# ! 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 caution 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. Always open access door/panel slowly to allow any pressure differences to equalize gradually. Prevent access to such space by children by putting a padlock on access door. ALSO, A COPY OF THIS CAUTION SHOULD BE POSTED ON OUTSIDE OF ANY SUCH ACCESS DOORS.

If skylight is installed above dome, the skylight must be a fixed type (can't open) and it must be shafted with sheet-rock to form a sealed space holding dome.

THE <u>LIGHTBOX ABOVE DOME SHOULD BE PAINTED WITH FLAT WHITE PAINT</u>, OR A HIGH REFLECTIVE WHITE PAINT, FOR BEST REFLECTIVITY OF LIGHT. If painted with a color the colors of the dome's glass panels will be distorted by the reflected light.

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 or cold climates. Outside of lightbox should be insulated to prevent condensation inside and for general energy conservation.

### **ADDITIONAL SAFETY REMINDERS**

- When removing glass panels from dome frame, always remove top tier first, then middle tier, then bottom tier last. (This is the reverse of how installed.)
   NEVER LEAN NOR PULL ON DOME FRAME. It is not designed to support the weight of a
- <u>NEVER LEAN NOR PULL ON DOME FRAME</u>. It is not designed to support the weight of a person. Doing so may cause frame distortion and falling glass.

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© Sierra Stained Glass Studios, Inc. 1992-2000 ALL DIMENSIONS IN INCHES (NOT TO SCALE) Elevation LIGHTBOX: INSIDE OF LIGHTBOX IS SEALED WITH SHEETROCK. ROUGH FINISH OK AS LONG 2X4 AS SEALED FOR CODE. (IF ROOF-MOUNTED SKYLIGHT ABOVE DOME, SHAFT MUST BE SEALED.) SHEETROCK PAINTED FLAT OR REFLECTIVE WHITE. FRAMING @ LIGHTING 16" O.C. SUGGESTION: Porcelain sockets with PROVIDE AT LEAST Compact Fluorescent 3" - 8" CLEARANCE ABOVE DOME FOR Bulbs in 4 corners. (May need more for large PROPER LIGHTING OF domes.) Be sure bulbs TOPPLATE. can be reached from **IMPORTANT: CAVITY** below for replacement. (LIGHTBOX) ABOVE DOME MUST BE INNER JOIST (2x?) SPACING (CENTERS) Also, 1 - 2 incandescents on separate dimmer switch 48.0 COMPLETELY can provide vari-SEALED TO PREVENT ble mood lighting. **GLASS PANELS** FROM BLOWING OUT. **ROUGH OPENING** Dome & 2x2 Elevation: 13.3 46.5 2 x 8 or DOME FRAME O.D. 2 x 10 or 45.5 (1.5") 2 x 12, ect. SHEETROCK OPENING 2 x 2 (short length) -- frame Ceiling 46.0 rests on 2x2's mounted flush Sheetrock with base of joists. ATTACH Outer Diameter of Frame's Base (Pt.-to-Pt.): 49.25 " FIRMLY SINCE THEY \*SHEET ROCK OPENING SHOWN IN THIS SUPPORT ENTIRE DOME VIEW (DOME FRAME NOT SHOWN) Top View\* WEIGHT. Corner 2x4's (for support of >72" frames that rest on the 2x2's )= 19.3" (long dimension, 19.1 pt. to pt.) Mount flush with base of framing joists. (Not SHEETROCK **ROUGH OPENING OPENING** needed for frames 46.5 46.0 <72".) (SAME ACROSS ALL PARALLEL SIDES) Radius to points of sheetrock SHEETROCK 48.0 cutout = 24.7**OPENING: INNER JOIST** (2x?) SPACING (on CENTERS) For 8-sided 1/4" from 13.5 frame only. framing 13.5

## WOOD TRIM MOULDING DETAIL

(Pre-Cut Kit shown is available separately only for polygonal openings.)

