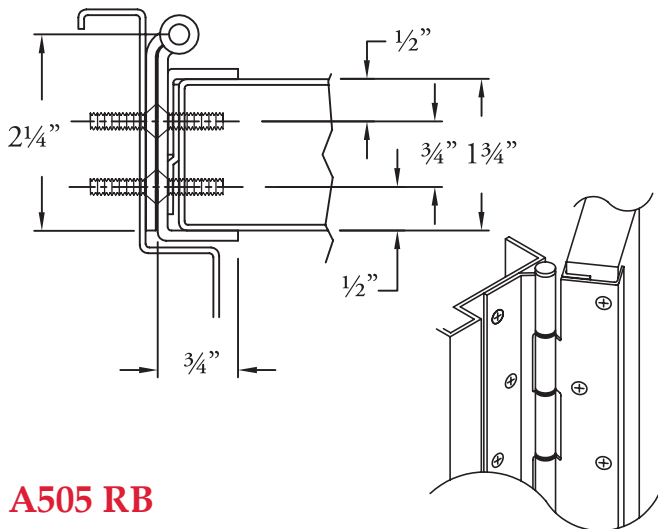


Full Concealed



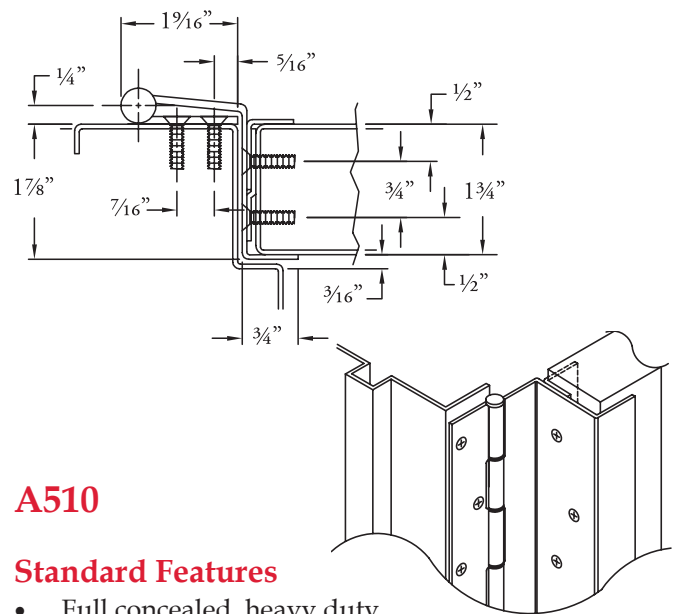
A505 RB

Standard Features

- Raised barrel (swaged) for door set back in deep reveals
- 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 7/8" undercut, self-drilling, thread-forming tek machine screws, stainless steel and #10 x 1-1/4" undercut wood screws, stainless steel
- **Lengths:** 78-3/4", 83-1/8", 85", 95" and 118-3/4"
- **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" 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



A510

Standard Features

- Full concealed, heavy duty
- No door inset, flush mount
- Swing clear application
- Door edge guard on both faces of door
- 48" door width maximum
- 600 lbs. door weight maximum
- **Fasteners:** 10-24 x 7/8" undercut, self-drilling, thread-forming tek machine screws, stainless steel and #10 x 1-1/4" undercut wood screws, stainless steel
- **Lengths:** 78-3/4", 83-1/8", 85", 95" and 118-3/4"
- **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



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		TW	EZ	M	PT	AMS	CT
Full Concealed	A500	●	●	●	●	●	●
	A500RB	●	●	●	●	●	●
	A5500WT	●	●	●	●	●	●
	A505	●	●	●	●	●	●
	A505RB	●	●	●	●	●	●
	A510				●		
	A511				●		
	A515	●	●	●	●	●	●
	A515RB	●	●	●	●	●	●
	A526				●		
	A529				●		
	A5500	●	●	●	●	●	●
	A5515	●	●	●	●	●	●
A5505	●	●	●	●	●	●	
Half Mortise	A504				●		
	A506				●		
Half Surface	A503				●		
Full Surface	A502						



Stainless Steel Continuous Pin & Barrel Hinges



Innovation, Quality,
Customer Service...

