electrical Options - Compatibility Chart									
Hinge Model		TW	EZ	M	PT	AMS	CT		
	A500	•	•	•	•	•	•		
	A500RB	•	•	•	•	•	•		
	A5500WT	•	•	•	•	•	•		
	A505	•	•	•	•	•	•		
	A505RB	•	•	•	•	•	•		
	A510				•				
Full	A511				•				
Concealed	A515	•	•	•	•	•	•		
	A515RB	•	•	•	•	•	•		
	A526				•				
	A529				•				
	A5500	•	•	•	•	•	•		
	A5515	•	•	•	•	•	•		
	A5505	•	•	•	•	•	•		
Half	A504				•				
Mortise	A506				•				
Half Surface	A503				•				
Full Surface	A502								





Non - Electrical Options

"CUT" - Cut to Custom Length

If a non-standard length hinge is required, ABH will cut from the bottom of the hinge to the desired length as long as it does not interfere with a screw hole. Specify length and handing.

"SPLICE" - Spliced Hinge

For hinges exceeding 118-34", ABH splices two separate lengths with an alternately split stainless steel pin that holds the barrel together. Specify length and handing.

"HT" - Welded Hospital Tip

Top of the hinge barrel is cut at a 45° angle and then welded to help provide and support a safer environment in hospitals and other institutions. Specify handing.

"DD" - Dutch Door

Modified door leaf cut to fit a dutch door application. Go online for order form or, specify top and bottom door leaf heights as well as clearance required between top and bottom and handing when ordering.

"STUD" - Security Studs

½" diameter stainless steel studs are permanantly mounted to the frame leaf projecting 1/4" and extend into the door leaf for added security.

"AS" - Adjustable Studs

Threaded studs are supplied for hinges with door edge guards on both faces of the door to help correct door alignment issues up to 3/8". Additional door reinforcement required. Specify wood or metal door.

"SEC" - Security Fasteners

Security fasteners are supplied in lieu of standard fasteners for all exposed areas. Specify wood or metal door and frame

"SNB" - Sex Bolts

When using on wood doors, sex bolts are provided for the surface mounted door portion.

"LL" - Lead-Lined

Lead is provided for the door portion fastener cover for half surface and full surface hinges.

"SL" - Sheared Leaf

Concealed leaf is sheared to accommodate a 1-3/8" thick door.

"ADB" - Cut for Automatic Door Bottom

Specify automatic door bottom model when ordering.

"CUSTOM HOLE"

Contact factory with custom mounting hole locations desired for unusual frame and/or door conditions. Restrictions apply.

"NO HOLE"

Contact factory for hinge without mounting holes.

"CUSTOM FINISH"

Custom powder coated finishes available - contact factory for details. Customer color sample approval will be required prior to fabrication.

Non-Electrical Options - Compatibility Chart															
Hinge Model		CUT	SPLICE	HT	DD	STUD	AS	SEC	SNB	TT	SL	ADB	CUSTOM HOLES	NO HOLES	CUSTOM FINISH
	A500	•	•	•	•	•		•			•	•	•	•	•
	A500RB	•	•	•	•	•		•			•	•	•	•	•
	A5500WT	•		•	•	•		•			•	•	•	•	•
	A505	•	•	•	•	•	•	•			•	•	•	•	•
	A505RB	•	•	•	•	•	•	•			•	•	•	•	•
	A510	•	•	•	•	•	•	•			•	•	•	•	•
Full	A511	•	•	•	•	•		•	П		•	•	•	•	•
Concealed	A515	•	•	•	•	•		•	П		•	•	•	•	•
	A515RB	•	•	•	•	•		•	П		•	•	•	•	•
	A526	•	•	•	•	•	•	•	П		•	•	•	•	•
	A529	•	•	•	•	•		•	П		•	•	•	•	•
	A5500	•	•	rd	•	•		•			•	•	•	•	•
	A5515	•	•	Standard	•	•		•			•	•	•	•	•
	A5505	•	•	Sta	•	•	•	•			•	•	•	•	•
Half	A504	•	•	•	•	•		•				•	•	•	•
Mortise	A506	•	•	•	•	•		•				•	•	•	•
Half Surface	A503	•	•	•	•	•		•	•	•	•		•	•	•
Full Surface	A502	•	•	•	•	•		•	•	•			•	•	•





