

## 20' Dome Prehung Door – ‘A’ Location - Installation Instructions

**IMPORTANT:** Refrain from caulking the bottom of the pre-hung door's threshold until adjusted location is determined. Open and close the door often while attaching the struts to the frame to insure proper door operation. Please read all instructions before drilling any holes in your support boards.

If too many struts are removed from the assembled dome frame, the frame will change shape and the apparent locations of where the struts fasten to the door may be misleading. Remove struts only as they are replaced by other (door) struts or as their presence inhibits locating the door. A fir 2x4 about 8 feet long may be propped into place under the hub above the door, as a temporary support as struts are removed.

**Adding support boards around the prehung door.** The door struts on your dome are sized to attach to 2x4, 2x6 or 2x8 support boards around the door frame of the prehung door. For the side support boards, cut two straight boards the same length as the height of the prehung door jamb. This is usually 81-3/4". Cut one board to span the top of the prehung door and the tops of the two side boards. This is usually 40-5/8". Verify squareness of prehung door and fasten the support boards to the door jamb with wood screws.

**Locating the points where the struts meet the door frame support boards.** Locate the lowest struts (Y) to meet the outer face of the vertical support boards, 2" above the floor, and 3/4" from the door frame. Locate the horizontal struts (I and V) 43-1/2" above the floor. The "normal" B struts will attach about 1-7/8" above where the horizontal struts attach. The W and X struts attach 1-13/16" below where the horizontal struts attach. The G and H struts are sized to reach the support boards 3/4" out and 3/4" up from the corner of the door frame. The holes for the G and H struts at the support boards should be 39" apart. The F strut is sized to reach the top support board at its midpoints 3/4" above the door frame.

**Using the Lag Bolts.** We have supplied 1/4" x 3-1/2" (7/16" hex head) lag bolts to fasten the struts to the door frame. Pre-drilling for the lag is required. Use a 5/32" drill bit to make a hole, 2-1/2 to 3" deep, in the center of the outer face of the support board. Rubbing a piece of wax or soap on the bolt threads will make the bolts easier to turn. Do not over-torque the lag bolts.

**Adjustment of Door.** Struts bolt together to form a hub. The order in which struts are placed on a bolt affects the exact placement of other hubs. The order in which the struts are placed at hubs near the door will affect the tilt and twist of the door. To ensure alignment of the door frame and operation of the door, make final adjustments by locating the door struts in the best position in their respective hubs. Check the swing of the door often as you are testing strut arrangements.

**Finishing the Fabric at the Door.** The best way to finish the fabric at the door depends upon the actual shape of the door frame and the personal preferences of the owner. The skin of the dome is designed with material that can be folded around a metal strap or thin wood lathe. This fold of fabric and the accompanying wood or metal strap can be fastened to the door frame on the exterior portion of the inside of the jamb with wood screws and finish washers. See drawing.