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 118-3/4”, 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

1/2” diameter stainless steel studs are permanently 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.

Hinge Model		CUT	SPLICE	HT	DD	STUD	AS	SEC	SNB	LL	SL	ADB	CUSTOM HOLES	NO HOLES	CUSTOM FINISH
Full Concealed	A500	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A500RB	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A550WT	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A505	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A505RB	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A510	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A511	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A515	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A515RB	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A526	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A529	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A5500	•	•	•	•	•	•	•	•	•	•	•	•	•	•
A5515	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
A5505	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Half Mortise	A504	•	•	•	•	•	•	•	•	•	•	•	•	•	
	A506	•	•	•	•	•	•	•	•	•	•	•	•	•	
Half Surface	A503	•	•	•	•	•	•	•	•	•	•	•	•	•	
Full Surface	A502	•	•	•	•	•	•	•	•	•	•	•	•	•	



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Stainless Steel Continuous Pin & Barrel Hinges



Innovation, Quality,
Customer Service...

Non - Electrical Options

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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.**

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For hinges exceeding 118-3/4”, ABH splices two separate lengths with an alternately split stainless steel pin that holds the barrel together. **Specify length and handing.**

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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.

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“SEC” - Security Fasteners

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

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

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“CUSTOM HOLE”

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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.



Hinge Model		CUT	SPLICE	HT	DD	STUD	AS	SEC	SNB	LL	SL	ADB	CUSTOM HOLES	NO HOLES	CUSTOM FINISH
Full Concealed	A500	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A500RB	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A550WT	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A505	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A505RB	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A510	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A511	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A515	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A515RB	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A526	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A529	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A5500	•	•	•	•	•	•	•	•	•	•	•	•	•	•
A5515	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
A5505	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Half Mortise	A504	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A506	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Half Surface	A503	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Full Surface	A502	•	•	•	•	•	•	•	•	•	•	•	•	•	•



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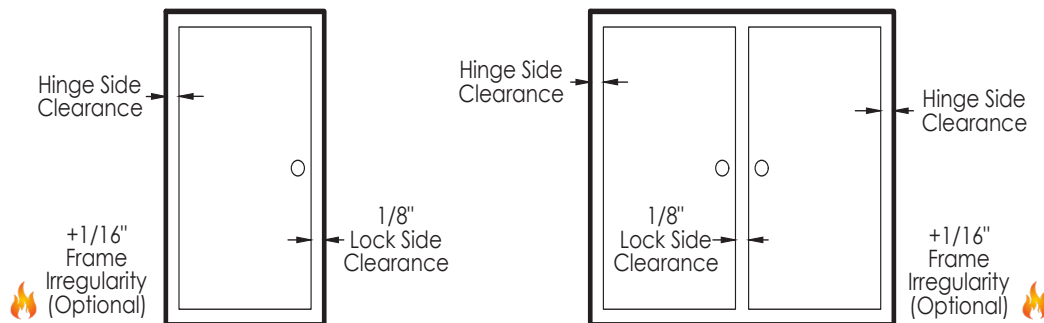
Stainless Steel Continuous Pin & Barrel Hinges

Door Clearance Chart

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"
Pairs of Doors- Square Edged							
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"

