Full Mortise Aluminum Continuous Geared Hinges / Heavy Weight

SCHHD111 and **SCHHD112** are Aluminum Continuous Geared Concealed Leaf Hinges. SCHHD111 offers a 1/8″ (3.18 mm) door inset, while SCHHD112 is designed for flush doors. Both hinges are compatible with any standard frame without hinge preparations and can be used with or without reinforcements, depending on the door weight. A minimum clearance of 5/16″ (7.95 mm) is required between the hinge edge of the door and the frame rabbet.

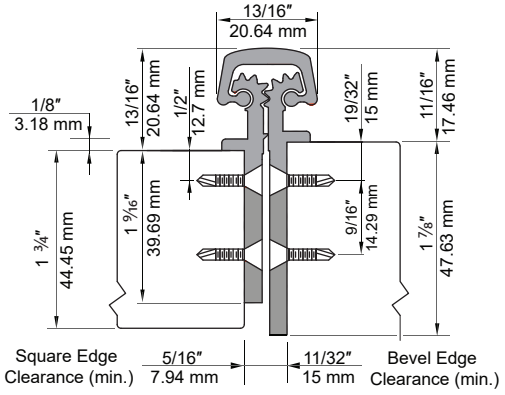


Fig. 1

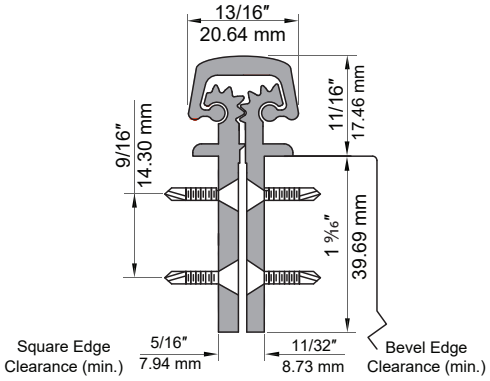


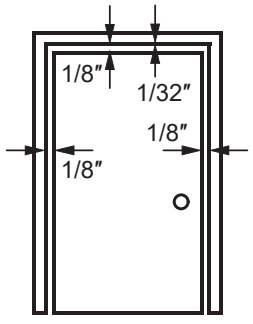
Fig. 2

Hinge Length

SCH hinges are supplied approximately 1″ (25.4 mm) to 1 5⁄16″ (33.34 mm) shorter than the nominal door height to prevent clearance issues with thresholds or carpets. If the hinge needs to be shortened, first determine the door's correct handing and the hinge's orientation. Mark & trim only from the bottom of the hinge.

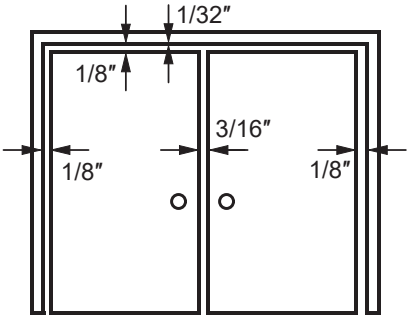
Door Height	Hinge Length
7′ - 0″	83″ (2108 mm)
8′ - 0″	95″ (2413 mm)

Door Clearance Required



SINGLE DOOR

Hinge thickness	5/16″ (7.95 mm)
Allowance for frame irregularities	1/32″ (0.79 mm)
Typical latch side clearance	1/8″ (3.18 mm)
TOTAL*	15/32″ (11.90 mm)



DOUBLE DOORS

First hinge thickness	5/16″ (7.94 mm)
First allowance for frame irregularities	1/32″ (0.79 mm)
Typical clearance between doors	3/16″ (4.78 mm)
Second hinge thickness	5/16″ (7.94 mm)
Second allowance for frame irregularities	1/32″ (0.79 mm)
TOTAL*	7/8″ (22.23 mm)

Cut the Hinge to Fit

- Keep the hinge in the closed position and remove door leaf caps if necessary.
- Determine the handing, if applicable.
- Cut the hinge at one end only. After cutting, the hinge must be installed according to the template hole pattern aligns at the top.
- Use a metal cutting saw, starting with the gear cap.
- A minimum clearance of 5/16″ (7.95 mm) is required between the hinge edge and the frame.
- To prevent grout interference with hinge fasteners, use mortar guards made of styrofoam or wood for the frames.
- For new site-hung wood doors, if trimming is necessary, scribe and cut from the latch edge to maintain sufficient hinge stile thickness for secure fastening.
- For remodeling existing wood or laminate doors, if trimming is needed, scribe and cut from the hinge edge of the door and plane it smooth.