Non - Electrical Options

"CUT" - Cut to Custom Length

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Non-Electrical Options - Compatibility Chart															
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	A500	•	•	•	•	•		•			•	•	•	•	•
	A500RB	•	•	•	•	•		•			•	•	•	•	•
	A5500WT	•		•	•	•		•			•	•	•	•	•
	A505	•	•	•	•	•	•	•			•	•	•	•	•
	A505RB	•	•	•	•	•	•	•			•	•	•	•	•
	A510	•	•	•	•	•	•	•			•	•	•	•	•
Full	A511	•	•	•	•	•		•	П		•	•	•	•	•
Concealed	A515	•	•	•	•	•		•	П		•	•	•	•	•
	A515RB	•	•	•	•	•		•	П		•	•	•	•	•
	A526	•	•	•	•	•	•	•	П		•	•	•	•	•
	A529	•	•	•	•	•		•	П		•	•	•	•	•
	A5500	•	•	rd	•	•		•			•	•	•	•	•
	A5515	•	•	Standard	•	•		•			•	•	•	•	•
	A5505	•	•	Sta	•	•	•	•			•	•	•	•	•
Half	A504	•	•	•	•	•		•				•	•	•	•
Mortise	A506	•	•	•	•	•		•				•	•	•	•
Half Surface	A503	•	•	•	•	•		•	•	•	•		•	•	•
Full Surface	A502	•	•	•	•	•		•	•	•			•	•	•





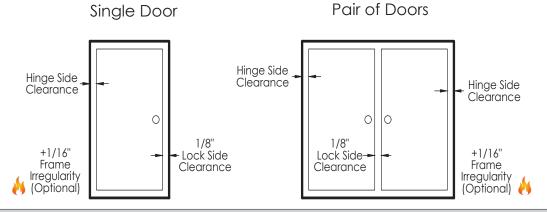
Door Clearance Chart

1222 Ardmore Avenue Itasca, IL 60143 Tel: 630-875-9900 Fax: 800-932-9224

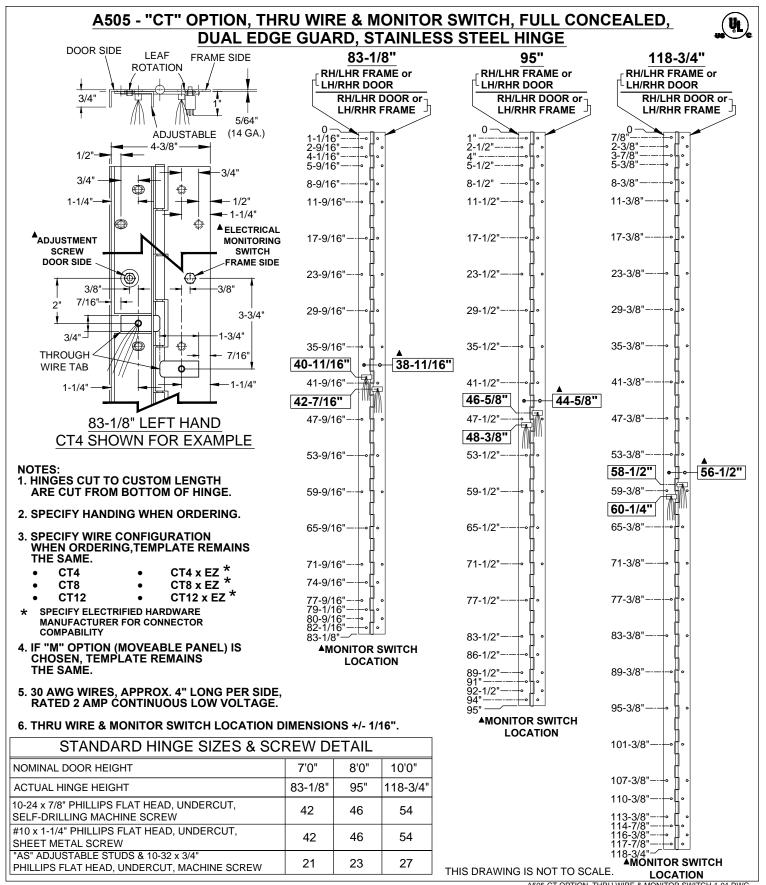
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abhinfo@abhmfg.com