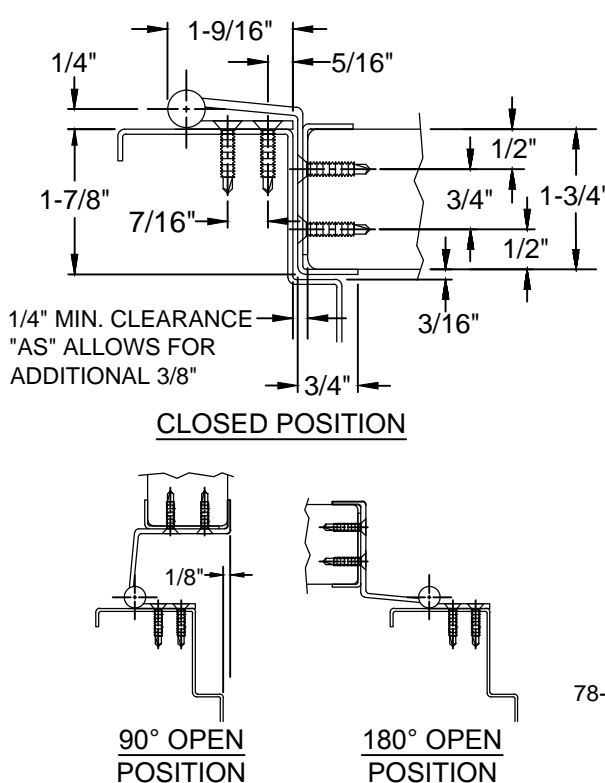
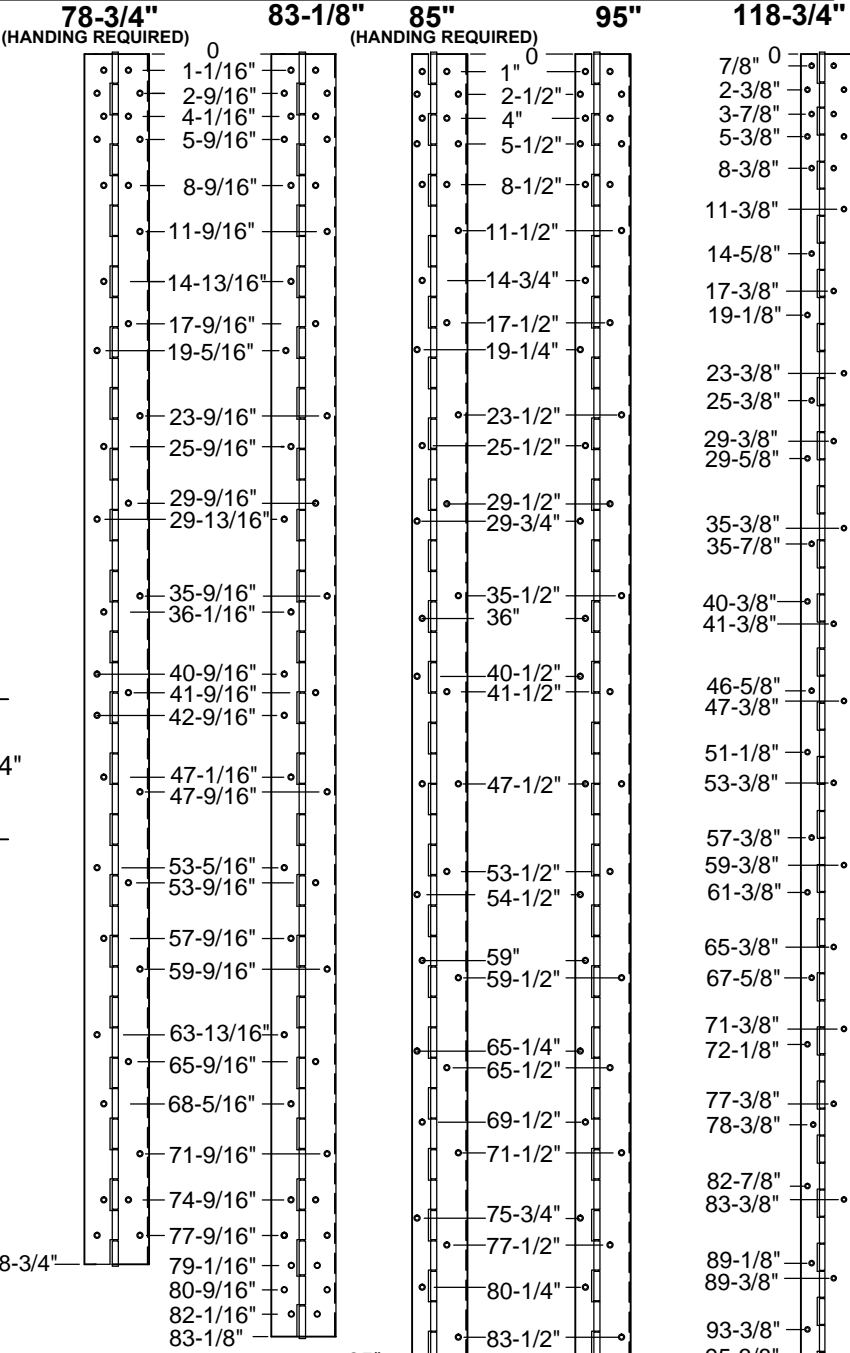
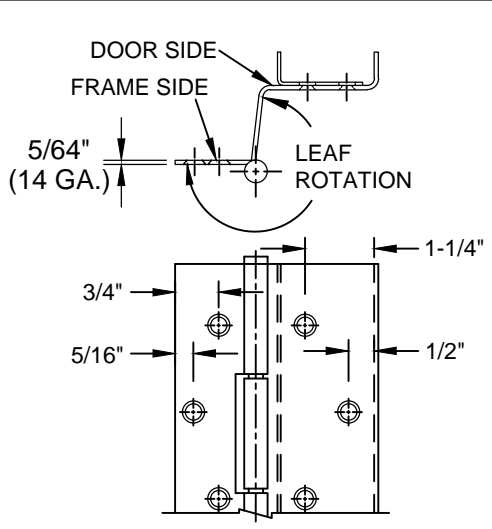
Single Door