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

INSTALLATION

SCHHD111 and SCHHD112 Installation Instruction

Frame Preparation (See Fig. 3)

1. With the hinge open, align the hinge frame leaf against the frame rabbet, ensuring the alignment rib is flush with the frame face along its entire length. Position the top of the hinge 1/16″ below the header (maximum 1/8″). Tip: Using a 1/16″ shim is recommended to accommodate any initial settling of the bearings.
2. Mark and center-punch the accurate screw hole positions with precision.
3. For 16-gauge metal frames, pre-drilling pilot holes is unnecessary when using the provided self-drilling screws. For metal frames thicker than 16 gauge, drill and tap all mounting holes to #12-24 threads before installing the screws. For wood frames, pre-drill pilot holes using a 5/32″ (0.156″) bit if using optional #12 wood screws.
4. Do not attach the hinge to the frame at this time.

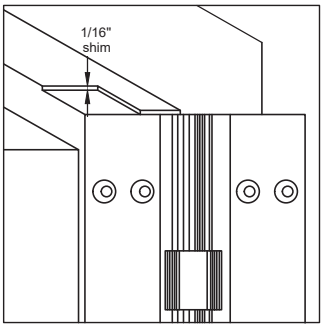


Fig. 3

Door Preparation (See Fig. 4)

5. With the hinge open, position the hinge door leaf against the edge of the door, ensuring the alignment rib is flush with the door face along its entire length. Align the top of the hinge with the top edge of the door.
6. For 16-gauge hollow metal doors, pre-drilling pilot holes is unnecessary when using the provided self-drilling screws. For metal doors thicker than 16 gauge, drill and tap all mounting holes for #12-24 threads before installing the screws. For wood doors, pre-drill pilot holes using a 5/32″ (.156″) bit if using the optional #12 wood screws (included with LL models).
7. Attach the hinge to the door. For metal doors, use the #12 self-drilling screws provided (recommended driver speed 1,900-2,500 RPM). For wood doors, use optional #12 wood screws.

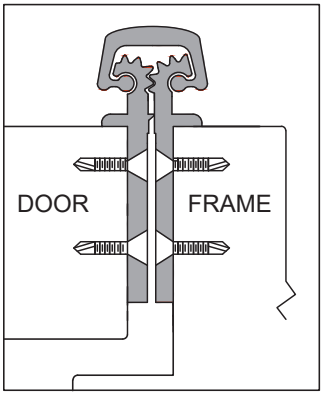


Fig. 4

Hanging the Door (See Fig. 5)

8. Position the door (with hinge attached) at 90° to the frame. Attach the hinge to the frame rabbet. For metal frames, use the #12 self-drilling screws provided (recommended driver speed 1,900-2,500 RPM). For wood frames, use optional #12 wood screws.
9. Make a gentle trial swing. Carefully check the door for proper swing and clearance.

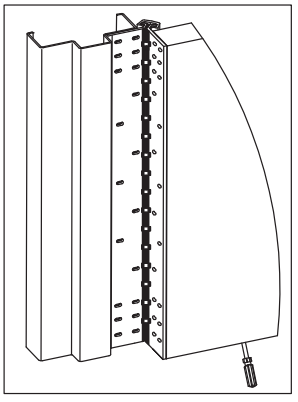
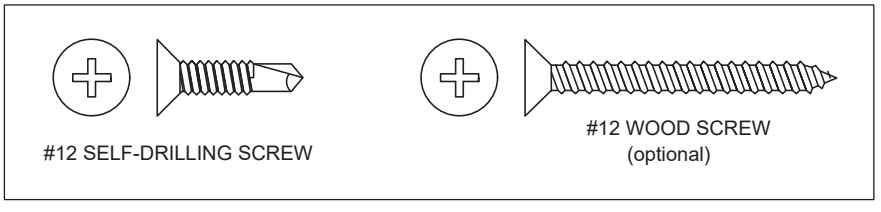


Fig. 5

Adjusting the Door

10. If lateral adjustment of the door is required due to excessive or uneven door/frame clearance, adjust by shimming where needed:
    a) For minor adjustments, an effective shimming material is 1 ½″ (38.10 mm) cloth duct tape. Apply the tape in stepped layers underneath the frame leaf where needed to build up to the desired thickness.
    b) To shift the entire door, a thin continuous aluminum strip may be used underneath the frame leaf (available in 1/16″ and 1/8″ thicknesses).
11. Retighten all screws. Carefully check the door for proper swing and clearance.