Single Door- Square Edged										
HINGE MODEL	HINGE SIDE CLEARANCE (Single)	+	LOCK SIDE CLEARANCE	+	***FRAME IRREGULARITY (OPTIONAL)	=	SINGLE DOOR TOTAL UNDERSIZE			
A500*, A500RB, A510**, A515, A515RB, A525, A529, AC500*	1/4"	+	1/8"	+	1/16"	=	7/16"			
A505**, A505RB**, A526**, A5500*, A5515, A5505	5/16"	+	1/8"	+	1/16"	=	1/2"			
A503, A504*, A506, A511	1/8"	+	1/8"	+	1/16"	=	5/16"			
A502	3/32"	+	1/8"	+	1/16"	=	9/32"			
	ı	airs o	f Doors- Squa	re Ed	ged					
HINGE MODEL	HINGE SIDE CLEARANCE (Pair)	+	LOCK SIDE CLEARANCE	+	***FRAME IRREGULARITY (OPTIONAL)	=	PAIR OF DOORS TOTAL UNDERSIZE			
A500*, A500RB, A510,** A515, A515RB, A529, AC500*	1/2"	+	1/8"	+	1/16"	=	11/16"			
A505**,A505RB**, A526**, A5500*, A5515, A5505	5/8"	+	1/8"	+	1/16"	=	13/16"			
A503, A504*, A506, A511	1/4"	+	1/8''	+	1/16"	=	7/16''			
A502	3/16"	+	1/8"	+	1/16"	=	3/8"			



- For beveled door, standard clearance is applied to the high side of the door. Refer to template.
- ** When using the optional "AS" Adjustable Studs, add 1/8" additional for adjustment clearance. (A505, A510 & A526 Only)
- *** 1/16" Frame Irregularity Allowance, Optional and included in all Total Door Undersize for single and pairs of doors



