

ALUMINUM CONTINUOUS GEARED HINGES

Half Surface Aluminum Continuous Geared Hinges / Heavy Weight

SCHHD053 is an aluminum continuous geared half-surface hinge with a 3/32" (2.38 mm) door inset. It is compatible with standard frames without requiring hinge preps and can be installed with or without reinforcements, depending on the door's weight. A minimum clearance of 3/16" (4.76 mm) is required between the hinge edge of the door and the frame. The heavy-duty models include additional bearings.

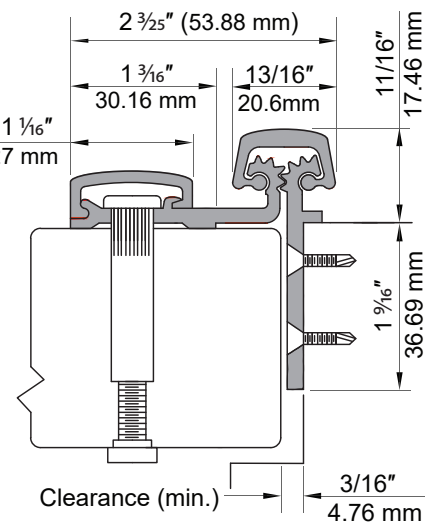


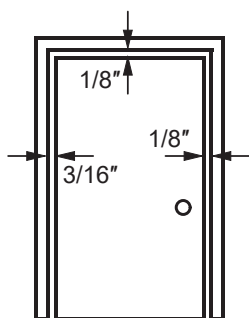
Fig. 1

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

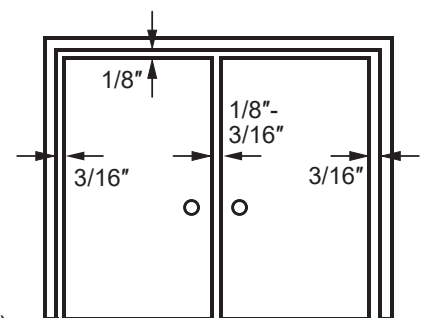


SINGLE DOOR

| | |
|-------------------------|------------------------|
| Typical hinge clearance | 3/16" (4.76 mm) |
| Typical latch clearance | 1/8" (3.18 mm) |
| TOTAL | 5/16" (7.95 mm) |

DOUBLE DOORS

| | |
|-----------------------------------|-------------------------|
| First hinge clearance (typical) | 3/16" (4.76 mm) |
| Clearance between doors (typical) | 3/16" (4.76 mm) |
| Second hinge clearance (typical) | 3/16" (4.76 mm) |
| TOTAL | 9/16" (14.28 mm) |



Cut the Hinge to Fit

- Keep the hinge in the closed position and remove door / frame leaf caps if necessary.
- Determine the handing, if applicable.
- Cut the hinge at one end only. After cutting, the hinge becomes handed and must be installed with the cut end at the bottom to ensure the templated hole pattern aligns at the top.
- Use a metal cutting saw, starting with the gear cap.
- A minimum clearance of 3/16" (4.76mm) 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

SCHHD053 Installation Instruction

Attach Hinge to Frame (See Fig. 2)

1. Position the hinge in the "door open" configuration.
2. Use a shim (1/16" or 1.59 mm) to position the top end of the hinge 1/16" (maximum 1/8" or 3.18 mm) below the header, ensuring proper door clearance. Align frame leaf alignment flange snugly against the frame face.
3. Mark or center punch one hole at the top and one hole at the bottom of the frame leaf, then drill holes at the marked locations:
 - Metal door frame: drill and tap all mounting holes to accommodate #12-24 threads before inserting screws.
 - Wood door frame: Use optional #12x1-1/2 flat head wood screws.
4. Secure the frame leaf to the door frame:
 - Metal door frame: Use the provided #12 self-drilling screws
 - Wood door frame: Use the optional #12 wood screws.

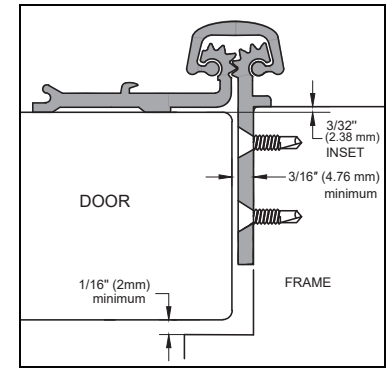


Fig. 2

Prepare Door

5. Shim the door into the opening to achieve the required clearances.
 6. Attach the door leaf to the door temporarily by inserting screws into the locator holes. Remove the shims and check the door clearances.
Note: Make any necessary adjustments to realign the door properly when the shims are removed.
 7. Mark the locations for the top and bottom barrel nuts on the door using a 3/8" (9.53 mm) striker pin.
 8. Remove the door and place it on a horizontal surface. Drill holes at the marked locations using a 3/8" (9.53 mm) drill bit.
 - Metal door: Use the provided optional #12 self-drilling screws
 - Wood door frame: Use a #18 (.170"/4.5mm) bit for optional #12 wood screws
- Note: Ensure the holes are drilled squarely through both faces of the door.

