

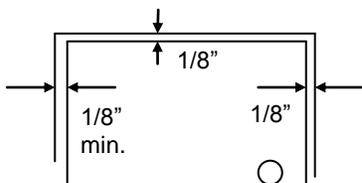
HAGER Models 790-903 and 790-935 are Stainless Steel Continuous Half Surface Hinges for 1-3/4" (44.5mm) thick doors. Clearance required between the hinge edge of the door and the frame rabbet is 1/8" (3.2mm) minimum. Both models provide for a 1/8" door inset. Model 790-935 provides 'swing clear' rotation.

**Hinge Length**

All HAGER Stainless Steel Continuous Hinges are supplied 7/8" to 1" shorter than the nominal door height to avoid threshold or carpet clearance problems. If the hinge must be trimmed shorter, first determine the correct hand of the door and orientation of the hinge. Remove the bottom pin cap and trim from the *bottom* end of the hinge only to achieve the desired length – do not cut the top end. Undercut the pin 7/8" shorter for clearance and reinsert the bottom pin cap.

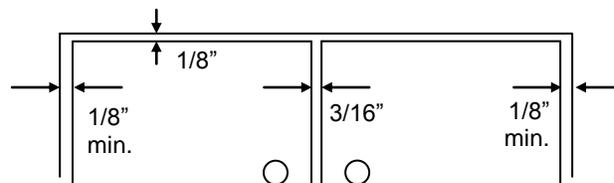
NOM. DOOR HEIGHT	HINGE LENGTH	NUMBER OF FASTENERS (Door/Frame)
6'-8"	79" (2006mm)	13 / 19
7'-0"	83-1/8" (2111mm)	14 / 21
7'-2"	85" (2159mm)	14 / 21
8'-0"	95" (2413mm)	15 / 23
10'-0"	119" (3022mm)	18 / 27

**Total Clearance Between Door and Frame Width**



SINGLE DOOR - SQUARE EDGED

Hinge side clearance (minimum)	1/8" (3.2mm)
Allowance for frame irregularities	1/32" (0.8mm)
Latch side clearance (typical)	1/8" (3.2mm)
<b>TOTAL</b>	<b>9/32" (7.1mm)</b>



PAIR OF DOORS - SQUARE EDGED

First hinge clearance (minimum)	1/8" (3.2mm)
Allowance for frame irregularities	1/32" (0.8mm)
Clearance between doors (typical)	3/16" (4.8mm)
Second hinge clearance (minimum)	1/8" (3.2mm)
Second allowance for frame irregularities	1/32" (0.8mm)
<b>TOTAL</b>	<b>1/2" (12.7mm)</b>

**General Fitting Procedure**

- For new construction with metal doors/frames: To accommodate the 1/8" (3.2mm) minimum hinge clearance required for HAGER Models 790-903 and 790-935, order the door undersized or the frame header oversized. See the clearance information above to attain the proper size. Mortar guards, either styrofoam or wood, are recommended for frames to prevent grout from interfering with the installation of the hinge fasteners.
- For new site-hung wood doors: If necessary, scribe and cut from the *latch edge* of the door to leave sufficient hinge stile thickness for proper fastening. See the clearance information above to attain the proper finished width of the door. A minimum clearance of 1/8" (3.2mm) is required between the hinge edge of the door and the frame rabbet.



- For remodeling with existing wood or laminate doors: If necessary, scribe and cut from the *hinge edge* of the door and plane smooth. See the clearance information above to attain the proper finished width of the door. A minimum clearance of 1/8" (3.2mm) is required between the hinge edge of the door and the frame rabbet.

### Installation Procedure

#### Frame Preparation

1. With the hinge open, place the hinge frame leaf against the frame rabbet. Position the top of the hinge 1/8" (3.2mm) below the header. Allow 1/16" (1.6mm) minimum between the frame stop and the edge of the hinge.
2. Mark and center punch the screw hole locations. *Accurate location is important for proper hinge installation.*
3. For metal frames 14 gage or less ( $\leq .080"/2.0\text{mm}$ ) it is not necessary to pre-drill pilot holes if using the #10 self-drilling screws provided. For metal frames 12 gage and over ( $\geq .093"/2.3\text{mm}$ ) drill and tap all mounting holes for #10-24 threads prior to installing the screws. For wood frames, pre-drill pilot holes using a #25 (.149"/3.8mm) bit.
4. Attach the hinge to the frame rabbet. For metal frames, use the #10 self-drilling screws provided (recommended driver speed 1,900-2,500RPM). For wood frames, use optional #10 wood screws.

#### Hanging the Door

1. Rotate the hinge leaf out of the way and set the door into the frame, using shims or wedges to adjust for the desired clearance on all sides. Allow 1/8" (3.2mm) clearance between the top of the door and the frame header rabbet. Allow 1/16" (1.6mm) minimum clearance between the edge of the door and the hinge frame leaf.
2. With the door held securely in place, rotate the hinge leaf into position on the face of the door.
  - a) For metal doors, mark and center punch the hole locations on the door face. For metal doors 12 gage or less ( $\leq .093"/2.0\text{mm}$ ) it is not necessary to pre-drill pilot holes if using the 1/4" self-drilling screws provided. For thicker metal doors, pre-drill pilot holes using a 7/32" (5.5mm) bit. Install the 1/4" self-drilling screws (recommended driver speed 1,900-2,500RPM), placing a Molding Clip under the head of a screw at five locations along the hinge - one at each end and the others spaced equally in between.
  - b) For wood doors, mark and center punch the hole locations on the door face. Pre-drill pilot holes using a 7/32" (5.5mm) bit. Install the #14 wood screws, placing a Molding Clip under the head of a screw at five locations along the hinge - one at each end and the others spaced equally in between.
  - c) (Optional Sexbolt Mounting) - Locate a sexbolt at each end hole, with the others spaced equally in between. (Note: There are more holes in the hinge than required. Use a minimum of 10 sexbolts.) Mark and center punch only the hole locations where a sexbolt will be inserted. Rotate the hinge leaf back out of the way. At each mark, drill a hole completely through the door using a 1/4" (6.3mm) bit. From the 'push' face of the door, at each hole location, bore 1-1/4" (32mm) deep using a 3/8" (9.5mm) bit. *Do not bore completely through the door.* Rotate the hinge leaf into position on the face of the door. Insert the sexbolt posts from the 'push' side of the door and the screws from the 'pull' side. When inserting the screws, place a Molding Clip under the head of a screw at five locations along the hinge - one at each end and the others spaced equally in between.
3. Remove all shims and wedges and make a gentle trial swing. Carefully check the door for proper swing and clearance.

#### Install the Snap-On Molding

1. Position the Molding so that the *short leg* is closest to the hinge pin. Hook the short leg over the Molding Clips along the full length of the hinge. Starting at the top and working downward press the long leg of the Molding in place completely over the outside edge of the door leaf. If necessary, gently tap in place using a rubber mallet, taking care not to damage the Molding.