Pair of Doors



* 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

A510 - STAINLESS STEEL HINGE, SWING CLEAR W/ DUAL EDGE GUARD



NOTE : HINGES CUT TO CUSTOM LENGTH ARE CUT FROM BOTTOM - PLEASE SPECIFY HANDING

STANDARD HINGE SIZES & SCREW DETAIL					
NOMINAL DOOR HEIGHT	6'8"	7'0"	7'2"	8'0"	10'0"
ACTUAL HINGE HEIGHT	78-3/4"	83-1/8"	85"	95"	118-3/4"
10-24 x 7/8" PHILLIPS FLAT HEAD, UNDERCUT, SELF-DRILLING, TEK MACHINE SCREW	42	42	42	46	54
#10 x 1-1/4" PHILLIPS FLAT HEAD, UNDERCUT, SHEET METAL SCREW	42	42	42	46	54
"AS" ADJUSTABLE STUDS & 10-32 x 3/4" PHILLIPS FLAT HEAD, UNDERCUT, MACHINE SCREW (OPTIONAL)	21	21	21	23	27

NOTE: THIS DRAWING IS NOT TO SCALE.



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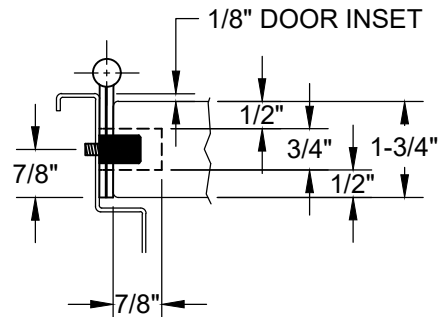
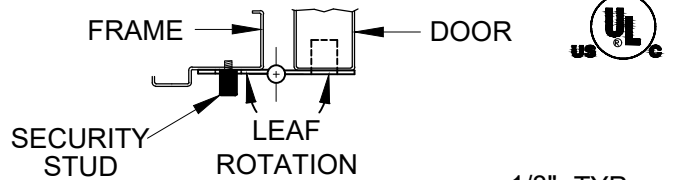
A510 STAINLESS STEEL HINGE
 PAGE 1 OF 1
 ISSUED 11-14-16
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A510-STAINLESS STEEL HINGE-01.DWG

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



DIMENSION					
"A" HINGE LENGTH	78-3/4"	83-1/8"	85"	95"	118-3/4"
"B"	14-1/2"	14-1/2"	14-1/2"	14-1/2"	14-1/2"
"C"	39-3/8"	38"	32-1/2"	32-1/2"	44-1/2"
"D"	64-1/4"	68-5/8"	62-1/2"	62-1/2"	74-1/4"
"E"	-----	-----	80-1/2"	80-1/2"	104-1/4"

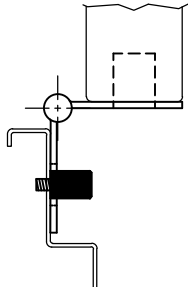


7/8" FROM CENTER OF HOLE TO EDGE OF HINGE

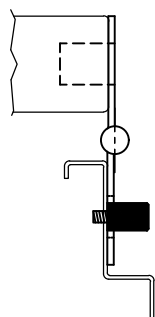
DRILL & TAP IN FRAME 12-24

DRILL 3/4" DIA. HOLE IN DOOR

CLOSED POSITION
(A500 HINGE & STUD SHOWN, FOR EXAMPLE)