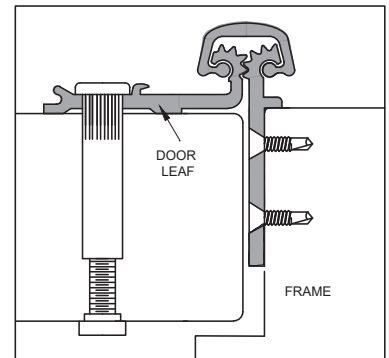


Fig. 3

Attach Door to Hinge (See Fig. 3)

9. Fasten the door to the door leaf as illustrated. Adjust the frame to ensure proper door alignment and smooth operation.
10. Fasten the door to the hinge as illustrated. Adjust the frame to ensure proper door alignment & smooth operation. Remove shims and wedges.
11. Secure door to door leaf with barrel nuts and 1/4-20 sexbolts.

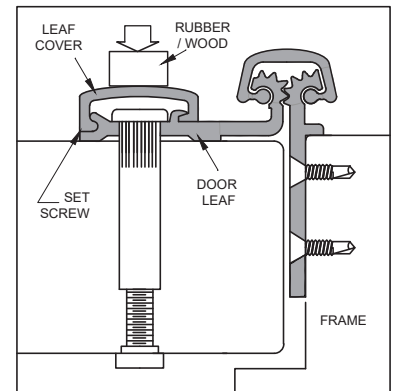


Fig. 4

Install Leaf Cover on Door Leaf (See Fig. 4)

Use the provided 5/64" (1.98 mm) hex key to locate and loosen the retaining setscrew on the edge of the molding. Align the longer leg of the molding along the outer edge of the door leaf, ensuring full-length contact with the hinge. Starting at the top, press or gently tap the short leg of the molding into place, using a rubber mallet or a hammer with a wood block for protection. Finally, securely tighten the retaining setscrew.

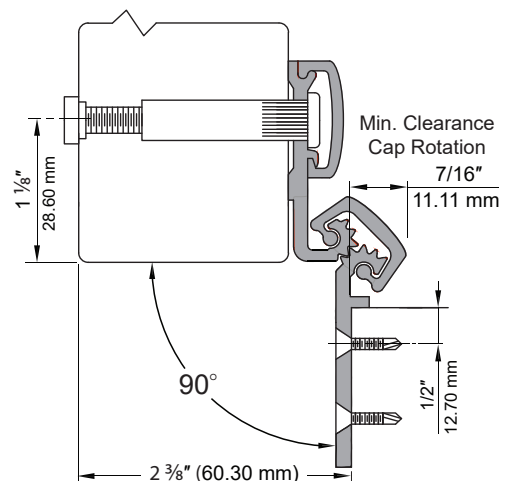
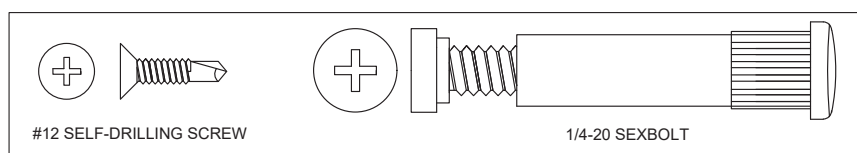
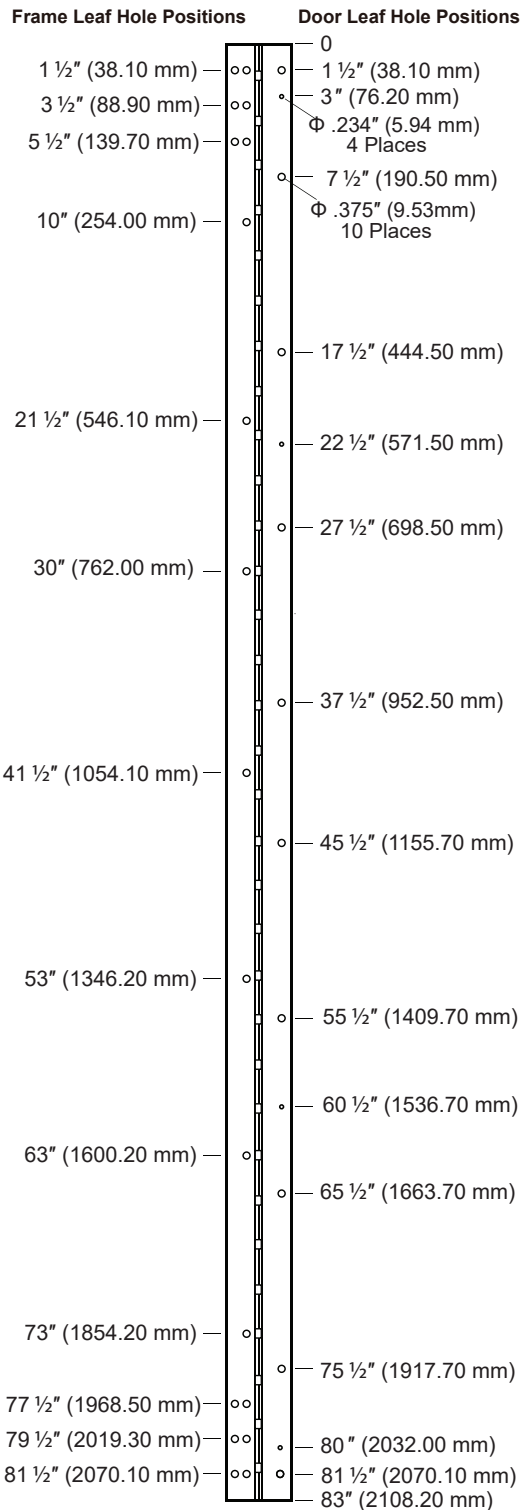


