

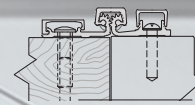
**Advanced Hospital Tips
Full Surface**

A570

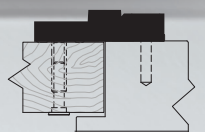
ABH Advanced Hospital Tips (AHT) are designed for use in behavioral health facilities, hospitals, correctional facilities or any institution where there are ligature risks. While most hospital tips are designed to work only in the closed position, the AHT works whether the hinge is open or closed. Each AHT has been designed to work with the specific hinge needed for the door and frame application at hand.



Possible ligature points present without the use of Hospital Tips

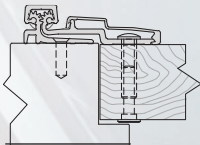


Ligature points eliminated with the use of Hospital Tips

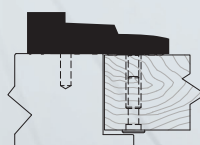


A210

Possible ligature points present without the use of Hospital Tips

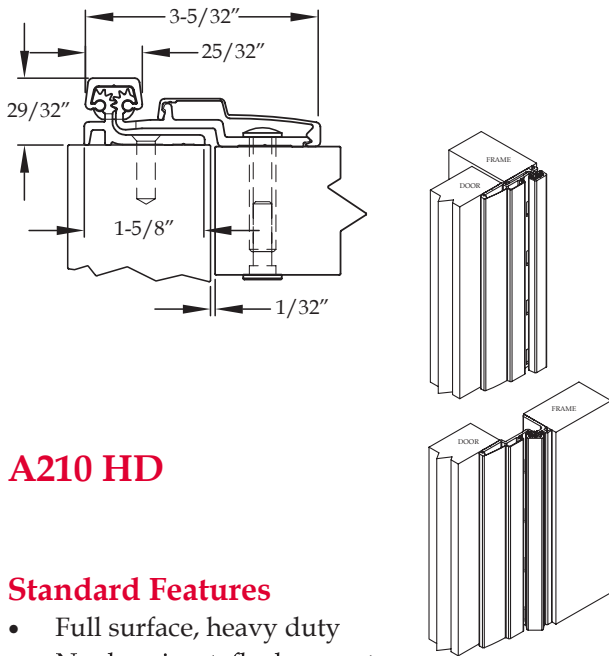


Ligature points eliminated with the use of Hospital Tips



*Note: Thickness of the door must be specified before ordering hinges.

Full Surface



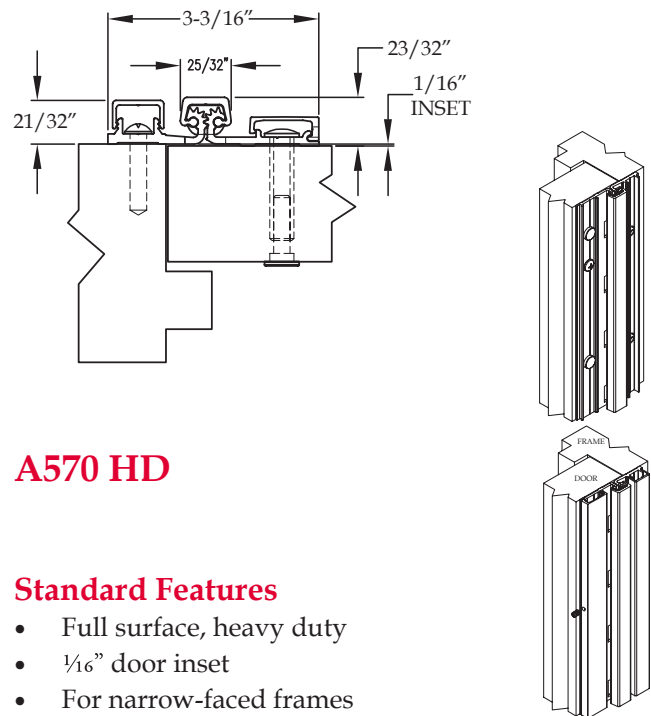
A210 HD

Standard Features

- Full surface, heavy duty
- No door inset, flush mount
- Swing clear application
- 48" door width maximum
- 450 lbs. door weight maximum
- **Fasteners:** 12-24 x 7/8" undercut self-drilling, thread-forming tek machine screws for frame and 1/4-20 sex bolts and shoulder bolts for door
- **Standard lengths:** 79", 83", 85", 95" and 120"
- **Finishes:** Clear, dark bronze and black anodized
- **Fire Rating**
 - Approved for use on metal swinging type fire doors rated up to and including 90 minutes (Specify "FR" option for 3 hour rating)
 - Approved for use on wood swinging type fire doors rated up to and including 60 minutes (Specify "FR" option for 90 minute rating)