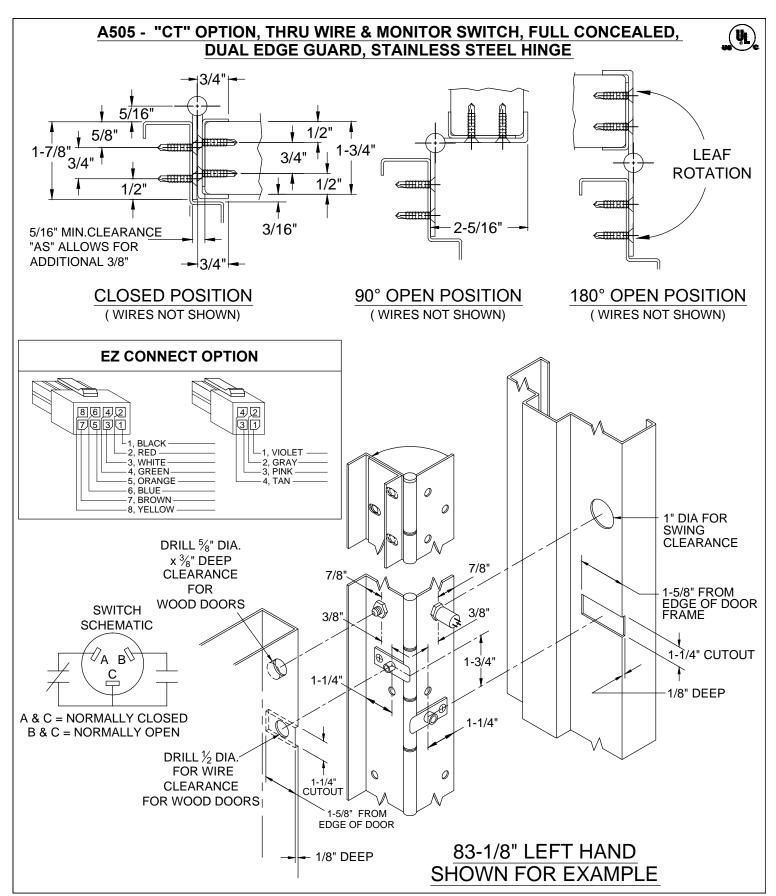


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A505 - "CT" OPTION THRU WIRE & MONITOR SWITCH

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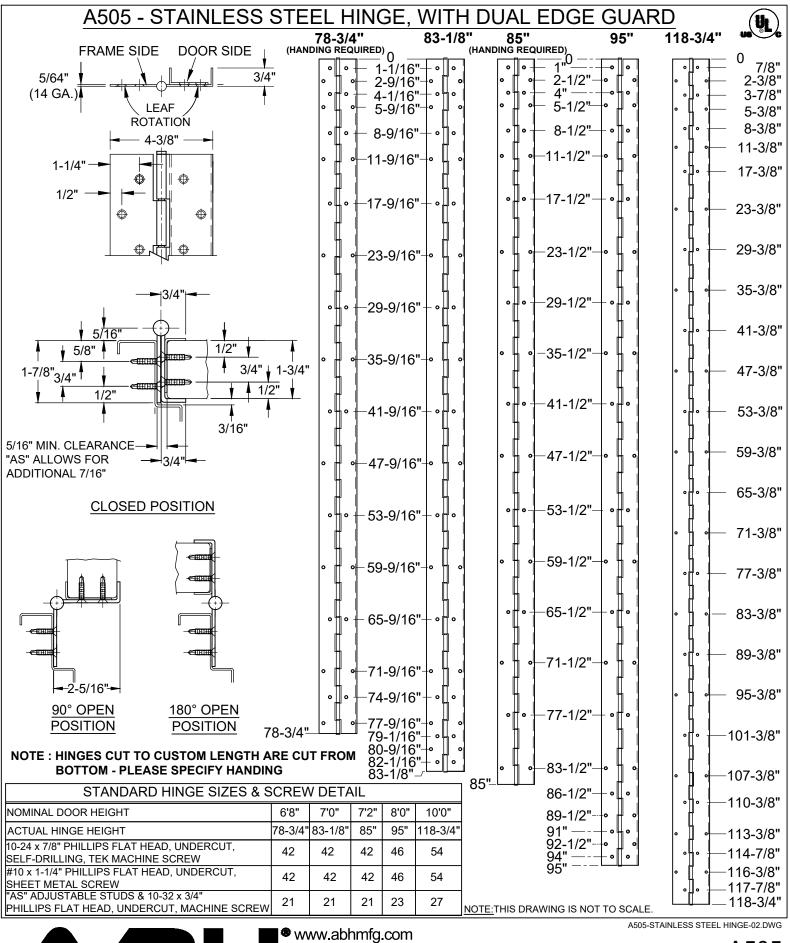
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A505-CT OPTION, THRU WIRE & MONITOR SWITCH-2-01.DWG

