STOP! PLEASE READ FIRST

Frame No. 4850-0 (Black with Open TopPlate for Glass) -or- Frame No. 4850-5 (Chandelier TopPlate)

ASSEMBLING YOUR 45.5" (8-sided) DOME FRAME : (Allow 15 to 20 minutes) Tools: Phillips Screwdriver & Wrench (Socket or Small Adjustable)

- 1) Remove all contents from container. You should have these parts:
 - 8 Dome Arms

- 8 Angled Base Plates
- 1 Center Top Plate

25 #12-24 x 5/8" Bolts

- 17 Flat Nuts for Base Plates
- 9 Nylon-Lock Nuts for Top Plate 1 Set of Assembly Instructions and Installation Guidelines
- 2) On a FLAT surface (a 4' x 4' area is needed), lay out the Center Top Plate, and the eight Dome Arms radiating from the Top Plate. Face the side of the arm with just one hole in the tongue towards the Top Plate. (Figure 1)
- 3) Start connecting the Dome Arm tongues to the Top Plate using the bolts & Nylon-Lock nuts: The Dome Arm tongues are designed to fit UNDER the Top Plate (as viewing the dome concave downward--the way it sits when installed.) (Figure 2) The bolts should be applied from the bottom (first through the Dome Arm tongues, and then through the Top Plate, with the nuts on top of the Top Plate. APPLY the NUTS LOOSELY at this point--DO NOT TIGHTEN. Stagger the first three arms to make the frame sit level. (Figure 3) This makes it easier to attach the remaining arms.
- 4) Next, arrange the Angled Base Plates around the base of the dome. The side with just one hole in the center should rest flat on the level surface. The other side (with 2 holes, and corner cutouts) should be standing upright, and facing nearest the center of the dome frame. The brackets on the Dome Arms are designed to be attached on the OUTSIDE of the Angled Base Plates (i.e. to the vertical side of the Angled Base Plate that faces AWAY from the dome's center). (Figure 4) Hence, they are not visible when the dome frame is installed.

Connect the Dome Arm brackets to the Angled Base Plates using the regular nuts & bolts, applying the bolts FROM the INSIDE of the dome frame. (Figure 4) Again, APPLY the NUTS LOOSELY--DO NOT TIGHTEN. The frame is precision-designed so that the parts fit together snugly without the need for forcing. If the nuts do not enter the holes easily, check to be sure that the brackets are on the correct side of the base plates, and that the Dome Arms were all installed on the bottom side of the Top Plate.

5) Align the Dome Arms before beginning to tighten the nuts with the wrench and screwdriver. The Dome Arms opposite each other should be in a straight line. First, tighten all the nuts at the Angled Base Plates. Second, tighten one nut on top of the Top Plate. Check alignment again before tightening the opposite nut on the Top Plate. Tighten the remaining nuts. (Tighten the nuts firmly, but not so hard that you strip the threads!) The frame now should be solid and easily moved to its final installation destination. (Figure 5)

AVAILABILITY OF OPTIONAL ITEMS (Glass Panels are Sold Separately)

The frame is available in two different center top plate ring configurations: 1) With a standard open ring for a glass panel (**Frame #4850-0**); -or- 2) With a solid top plate with a 9/16" hole for supporting a hanging lamp fixture (**Frame #4850-5**) If you ordered the open ring frame, and later need the chandelier center, it can be purchased separately by ordering the **Chandelier Top Plate #4855**.

A special top plate sized for mounting a Juno<u>4</u>" or <u>6</u>" recessed lamp fixture is available, --replaces the top plate that came with frame. Downlight Top Plate #4854 -or- # 4856

The pre-cut molding package (# 4058) is no longer manufactured.

Manufactured by Sierra Stained Glass Studios Modesto, CA 209-448-0350 Fax: 209-529-0632 [Patented, U.S. Patent Office, Patent No. 5,130,915]

45.5" (8 sided

Note: These illustrations are for the 8-sided 45.5" dome frame. Assembly for 12-, 16-, and 24-sided frames are similar. There are just more arms, angled base plates, and bolts.