FRAME

WOOD SCREWS
HOLD MOULDING
IN PLACE.▼

HORIZONTAL

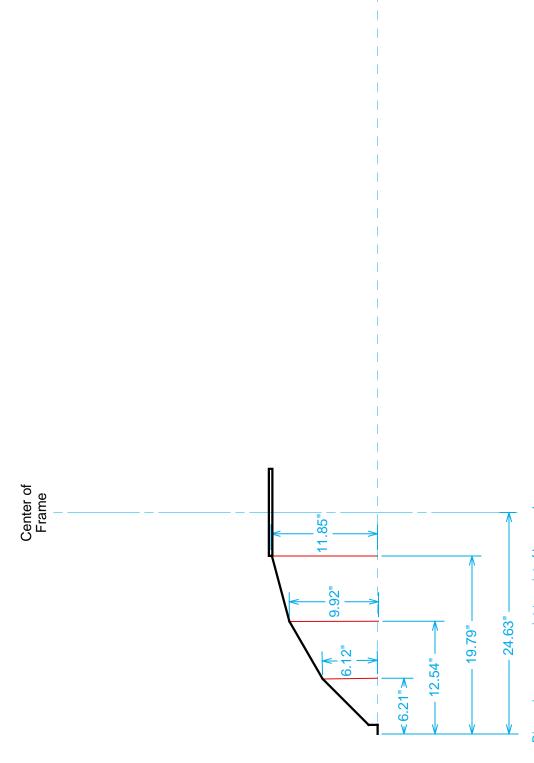
**CEILING** 

SHEETROCK

HORIZONTAL MOULDING

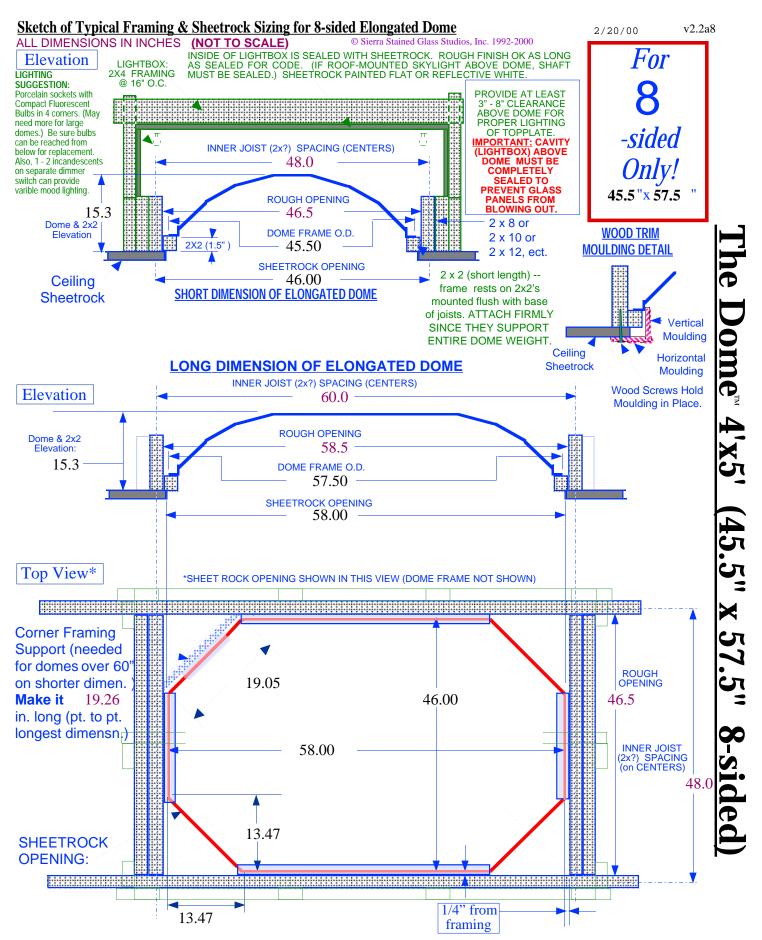
For 8-sided 45.5" frame Only!