A505 - "CT" OPTION THRU WIRE & MONITOR SWITCH

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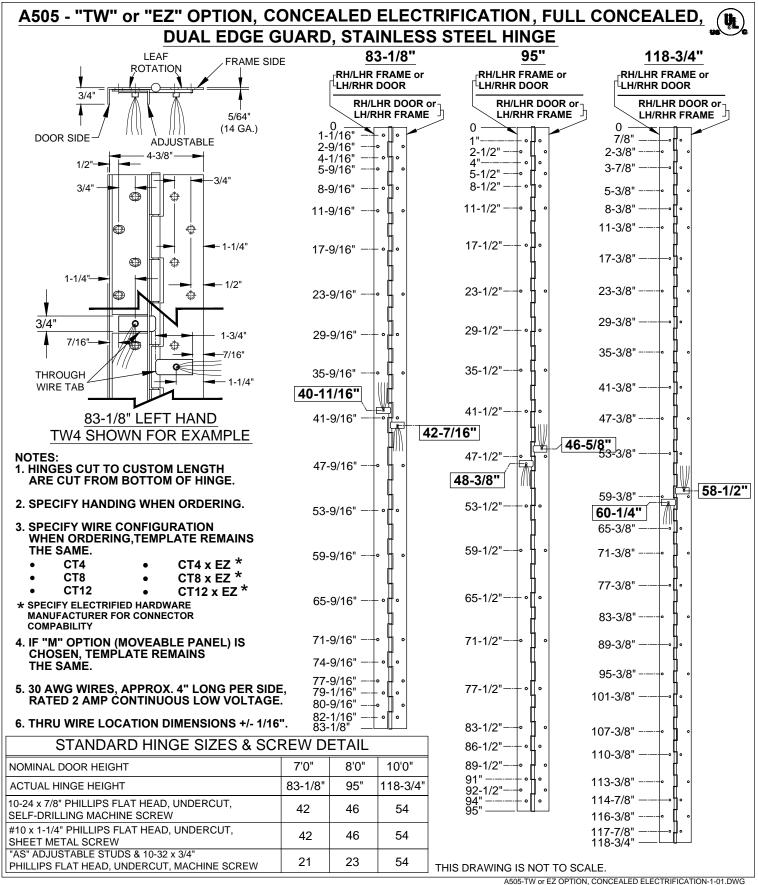


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STAINLESS STEEL HINGE

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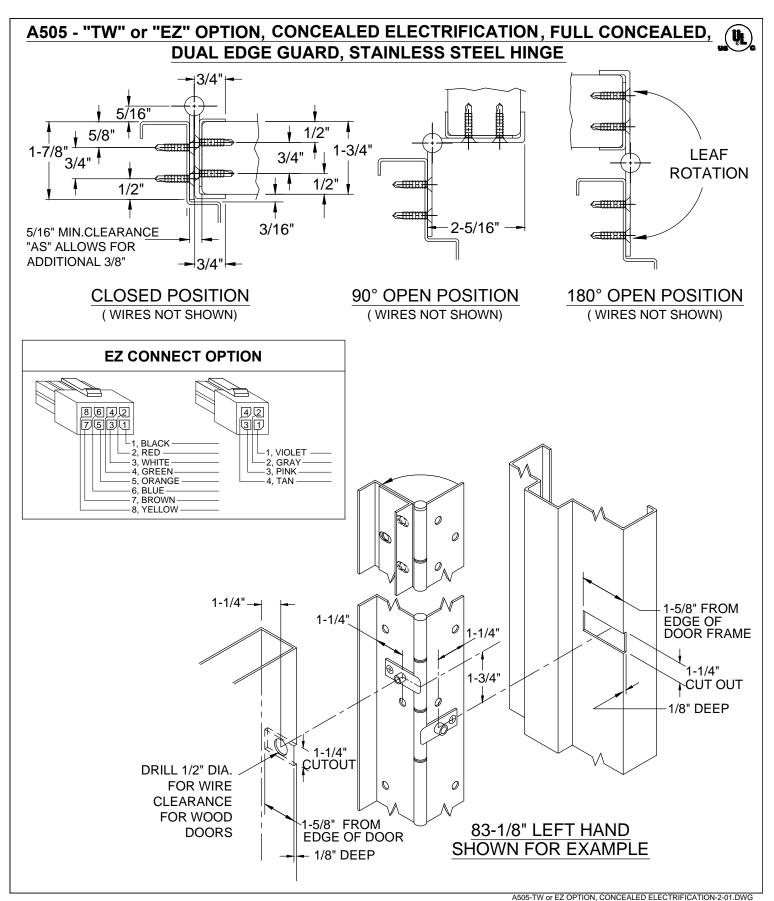
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A505 - "TW" or "EZ" OPTION Inc. CONCEALED ELECTRIFICATION

