16' Dome Pre-hung Door - 'A' Location - Installation Instructions

IMPORTANT: Refrain from caulking the bottom of the pre-hung door's threshold until adjusted location is determined. 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.

Cutting support boards for the pre-hung door opening. The door struts on your dome are sized to attach to 2x6 support boards creating an opening for the pre-hung door. For the side support boards, cut two straight boards 81-3/4". Cut one board to span the top of the pre-hung door and the tops of the two side boards. This is usually 40-1/2 to 40-5/8". Attach the short board atop the long boards with screws or nails. Pre-drill to avoid spitting the wood and to assist alignment.

Locating the points where the struts meet the door frame support boards. Locate the lowest struts (H) to meet the outer face of the vertical support boards, 1-1/4" above the floor, and $\frac{3}{4}$ " from the door frame. Locate the horizontal struts (F) 45" above the floor. Locate the E & G struts 15-1/2" above and below where the F struts attach. The D & P struts reach the support boards $\frac{3}{4}$ " out and $\frac{3}{4}$ " up from the corner of the door frame. The holes for the D & P struts at the support boards should measure 39" apart. The C strut reaches the top support board at its midpoint $\frac{3}{4}$ " above the door frame.

Using the lag bolt screws. We have supplied 3/8" x 3" (9/16" hex head) lag bolt screws to fasten the struts to the door frame. Pre-drilling for the lag is required. Use a 15/64 to 1/4" drill bit to make a hole about 3" deep, in the center of the outer face of the support board. Rubbing a piece of wax 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 C, D, P, E, F, G, and H struts in the best position in their respective hubs.

Finishing the fabric at the door. Your dome skin has fabric flaps that you can tuck into the framed door opening. Pull the fabric into the opening, staple the flaps to the inside of the opening and install your pre-hung door into the opening with wood screws.