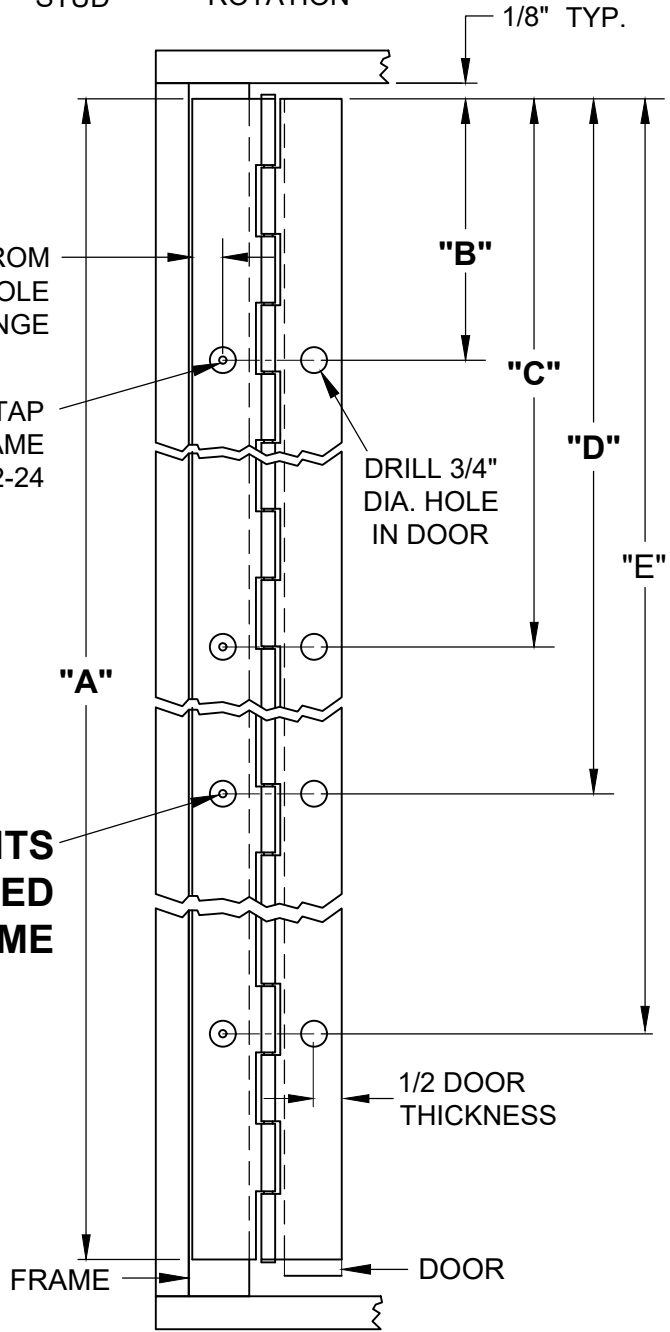


90° OPEN POSITION
(A500 HINGE & STUD SHOWN, FOR EXAMPLE)



180° OPEN POSITION
(A500 HINGE & STUD SHOWN, FOR EXAMPLE)