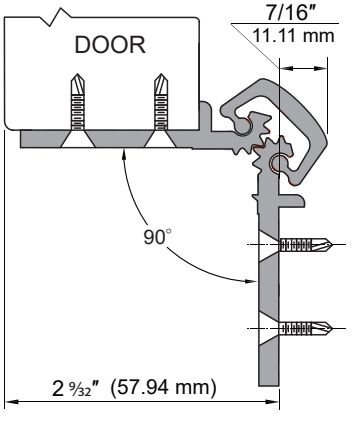


Fig. 6

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SCHHD111 / SCHHD112 Templates

(Refer to Fig.1 through Fig.7)

For these items, the frame leaf and door leaf have the same hole positions.

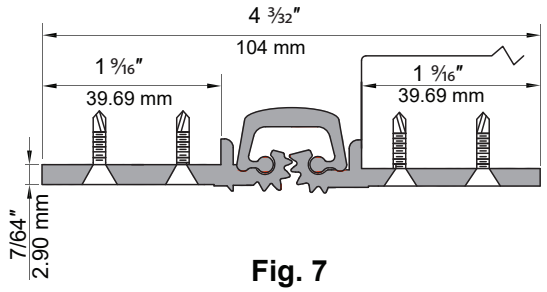
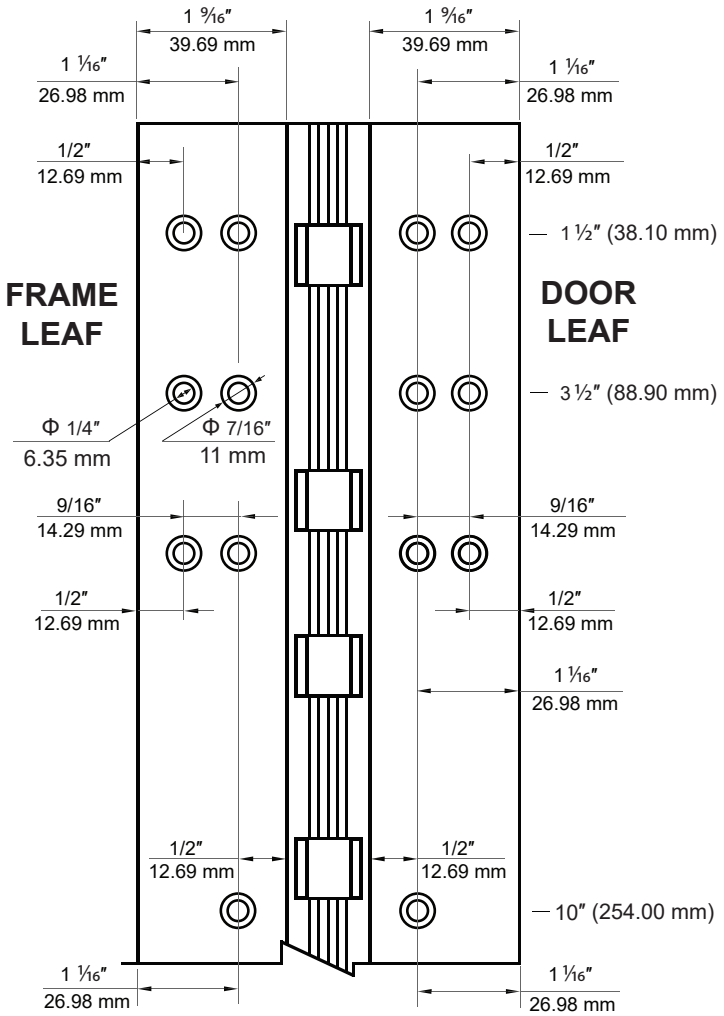
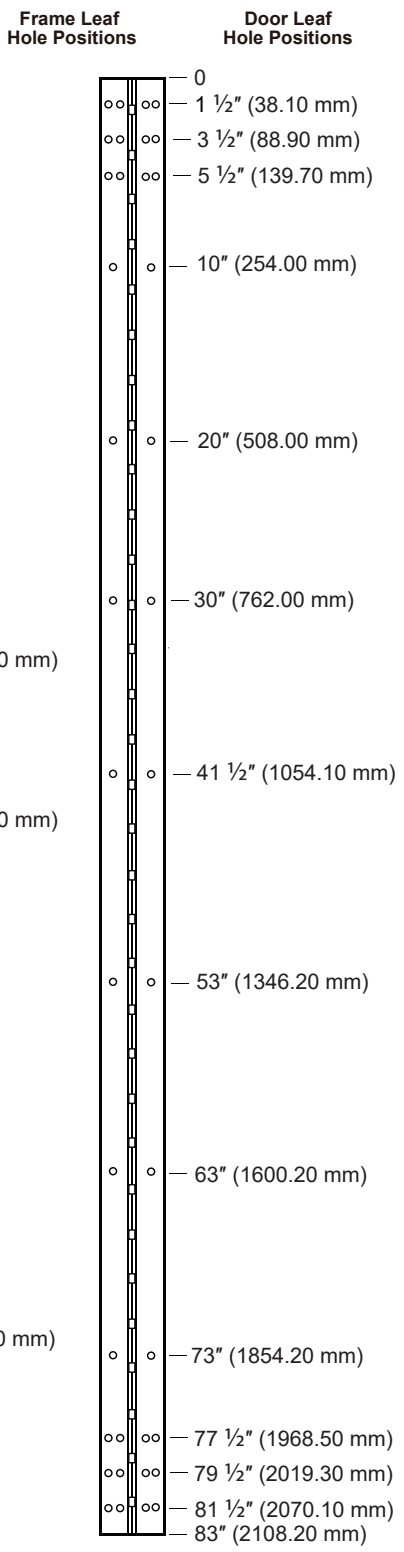


