112HD & 224HD

829168-00

Concealed Continuous Hinges

Installation Instructions

⚠ CAUTION

Please follow the installation instructions carefully. Not doing so may result in improper installation and void the manufacturer's guarantee. Anodizing or painting the product in the field will void the guarantee.

INSTALLATION NOTES

Reinforcing and Rivet nuts:	No frame reinforcement is required for doors up to 200 lbs. For doors between 200 and 450 lbs, a 16 gauge channel in the frame is required. For doors greater than 450 lbs (600 lb max.), rivet nuts are required in the frame in addition to the frame reinforcement.
Doors:	For doors up to 200 lbs, no door reinforcement is required. For doors greater than 200 lbs, up to 600 lbs, a 16 gauge channel in the door is required.
Pairs of Doors with Mullions:	If the mullion is between the doors, treat as a single door installation. If the mullion is behind the doors, treat as a double door installation.

HINGE CUTTING (IF NECESSARY)

Note: All standard length hinges are supplied slightly shorter than nominal door height to avoid threshold or carpeting clearance problems. All uncut hinges are templated and non-handed. Use the same model for both right and left hand openings. If hinge is longer than door and needs cut, follow instructions below. Once the hinge is cut it becomes handed because the cut end must go on bottom.

1 Determine hinge height.

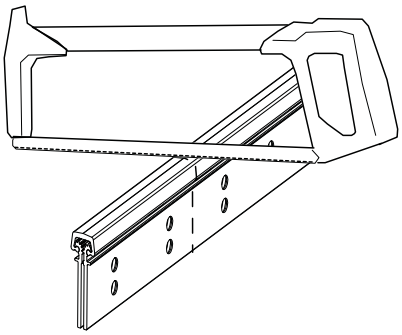
If hinge is taller than door, hinge must be cut to match door height. Hinge must not be taller than door height. Mark hinge with line where cut is needed.

2 Cut hinge.

A. Fold hinge so that channel is up.

B. Starting on channel, cut through entire hinge along line.

C. Debur all cut edges with file.



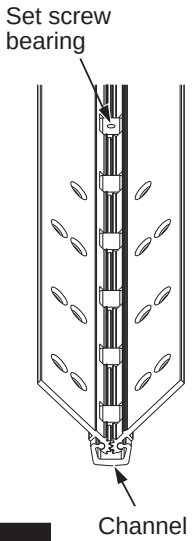
3 Special note, when cutting off more than 13.50".

A. If more than 13.5" is cut from bottom of hinge, a set screw bearing will be cut off. This set screw bearing is required for proper operation.

B. In this case remove the set screw bearing from the cut off section by loosening set screw and sliding back channel.

C. Loosen set screw(s) on hinge, slide back channel, and replace a non set screw bearing with a set screw bearing.

D. Slide channel back into place and tighten all set screws.



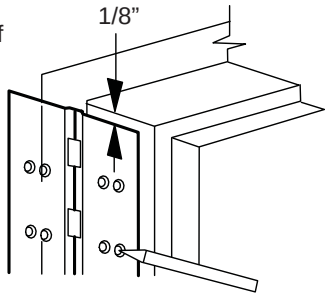
⚠

- 83", 85", and 95" hinges require 2 set screw bearings.
- 120" hinges require 3 set screw bearings.
- Serviceable panel hinges require 2 set screw bearings per section.

INSTALLATION

1 Mark frame hole locations.

Note: For TWP (thru-wire panel) installation, see supplemental instruction on page 4.



A. Open hinge and place frame leaf flat against surface of frame leaving 1/8” gap between top of hinge and frame header. Hinge lip should be held tight against the frame face from top to bottom. HT (Hospital Tip) and pre-cut hinges have “top” and ”bottom” stickers.

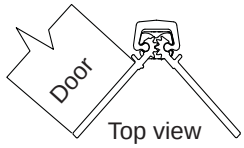
B. Mark all hole locations on frame.

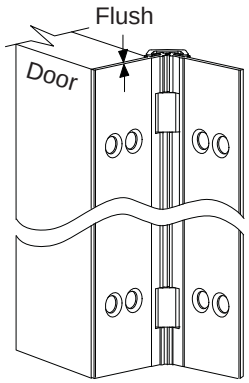
C. If metal frame, no drilling is required with standard screws supplied (self drilling/self tapping). If using optional screws (thread forming), drill all frame holes using #13 (.185”) or 3/16” (.188”) drill. If wood frame, use 5/32” (.156”) drill. Optional wood screw pack required.

D. DO NOT install hinge to frame at this time.

2 Mount hinge to door.

A. Place door leaf of hinge against hinge edge of door so that top of hinge is flush with top of door. Hinge aligment lip must lay flat against full length of door.





B. With hinge held firmly in place, mark all hole locations on door using center punch.

C. Drill all holes as in step 1.

D. Attach hinge leaf to door using fasteners provided and #3 phillips drive. See screw chart below.

Note: Fasten top screw first, and bottom most screw second, making sure hinge is aligned correctly.

Screw Chart

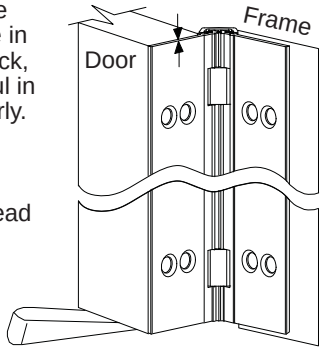
Door & Frame Material	Screw Type
Metal frame & metal door	#12 x 3/4” self drilling/self tapping Optional - #12-24 x 3/4” thread forming
Metal frame & wood door*	(frame) #12 x 3/4” self drilling/self tapping Optional - #12-24 x 3/4” thread forming (door) #12 x 1-1/2” flat head wood screws
Wood frame* & wood door*	#12 x 1-1/2” flat head wood screws

*Optional wood screw pack required.