Fig. 5

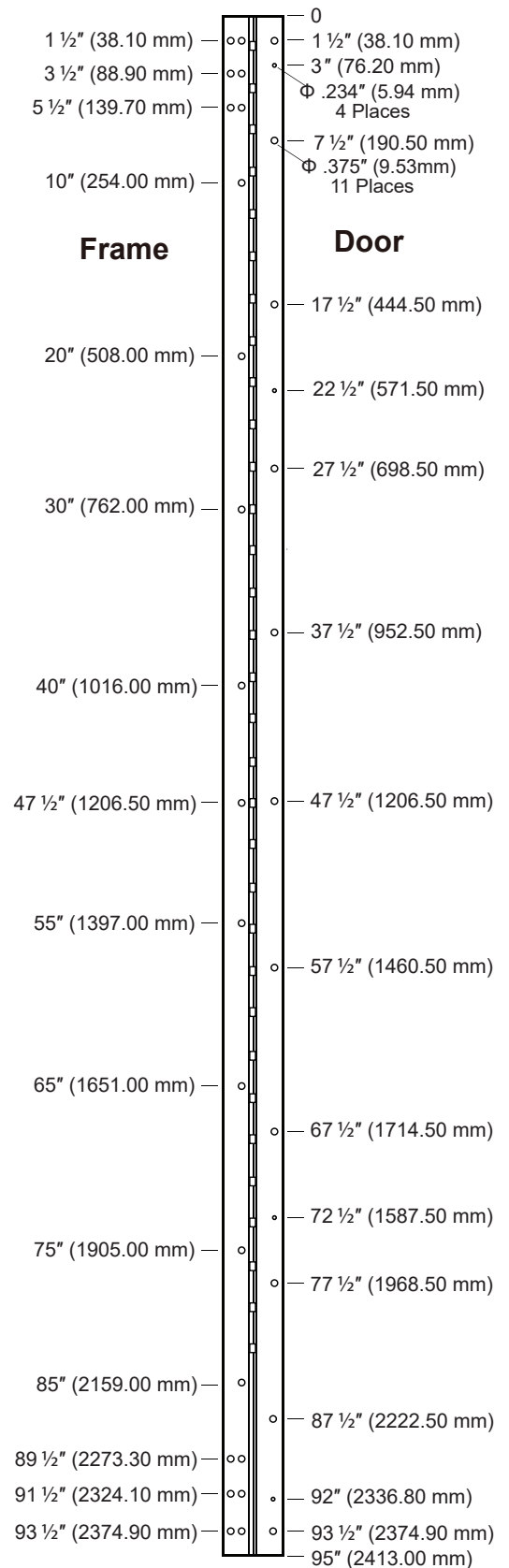
TEMPLATES & CROSS REFERENCES

SCHHD053 Templates (See Figs. 1–5)

83": 29 fasteners and 32 bearings



95": 33 fasteners and 36 bearings



Cross References

| SCH | SELECT | NGP | ROTON | PEMKO | MARKAR | MCKINNEY | ZERO | STANLEY | ABH | PBB | IVES |
|----------|------------|--------|-----------|-------|--------|----------|-------|---------|--------|-------|-------|
| SCHHD053 | SL53 HD600 | HD5300 | 780-053HD | | | | 925DB | 679HD | A530HD | CG34N | 053XY |

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