Options Available

- See pages F-7 to F-8 for option availability and details



A570 HD

Standard Features

- Full surface, heavy duty
- 1/16" door inset
- For narrow-faced frames
- 48" door width maximum
- 450 lbs. door weight maximum
- **Fasteners:** 12-24 x 7/8" undercut self-drilling, thread-forming tek machine screws for frame and 1/4-20 sex bolts and shoulder bolts for door
- **Standard lengths:** 79", 83", 85", 95" and 120"
- **Finishes:** Clear, dark bronze and black anodized
- **Fire Rating**
 - Approved for use on metal swinging type fire doors rated up to and including 90 minutes (Specify "FR" option for 3 hour rating)
 - Approved for use on wood swinging type fire doors rated up to and including 60 minutes (Specify "FR" option for 90 minute rating)

Options Available

- See pages F-7 to F-8 for option availability and details



INSTALLATION INSTRUCTIONS FOR FULL SURFACE HINGES

A210HD, A570HD & A571HD

- A. All uncut standard length hinges are non-handed and can be used for right or left hand doors.
- B. Standard length hinges are supplied slightly shorter than nominal door height to accommodate threshold and carpeting clearances.

CUTTING THE HINGE TO FIT

- Keep hinge in the closed position. If necessary remove door/frame leaf caps.
- Cut one end of the hinge only. The hinge must be installed with the cut end at the bottom to keep the templated hole pattern at the top.
- Use a Metal Cutting Saw cut through the gear cap first.

Note: If cut length interferes with a set screw bearing remove it and switch it with a plain bearing above the cut location.

ATTACHING THE HINGE TO THE FRAME

1. Shim the hinge to be 1/8" below the header.
2. Hold hinge in the open position and align frame leaf with the inner edge of the door frame.
3. Mark or Center Punch hole locations: two holes at the top and two at the bottom.
4. Using the provided Self Drilling/Thread Forming Screws please proceed to fasten the frame leaf in marked holes.

Note: If using wood screws drill a 5/32" pilot hole.

PREPARE THE DOOR

5. Position Door in the opening and shim for proper clearances.
6. Align the top end of the hinge to be absolutely flush with the top of the door.
7. Mark the four LOCATOR HOLE locations (shown on template) using the provided small center punch.
8. Using a #3 philips head bit, attach the door leaf to the door through the LOCATOR HOLES with the provided pan head screws
9. Remove any shims and check for proper clearances and door operation.
10. If door sags slightly, note amount of adjustment needed to bring door back into alignment.

DO NOT PROCEED UNTIL DOOR OPERATES PROPERLY

11. Locate and mark for the thru-bolts in the door using the large punch provided.
12. Remove door and use a 3/8" drill bit to drill holes at marked locations

ATTACHING DOOR TO THE HINGE

13. Fasten the door to door leaf using the provided sex bolts and shoulder screws

Note: Always install the shoulder screws on the secured side of the door

14. Mark or Center Punch the remaining frame leaf hole locations. Using the provided flathead or pan head self drilling/thread forming screws completely fasten the frame leaf.

INSTALL THE LEAF COVERS

Note: Before installing the door leaf cover make sure the the set screws do not protruded into the interior of the cover.

15. Line up the end of the door leaf cover with the top end of the hinge
16. Starting at the top, apply pressure along the length of the cover and snap into place as you go down the length of the hinge.
17. When the cover is on tighten the set screw to secure it.
18. Install the frame leaf cover by first hooking it onto the outside edge of the frame leaf.
19. Starting at the top, apply pressure along the length of the cover and snap into place as you go down the length of the hinge.

Note: If using a hammer, use a block of wood to protect the cover.