3 Mount door to frame

A. With door held securely, position door 90 degrees to opening and align mounting holes in frame leaf of hinge with marks on frame made in step 1. **Note:** An angle block, jack or shims will be helpful in positioning the door properly.

B. With hinge and door held securely and accurately in place, install #12-24 flat head screw through top hole in frame leaf of hinge and into frame. Align other holes and install all other remaining screws.

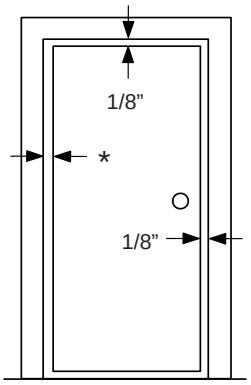


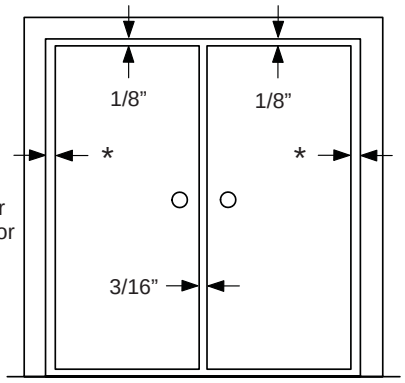
4 Check for proper operation and clearances.

A. Close door and check for proper operation.

B. Check push side of door for proper clearances. Clearance for single door is shown to the right and double door is shown below.

C. Check with NFPA 80 manual for clearance requirements on FIRE-RATED openings.



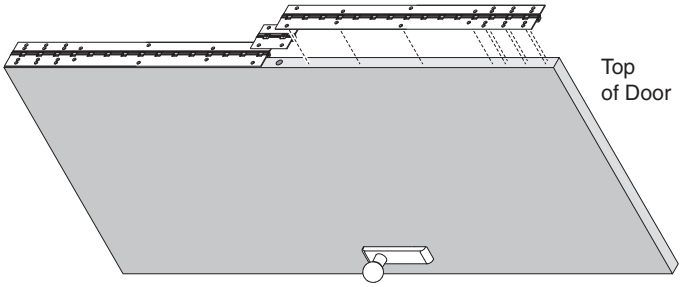


* 1/16” for square edge door
3/32” for beveled edge door

TWP (THRU-WIRE PANEL) SUPPLEMENTAL INSTRUCTION

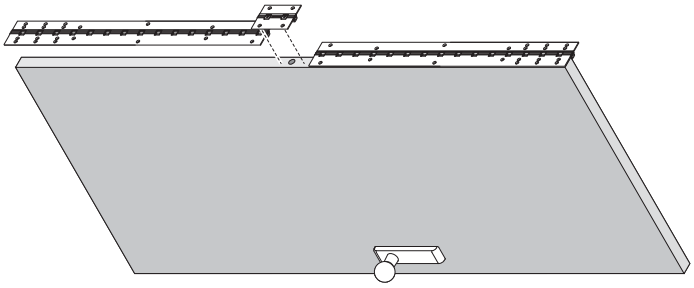
A. Mark and drill the top two holes on the frame, per step 1 from the “Installation” section on page 2.

B. Position the top section of the TWP hinge and attach to door (per “Installation” section step 2D).

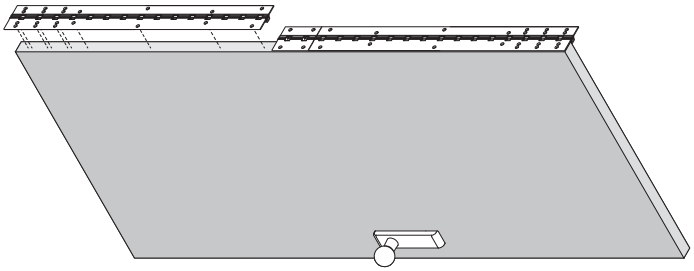


C. Prior to attaching the serviceable / removable section of the hinge, confirm the cutout in the door and frame is large enough to allow sufficient clearance for the wire harness. Debur any sharp edges.

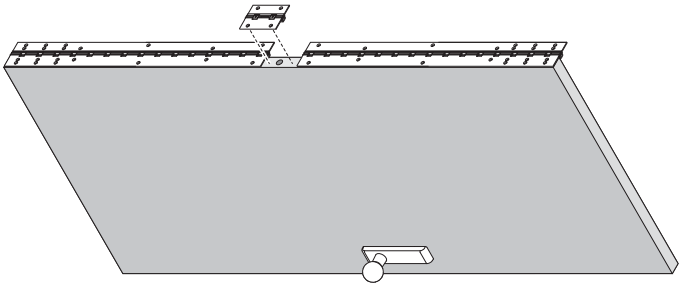
D. Install the 5.5” serviceable / removable panel, leaving .010” space between this panel and the top section (refer to “Installation” section step 2).



E. Install the lower section of the TWP hinge per “Installation” section step 2, leaving .010” space between lower section and serviceable panel.



F. Remove the 5.5” serviceable / removable panel of the hinge from the door prior to installing the door on the frame to protect the wire harness during installation. Mount door to frame per “Installation” section step 3.



G. Install the 5.5” panel after steps 3 and 4 from the “Installation” section on page 3 have been completed.

Customer Service

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