FIRE STUD MOUNTS ONTO THE THREADED FRAME



FRONT VIEW
FOR SECURITY STUD LOCATION
MODEL A500 HINGE SHOWN FOR EXAMPLE

ALL HINGES ARE HANDED

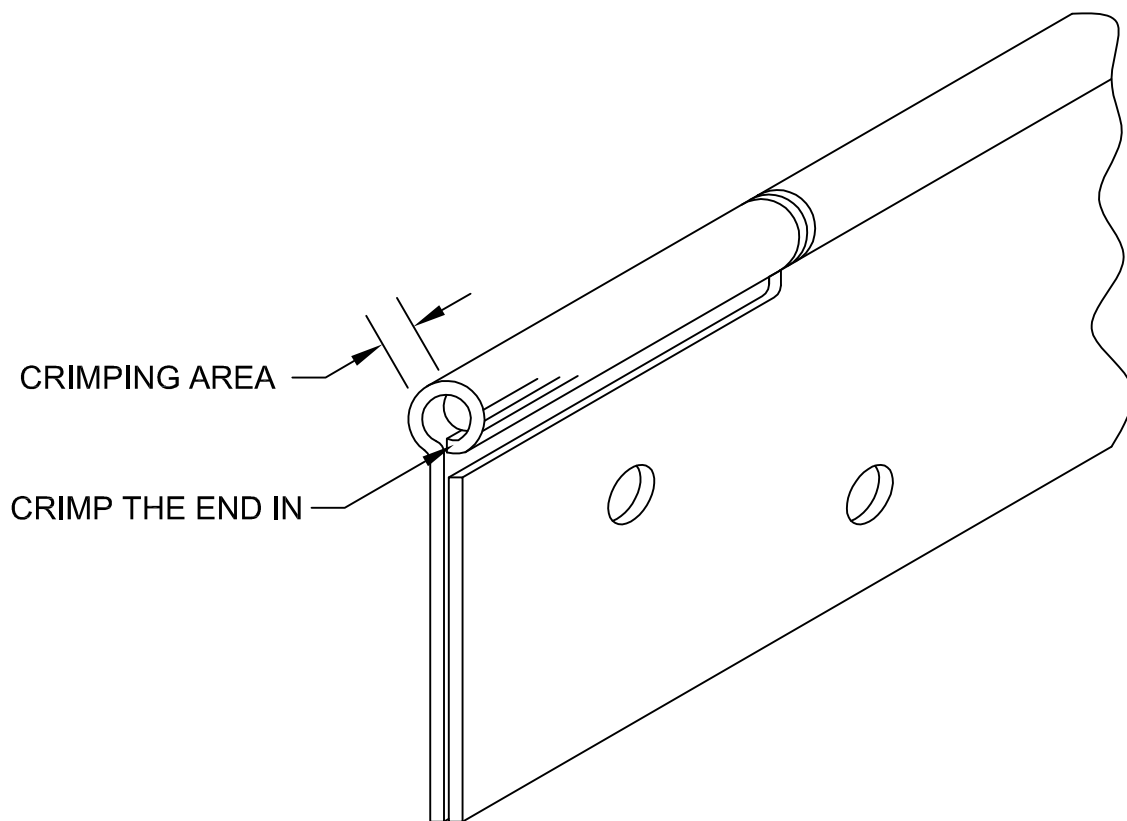


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FC SECURITY STUD LOCATION SS-05.DWG
**FULL CONCEALED
SECURITY STUD
LOCATION INSTRUCTIONS**
© 2020 ABH Mfg., Inc.
printed in USA
ISSUED 10-21-20

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.
3. 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 OF 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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SS HINGE CUSTOM CUTTING LENGTHS-00.DWG
STAINLESS STEEL HINGE
CUSTOM CUTTING LENGTHS