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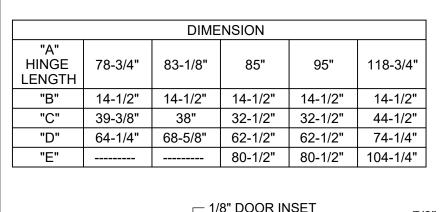
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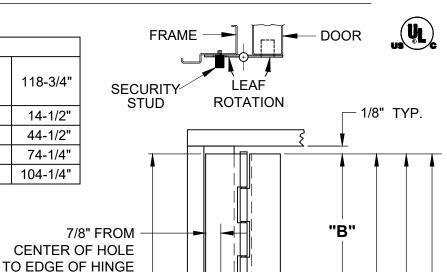
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PAGE 2 OF 2 REVISED 02-17-17

SECURITY "STUD" FOR FULL CONCEALED STAINLESS STEEL HINGES 14 & 12 GA.





"C"

DRILL 3/4"

DIA. HOLE IN DOOR

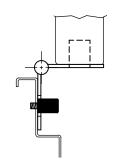
"D"

"E"

1-3/4" 3/4" 7/8" 1/2"

CLOSED POSITION

(A500 HINGE & STUD SHOWN, FOR EXAMPLE)



FIRE STUD MOUNTS ONTO THE THREADED **FRAME**

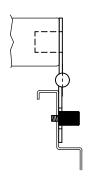
DRILL & TAP IN FRAME

12-24

"A"

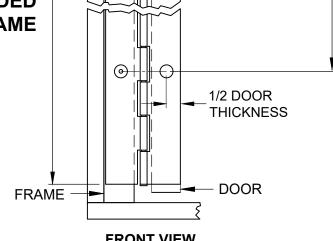
90° OPEN POSITION

(A500 HINGE & STUD SHOWN, FOR EXAMPLE)



180° OPEN POSITION

(A500 HINGE & STUD SHOWN, FOR EXAMPLE)



FRONT VIEW

FOR SECURITY STUD LOCATION MODEL A500 HINGE SHOWN FOR EXAMPLE

ALL HINGES ARE HANDED



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FC SECURITY STUD LOCATION SS-05.DWG

FULL CONCEALED SECURITY STUD LOCATION INSTRUCTIONS

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ISSUED 10-21-20

CHS-1, SLIP-IN, 16GA. (1/16") STAINLESS STEEL SHIM 95" 83-1/8" 118-3/4" 0.000 0.875-1.063-4.06 8 1/2-8.375 8.563 DETAIL A 17 1/2-17.375-17.563-29 1/2-29.375-29.563 41 1/2-41.375 41.563-53 1/2-53.375-53.563-65 1/2-65.375 65.563-74 563-77 1/2-77.375-79.063-82.063-83-1/8-86 1/2-89.375-**DETAIL A** 101.375-0.750 0.375 0.188 -114.875 117.875-118 3/4



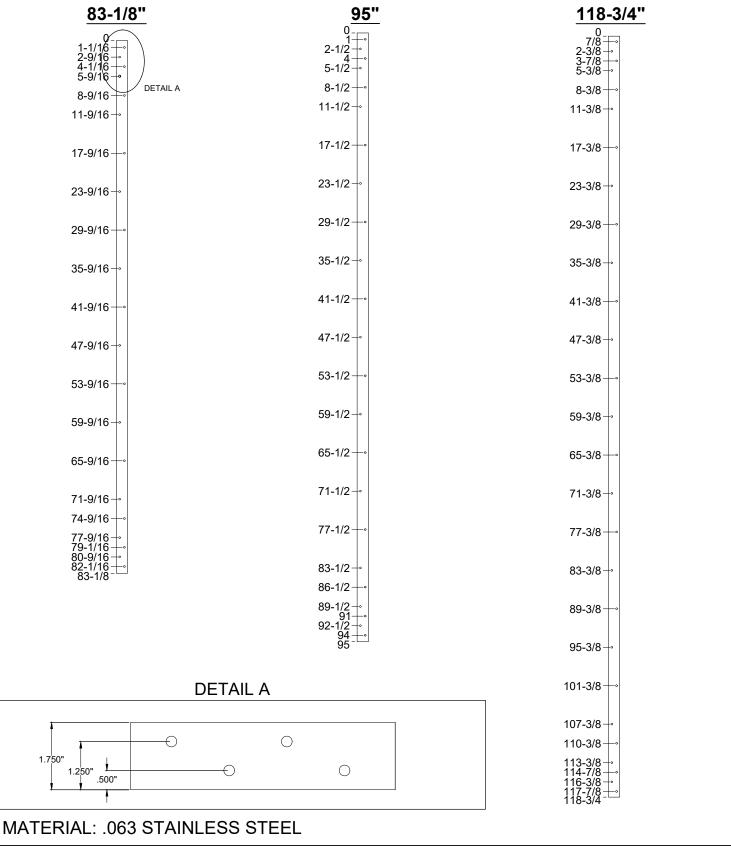
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CHS-1-SLIP-IN SHIM-00.DWG