REINFORCING AND RIVNUTS

- No reinforcing is necessary except on extremely high-frequency, extremely heavy or extra-wide doors.
- Rivnuts are recommended for use in the frame when the door exceeds 450lbs.

Note: RIVNUTS are **not** to be used with Fire Rated Hinges

GROUT/SLUSHED-IN FRAMES

It is recommended that a mudguard be installed behind the frame for ease of installation. Do not use self-drill screws with grouted steel frames without a mudguard. If no mudguard has been used, drill holes through frame and remove grout for screw clearances. Do not oversize hole.

SCREW DETAIL	
FRAME	12-24 x 3/4" PHILLIPS FLAT HEAD, UNDERCUT, SELF DRILLING, THREAD FORMING TEK MACHINE SCREW
FRAME	12-24 x 1" PHILLIPS PAN HEAD, SELF DRILLING, THREAD FORMING TEK MACHINE SCREW
DOOR	1/4-20 x 1-1/4" x 3/8 DIA. SEX BOLT & 1/4-20 x 1-1/4" PH. HEAD SHOULDER SCREW
	12-24 x 1" PH. PN. HD. SELF DRILLING TEK SCREW (LOCATOR HOLE)

The following actions will void any warranty, expressed or implied.

- Failure to Install the hinge according to ABH's specifications and requirements
- Use of Fasteners other than those supplied with the hinge.
- Unauthorized field modifications including removing any of the bearings, altering the original finish or painting the hinge.



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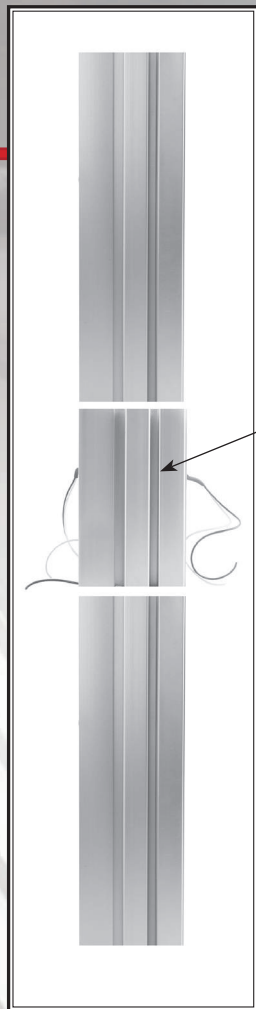
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FS INSTALLATION-05.DWG
FULL SURFACE
INSTALLATION
INSTRUCTIONS
PAGE 1 OF 1
REVISED 1-27-21

A570TW

Full Surface Thru Wire Hinge

Introducing ABH's New Electrified Full Surface Hinge with concealed thru wires to carry electrical current between the frame and door. This 5" removable section is used with our Full-Length Full Surface Models, A570 & A571.



5" TW Section
(Front View)



(Open Hinge)



(Back View)

Standard Features:

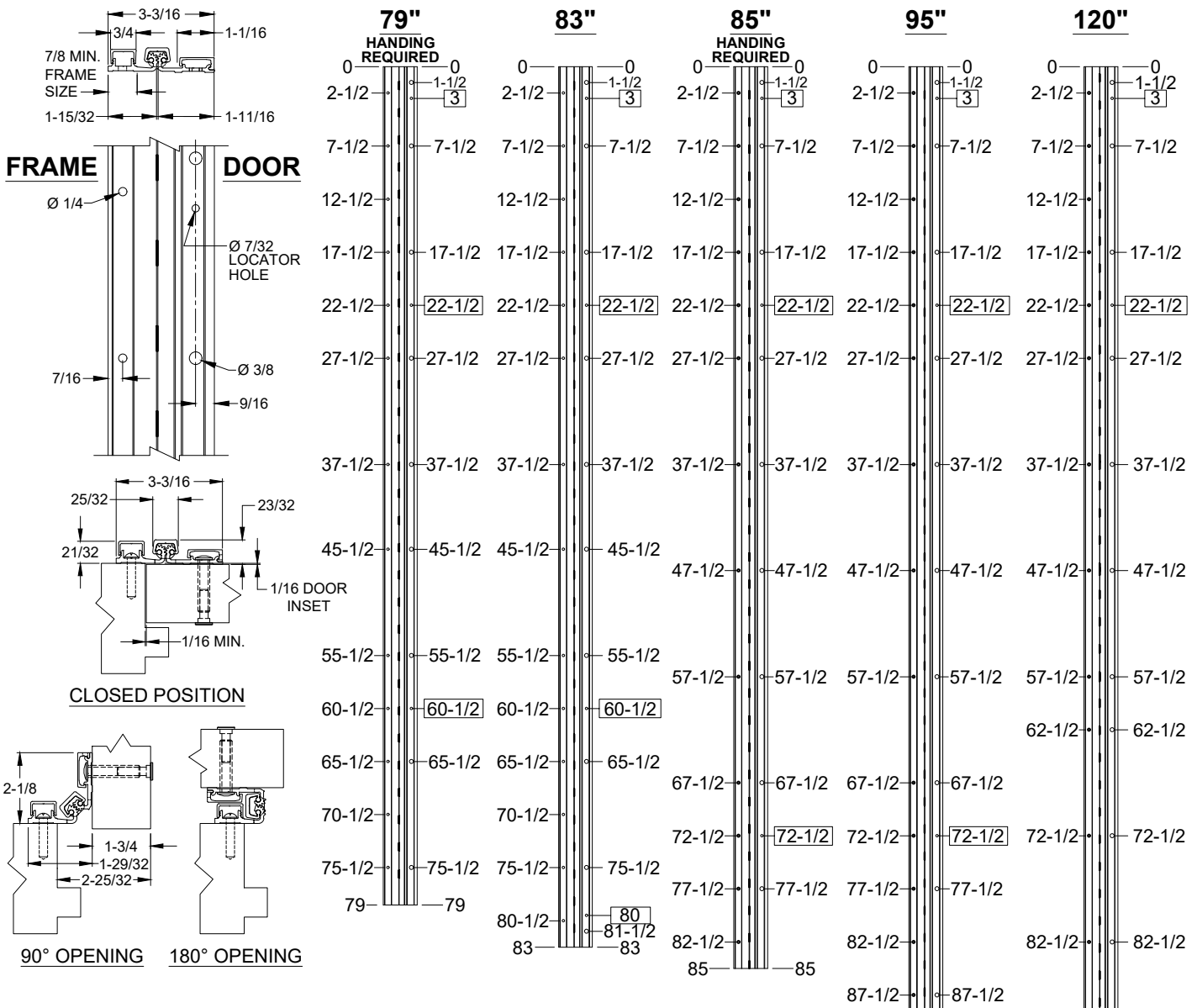
- For Full Surface Applications
- 5" Removable Section - For ease of installation
- 2 (22ga.) Super Flex Wire Standard
- Available in Standard Finishes
 - Clear Anodized
 - Dark Bronze Anodized
 - Black Anodized

Specifications

Discription:	Single Conductor #22 AWG miniature hook-up Wire for applications requiring extreme flexibility.
Conductor:	#22 AWG 168/44 (0.002") Soft Bare Copper LHL.
Insulation:	Proprietary formulation PVC 0.010" NOM. Wall meets VW-1 Flame requirements.
Diameter:	0.053" ± 0.003"
Resistance:	16.7 OHMS MAX. @ 20°C, per 1000 ft.
Voltage Rating:	600 Volts RMS, depending on specification.

Available as RoHS Compliant.

A570 - ALUMINUM GEARED HINGE, NARROW FRAME LEAF, 1/16 INSET, FULL SURFACE



- NOTES:**
1. HINGES CUT TO CUSTOM LENGTH ARE CUT FROM THE BOTTOM. PLEASE SPECIFY HANDING.
 2. ALL DIMENSIONS ARE IN INCHES.
 3. ALL DIMENSIONS ARE TO CENTERLINE OF HOLES.
 4. XX DENOTES LOCATOR HOLE.