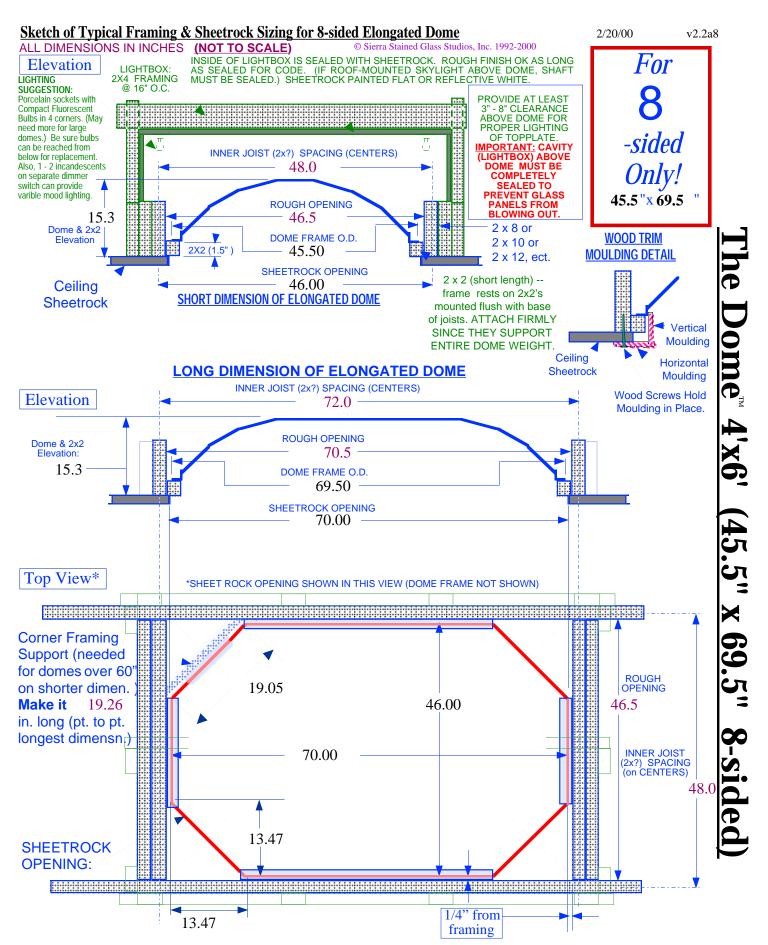
# Elevations, 4' Dome, along arms. Frame #4850-0