CHS-1 SLIP-IN SHIM

PAGE 1 OF 1 ISSUED 06-03-20

CHS-2, 16GA. STAINLESS STEEL SHIM



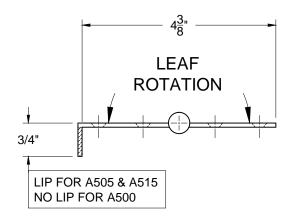


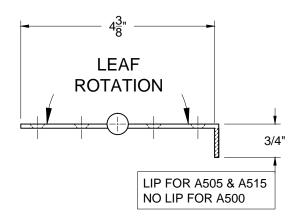
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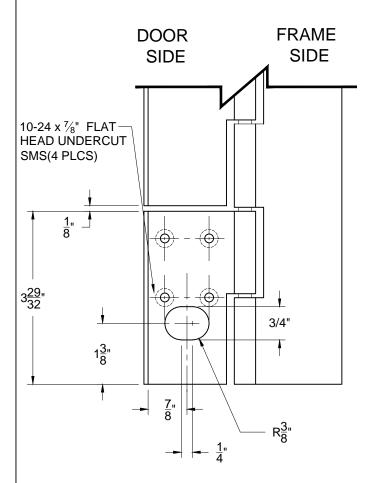
CHS-2 SHIM

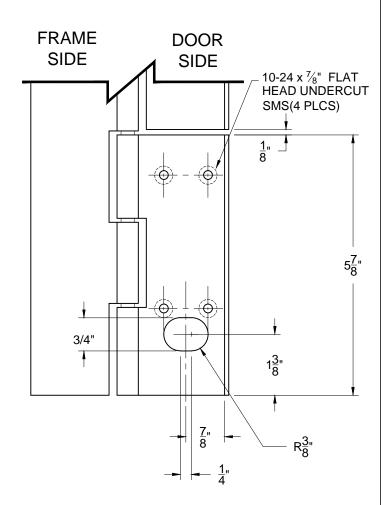
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HINGE WITH 1840 AUTOMATIC DOOR BOTTOM









LEFT HANDED

RIGHT HANDED

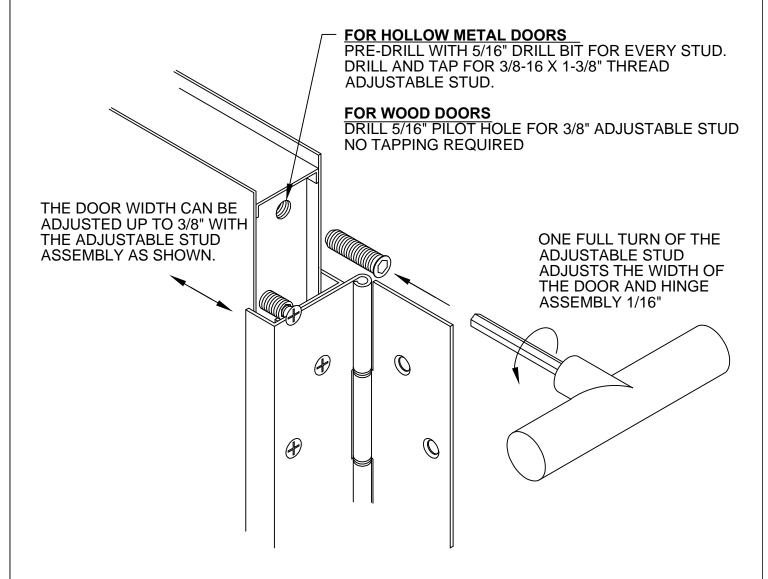


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HINGE W/ 1840 AUTOMATIC DOOR BOTTOM REVISED 06-19-18