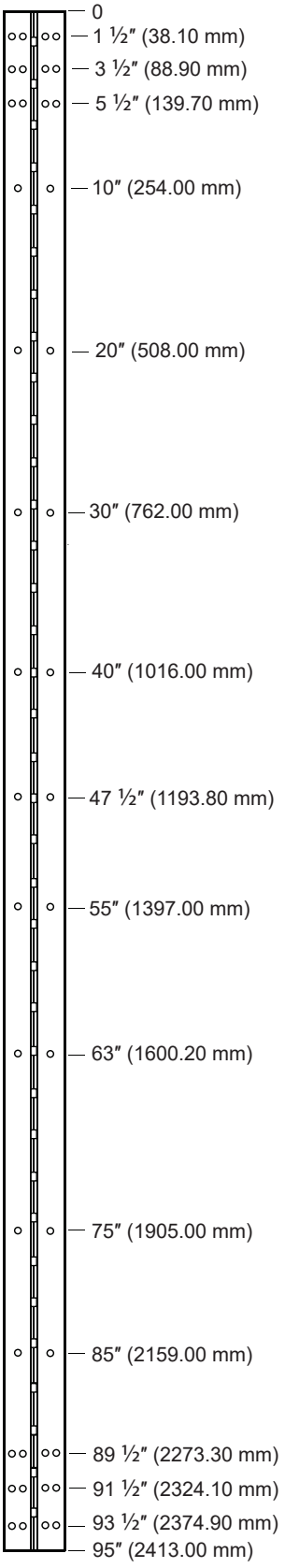
Fig. 7



83″: 38 fasteners and 32 bearings



95″: 42 fasteners and 36 bearings



Cross References

SCH	SELECT	NGP	ROTON	PEMKO	MARKAR	MCKINNEY	ZERO	STANLEY	ABH	PBB	IVES
SCHHD111	SL18 HD600	HD1800	780-111HD	FMSLIHD		MCK1-14HD			A111HD	CG311	
SCHHD112	SL11 HD600	HD1100	780-112HD	FMSLFHD	FM2000	MCK12HD	910DB	661HD	A110HD	CG31	112HD