STANDARD HINGE SIZES & SCREW DETAIL					
NOMINAL DOOR HEIGHT	6'8"	7'0"	7'2"	8'0"	10'0"
ACTUAL HINGE LENGTH	79"	83"	85"	95"	120"
FRAME	12-24 x 1" PHILLIPS PAN HEAD, SELF DRILLING, THREAD FORMING TEK MACHINE SCREW				
DOOR	1/4-20 x 1-1/4" x 3/8 DIA. SEX BOLT & 1/4-20 x 1-1/4" PH. HEAD SHOULDER SCREW				
	12-24 x 1" PH. PN. HD. SELF DRILLING TEK SCREW (LOCATOR HOLE)				



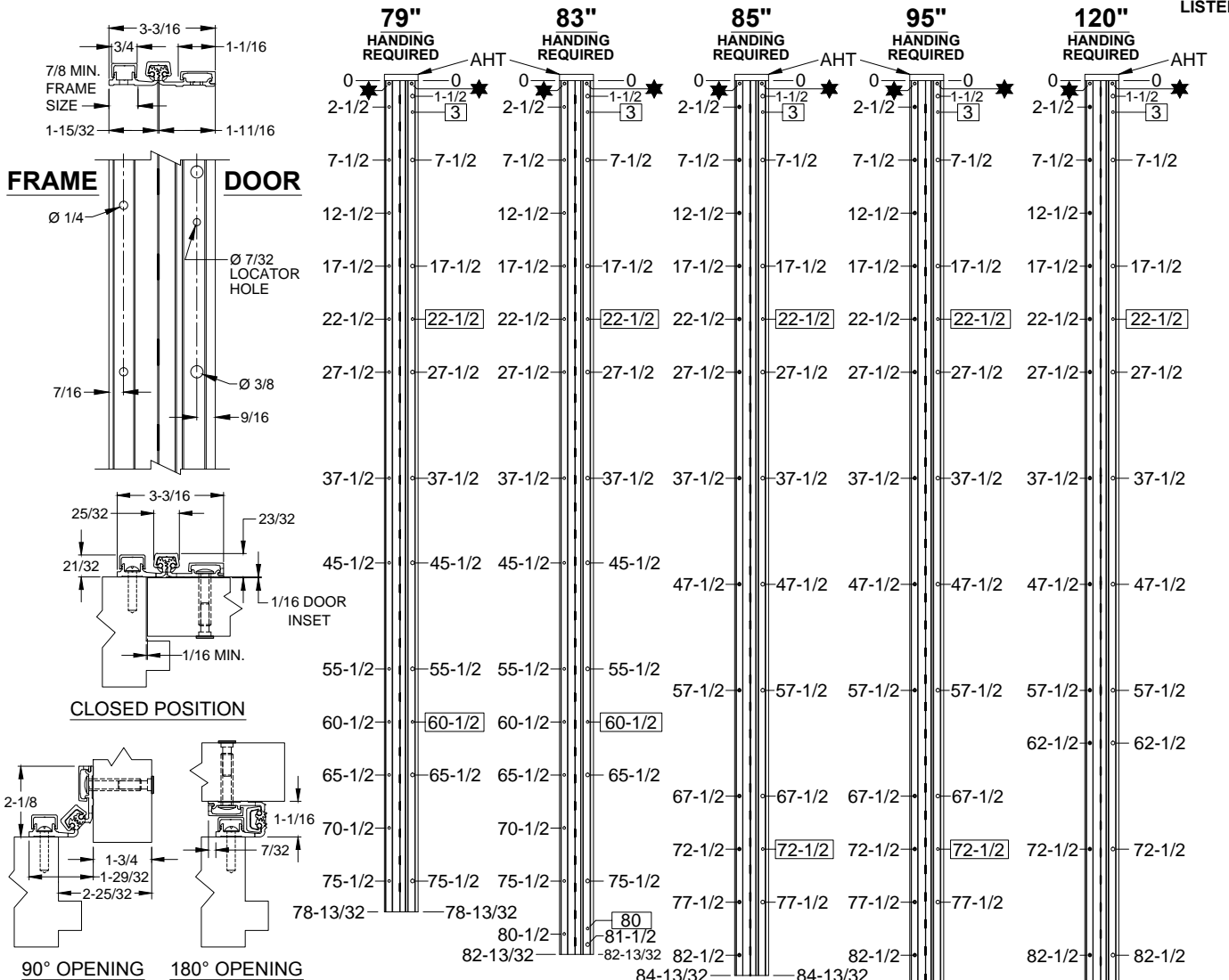
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A570 ALUMINUM GEARED HINGE