APPLICATIONS:

- BACKLIGHTING WITH ARTIFICIAL LIGHT: Dome is installed in flat ceiling with simple SEALED lightbox built over dome in attic. Four compact fluorescent tubes mounted from top four corners of lightbox provides excellent lighting.
- from top four corners of lightbox provides excellent lighting.
 BACKLIGHTING WITH SKYLIGHT: Dome is installed in flat ceiling with SEALED sheetrock shafting to a roof mounted skylight (any size). Dome fits easily under a standard 4' square bubble skylight in flat roofs. Artificial lights, located within easy reach from below dome, should be added to the sealed shaft for night lighting. White bubbles are recommended.
 ADDING AUXILIARY LIGHTING TO DOME FRAME: A
- ADDING AUXILIARY LIGHTING TO DOME FRAME: A special top center frame plate can be ordered with a hole for hanging a chandelier, -or-, mounting a recessed light fixture above the dome frame (either Juno® 4" or 6" can fixtures.)

INSTALLATION GUIDELINES

- NEW CONSTRUCTION: A square is framed with standard joists on 48" centers. A **SEALED** cavity or soffit must be constructed above the dome opening, or sealed shafting to a code approved skylight mounted on the roof. This cavity or shafting should be made of 2x4's with sheetrock inside. See CAUTION below.
- RETROFITTING TO EXISTING STRUCTURES: Because The Dome is installed from below the ceiling, retrofitting is relatively easy, provided the dome is located between existing ceiling joists and a minimum vertical clearance of 18" is available above the ceiling for the center of the 48" square. (If ceiling is supported with trusses, rather than joists, or, the desired dome location spans structural headers, a retrofit is not possible without first re-engineering the structure.)

-Locate existing joists, making certain that a minimum of 45-3/4" is available BETWEEN the 48" centered joists. Before cutting, make certain there are no electrical or plumbing lines above the open-ing. Then cut the ceiling sheetrock to make a 46" octagonal opening that is centered between the joists on 48" centers. (The base of the dome frame held upside against the ceiling makes an ideal guide. The frame's base is 45-1/2" O.D.)

-Next, cut existing joists that span the octagonal opening, and proceed to frame the 48" (centers) square as desribed above for new construction. You should use double headers to span the cut joists, such that the inner headers are at 48" centers.

CAUTION: THE SHEET-ROCKED SOFFIT (LIGHTBOX) ABOVE DOME MUST BE PROPERLY SEALED AND NOT VENTED TO ATTIC NOR EXTERIOR FOR MEETING BUILDING CODES & SAFETY REQUIREMENTS.

Failure to observe this can result in glass panels lifting out of the frame and falling!

For example, on a windy day when a window or door is opened to the wind, the air pressure can blow or suck out the glass panels if the area above the dome has any exposure to the building's exterior. (Remember, the glass panels are held in place by gravity so they can be easily removed from below for cleaning or changing light bulbs.) Also, leaded glass does not qualify as a fire break to prevent the spread of fire to the attic or other areas above the dome.

If the area above the dome is accessible from the attic or another room, caution must be

taken to seal and lock the access door/panel to prevent such sudden air pressure differences from lifting or sucking out the glass panels. Do not attempt to open such access door/panel on a windy or gusty day. Also prevent access to such space by children. Do not seal the space between the dome frame and the ceiling's trim moulding. This gap is necessary to equalize air pressure above and below the dome, and allows the area above the dome to "breathe" into the room below to avoid condensation buildup in humid climates.

INSTALLATION OF THE GLASS PANELS:

First install the panel that fits into the center top plate (if applicable).

Next, for each section, install first the bottom (largest) panel, being certain that the H-channel at the base rests atop the frame's Base Angle Plate. Be sure that the entire length of the H-channel at the bottom of this largest panel is resting on the frame's Base Angle Plate, and not just leaning against the frame. (You may have to lift the center of the bottom of the panel to rest on the frame's lip.) This is important to prevent sagging of the panels over time. (See drawing.)

Then install the 2nd tier, being certain to interlock the first & second panels' H-channels. Continue up the section until the top tier (smallest) is installed, again being certain that its base H-channel interlocks into the panel below. The top of the final tier rests against the top plate.

TO REMOVE THE GLASS PANELS:

If the glass panels need to be removed at a later time for cleaning or changing of light bulbs, ALWAYS FIRST REMOVE THE TOP TIER (SMALLEST PANEL), AND PROCEED DOWN THE TIERS IN EACH SECTION. CAUTION: REMOVAL OF THE BOTTOM PANEL FIRST WILL CAUSE UPPER PANELS TO SLIDE DOWN AND FALL OUT!

DISCLAIMER: Selection of Sierra Stained Glass products to conform to all local applicable laws, ordinances, building codes, and safety requirements is the sole responsibility of the architect, house/building owner and/or contractor. Proper installation of our products is the responsibility of the customer. Sierra Stained Glass Studios has no responsibility in these regards.