ISSUED 05-26-10

UNIVERSAL ADJUSTABLE STUD ASSEMBLY

FOR HOLLOW METAL DOORS

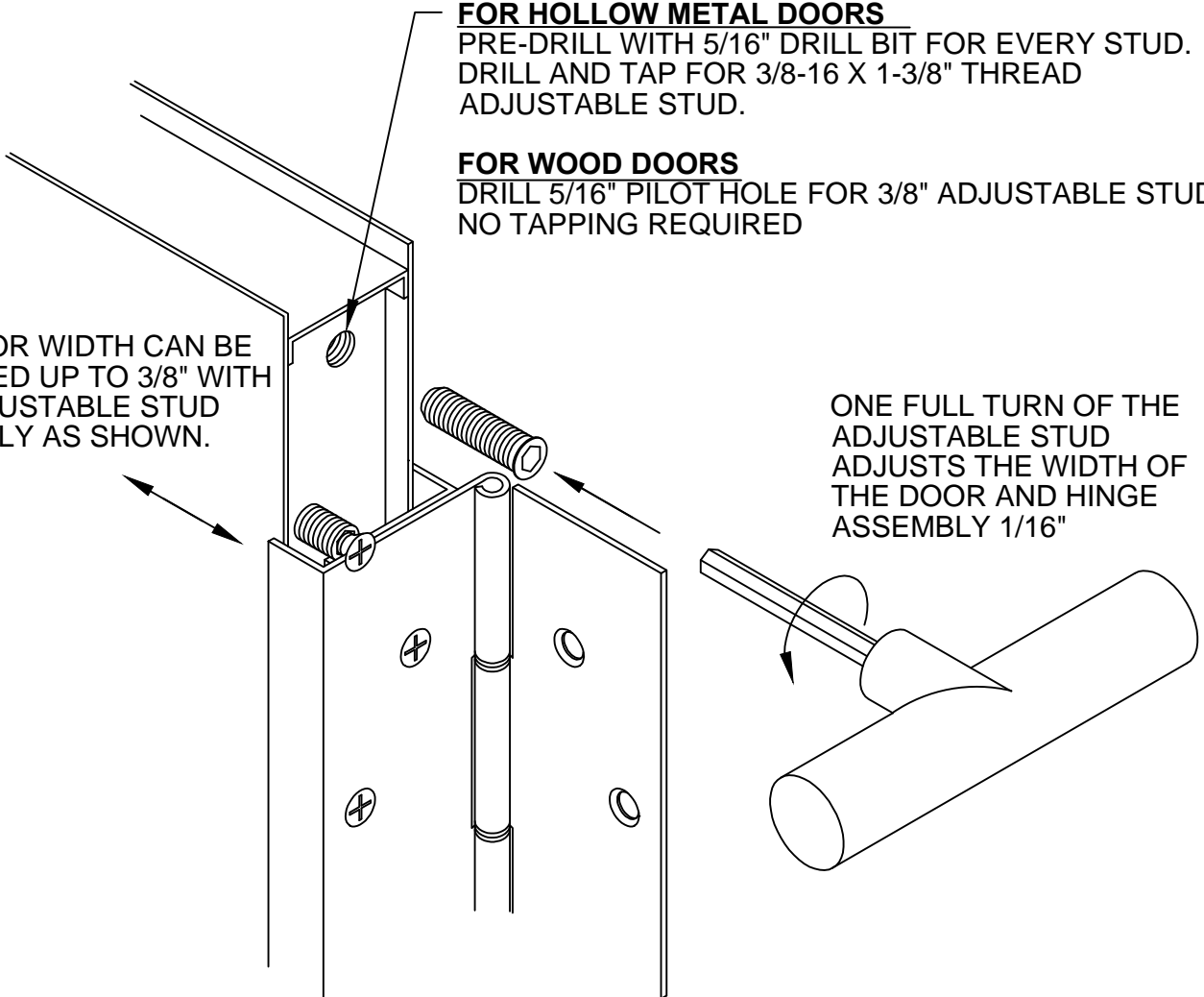
PRE-DRILL WITH 5/16" DRILL BIT FOR EVERY STUD.
DRILL AND TAP FOR 3/8-16 X 1-3/8" THREAD
ADJUSTABLE STUD.

FOR WOOD DOORS

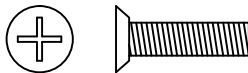
DRILL 5/16" PILOT HOLE FOR 3/8" ADJUSTABLE STUD
NO TAPPING REQUIRED

THE DOOR WIDTH CAN BE
ADJUSTED UP TO 3/8" WITH
THE ADJUSTABLE STUD
ASSEMBLY AS SHOWN.

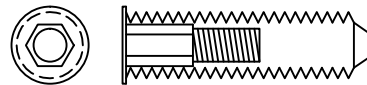
ONE FULL TURN OF THE
ADJUSTABLE STUD
ADJUSTS THE WIDTH OF
THE DOOR AND HINGE
ASSEMBLY 1/16"



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 GAUGE REINFORCEMENTS ON FRAME AND 12 GAUGE REINFORCEMENTS ON DOOR.

SS HINGE ADJUSTABLE STUD ASSEMBLY-04.DWG

ABH
MANUFACTURING INC.

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STAINLESS STEEL HINGE
ADJUSTABLE STUD ASSEMBLY

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