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A570-ALUMINUM GEARED HINGE-02.DWG

A570 - "AHT" OPTION, ADVANCED HOSPITAL TIP, ALUMINUM GEARED HINGE, NARROW FRAME LEAF, 1/16 INSET, FULL SURFACE

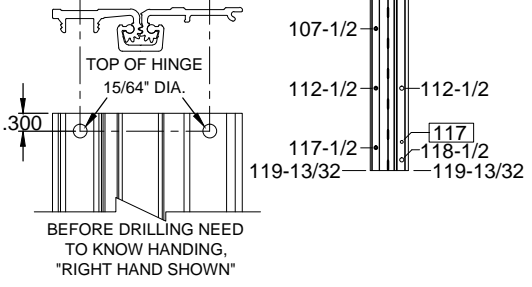


- NOTES:**
- HINGES CUT TO CUSTOM LENGTH ARE CUT FROM THE BOTTOM. PLEASE SPECIFY HANDING.
 - ALL DIMENSIONS ARE IN INCHES.
 - ALL DIMENSIONS ARE TO CENTERLINE OF HOLES.
 - XX DENOTES LOCATOR HOLE.
- ★ = ADVANCED HOSPITAL TIP (AHT), AT THE TOP OF THE HINGE PER HANDING. MANUFACTURING TO ADD (2) .234 (15/64") DIA. THRU HOLES FOR #12 SCREWS CENTERED BETWEEN THE HINGE LEAF CAP SLOT. SEE INSTALLATION PAGE 2.

"AHT" OPTION
SEE PAGE 2 FOR COMPLETE DETAILS

STANDARD HINGE SIZES & SCREW DETAIL

		6'8"	7'0"	7'2"	8'0"	10'0"
NOMINAL DOOR HEIGHT		6'8"	7'0"	7'2"	8'0"	10'0"
ACTUAL HINGE LENGTH		79"	83"	85"	95"	120"
FRAME	12-24 x 7/8" PHILLIPS PAN HEAD, SELF DRILLING, THREAD FORMING TEK MACHINE SCREW	13	14	13	15	18
	12-24 x 7/8" TORX FLAT HEAD UNDERCUT, SELF DRILLING, THREAD FORMING TEK MACHINE SCREW (AHT OPTION MOUNTING)	2	2	2	2	2
DOOR	1/4-20 x 1-11/16" x 3/8 DIA. SEX BOLT & 1/4-20 x 1-1/8" PH. HEAD SHOULDER SCREW	9	10	9	11	14
	12-24 x 7/8" PH. PN. HD. SELF DRILLING TEK SCREW (LOCATOR HOLE)	3	4	3	4	4
	#12 x 1-1/2" TORX FLAT HEAD UNDERCUT SHEET METAL SCREW (AHT OPTION MOUNTING)	2	2	2	2	2



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A570-AHT OPTION, ADVANCED HOSPITAL TIP-01.DWG