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UNIVERSAL ADJUSTABLE STUD ASSEMBLY



10-32X3/4"
PHILLIPS FLAT HEAD
UNDERCUT STAINLESS STEEL
MACHINE SCREW





ADJUSTABLE FASTENER WITH 10-32 INTERNAL THREAD AND HEX HEAD ADJUSTMENT





NOTE:

• IF USING AN ADJUSTABLE HINGE GUARD WITH ADJUSTABLE STUD, USE 14 GUAGE REINFORCEMENTS ON FRAME AND 12 GAUGE REINFORCEMENTS ON DOOR.

ABH[®]
MANUFACTURING INC.

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SS HINGE ADJUSTABLE STUD ASSEMBLY-04.DWG

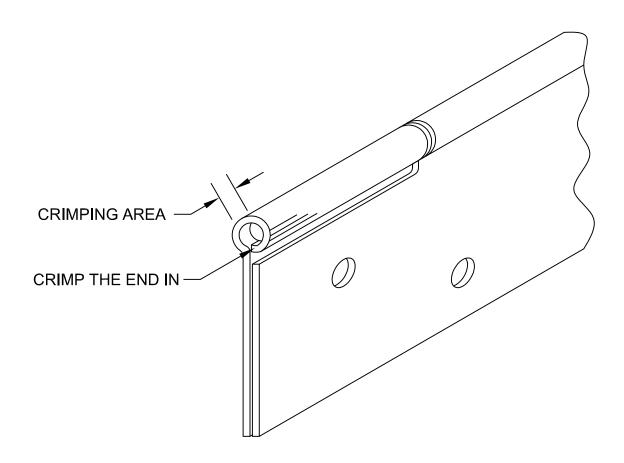
STAINLESS STEEL HINGE ADJUSTABLE STUD ASSEMBLY

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REVISED 12-10-18

CUTTING STAINLESS STEEL HINGES TO CUSTOM LENGTHS

- 1. DETERMINE THE AMOUNT THAT THE HINGE NEEDS TO BE SHORTENED. NOTE THE HAND OF THE HINGE BEFORE BEGINING TO LAY OUT YOUR CUT. ALL CUTS WILL BE DONE AT THE BOTTOM OF YOUR HINGE ASSEMBLY MAKING SURE TO LEAVE THE GANG HOLE PATTERN AT THE TOP.
- 2. MEASURE FROM THE TOP DOWN AND SCRIBE A CUT LINE ON YOUR LEAF AT THE DESIRED LENGTH.
- CUT THE HINGE TO LENGTH WITH A HACKSAW, GOING THROUGH THE LEAFS, BARREL AND PIN. IF NECESSARY, USE A FILE TO REMOVE ALL SHARP EDGES AFTER CUTTING.
- 4. MOVE THE STAINLESS STEEL PIN OUT APPROXIMATELY 1" MAKING SURE THE ASSEMBLY STAYS TOGETHER AS ONE UNIT. REMOVE $\frac{1}{4}$ " FROM THE END OF THE PIN USING A HACKSAW AND THEN PUSH BACK INTO IT'S ORIGINAL POSITION.
- 5. USING A PAIR OF VICE-GRIPS, CRIMP THE END IF THE BARREL MAKING SURE THE HINGE PIN WILL NOT SLIDE OUT.



ABH suggests ordering the hinge cut to length at factory. If the hinge is field cut, it will void the warranty.



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STAINLESS STEEL HINGE CUSTOM CUTTING LENGTHS

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