A570 - "AHT" OPTION
ADVANCED HOSPITAL TIP

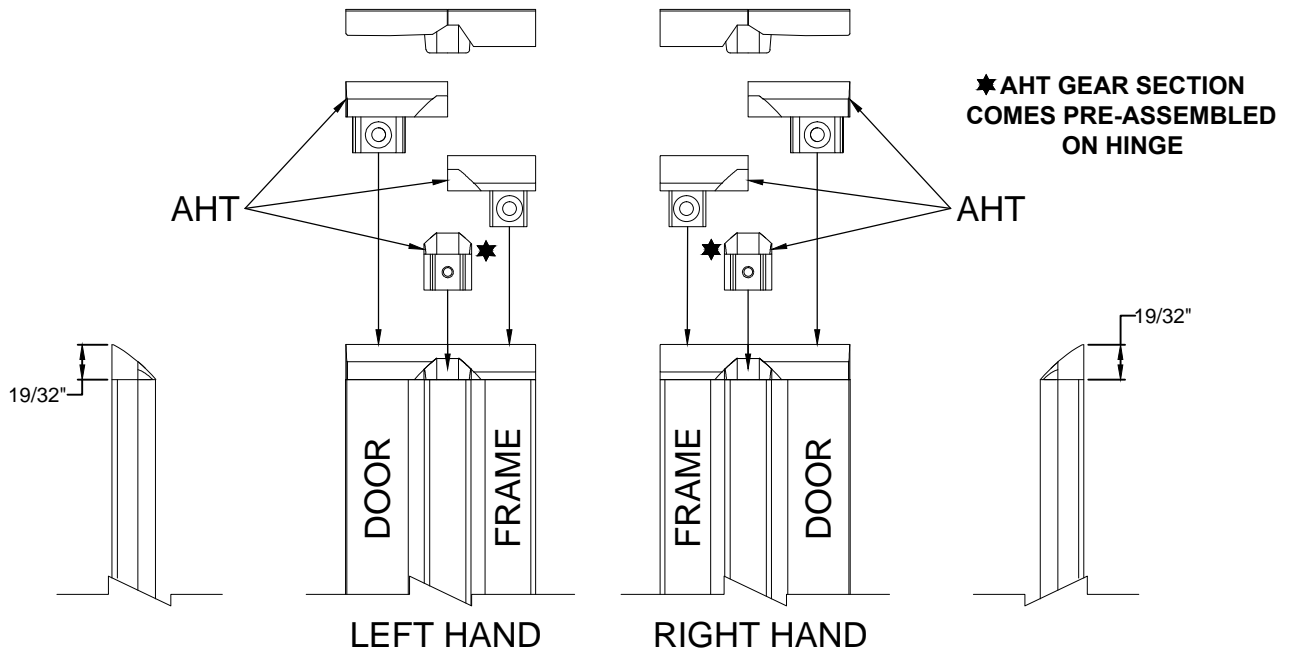
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A570 - "AHT" OPTION, ADVANCED HOSPITAL TIP, ALUMINUM GEARED HINGE,
NARROW FRAME LEAF, 1/16 INSET, FULL SURFACE

A570 AHT (ADVANCED HOSPITAL TIP) INSTALLATION INSTRUCTIONS

1. INSTALL TOP OF HINGE 19/32" FROM THE TOP OF THE DOOR
2. BEFORE INSTALLING DOOR AND FRAME LEAF COVERS, FASTEN DOOR AND FRAME SIDE HOSPITAL TIP SECTIONS
3. **INSTALL DOOR SIDE AHT SECTION**
 - a. SLIDE AHT SECTION INTO SLOT ON HINGE LEAF, THIS WILL LINE UP WITH THE PREDRILLED HINGE LEAF THRU-HOLE
 - b. FOR METAL DOORS, MARK HOLE LOCATION, THEN DRILL AND FASTEN THE AHT SECTION USING PROVIDED 12-24 X 7/8" TORX FLAT HEAD, UNDERCUT, SELF-DRILLING, THREAD FORMING TEK MACHINE SCREW
 - c. FOR WOOD DOORS, MARK HOLE LOCATION AND DRILL 3/16" PILOT HOLE, FASTEN AHT SECTION USING PROVIDED #12 X 1-1/2" TORX FLAT HEAD, UNDERCUT WOOD SCREW
4. **INSTALL FRAME SIDE AHT SECTION**
 - a. SLIDE AHT SECTION INTO SLOT ON HINGE LEAF, THIS WILL LINE UP WITH THE PREDRILLED HINGE LEAF THRU-HOLE
 - b. FOR METAL FRAMES, MARK HOLE LOCATION, THEN DRILL AND FASTEN THE AHT SECTION USING PROVIDED 12-24 X 7/8" TORX FLAT HEAD, UNDERCUT, SELF-DRILLING, THREAD FORMING TEK MACHINE SCREW
 - c. FOR WOOD FRAMES, MARK HOLE LOCATION AND DRILL 3/16" PILOT HOLE, FASTEN AHT SECTION USING PROVIDED #12 X 1-1/2" TORX FLAT HEAD, UNDERCUT WOOD SCREW
5. BEFORE TIGHTENING THE SCREWS DOWN COMPLETELY, DOOR AND FRAME AHT SECTIONS SHOULD BE FLUSH WITH THE TOP OF THE DOOR.
6. INSTALL DOOR AND FRAME LEAF COVERS



A570-AHT OPTION, ADVANCED HOSPITAL TIP-2-01.DWG

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A570 - "AHT" OPTION
ADVANCED HOSPITAL TIP

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