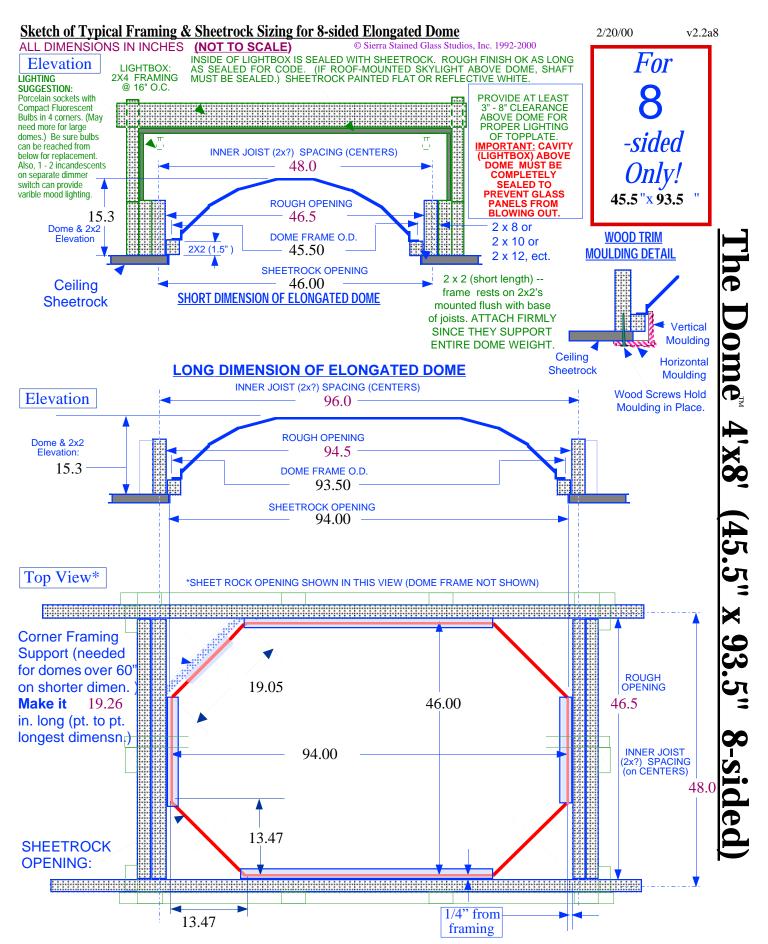


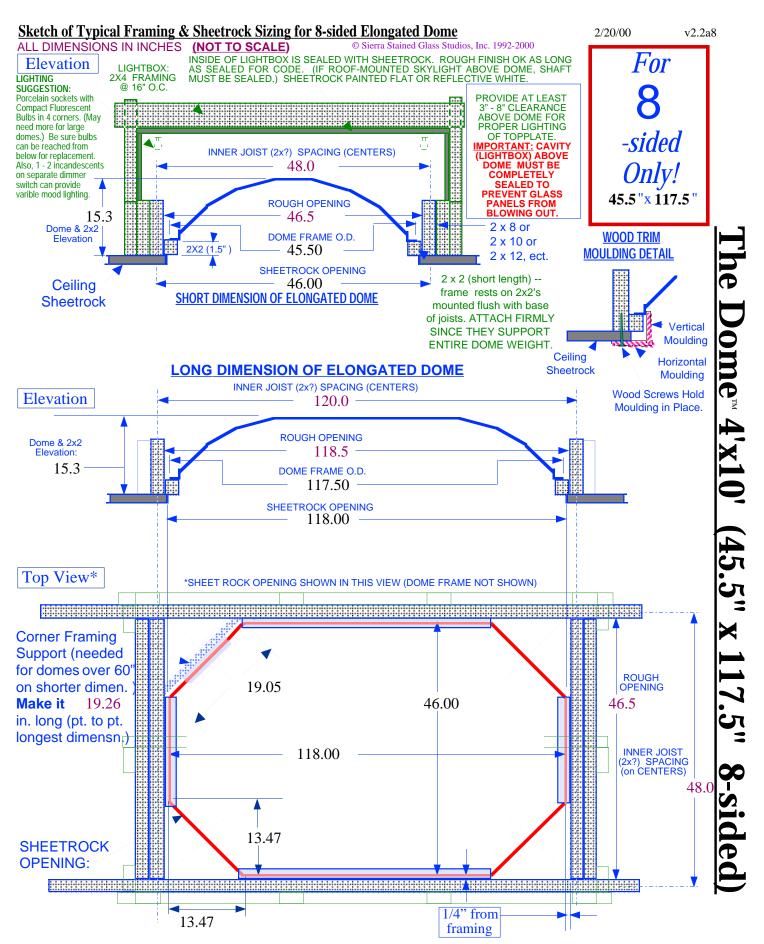
Dimensions across point-to-point of base polygon.

ALLOW AN EXTRA INCH IN ELEVATIONS FOR TOP SIDE OF T-BAR



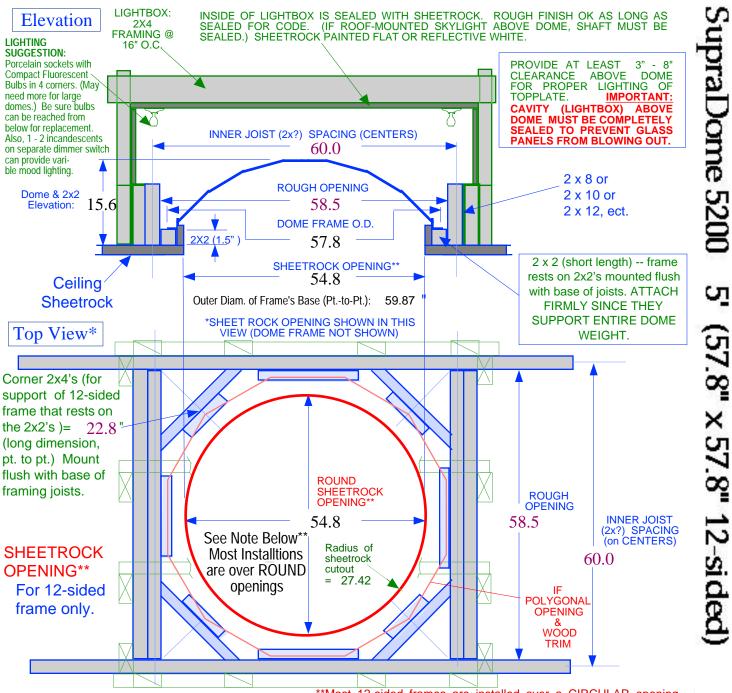






ALL DIMENSIONS IN INCHES (NOT TO SCALE)

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\*\*Most 12-sided frames are installed over a CIRCULAR opening. diameter of opening 3" less than frame O.D. across paralled sides. Note: When circular opening planned, frame must be installed before sheetrocking circular opening. The vertical sheetrock trim is wet, then bent to shape.

## WOOD TRIM MOULDING DETAIL

(Wood trim detail applies only to non-standard polygonal openings.)

FRAME

WOOD SCREWS
HOLD MOULDING
IN PLACE.

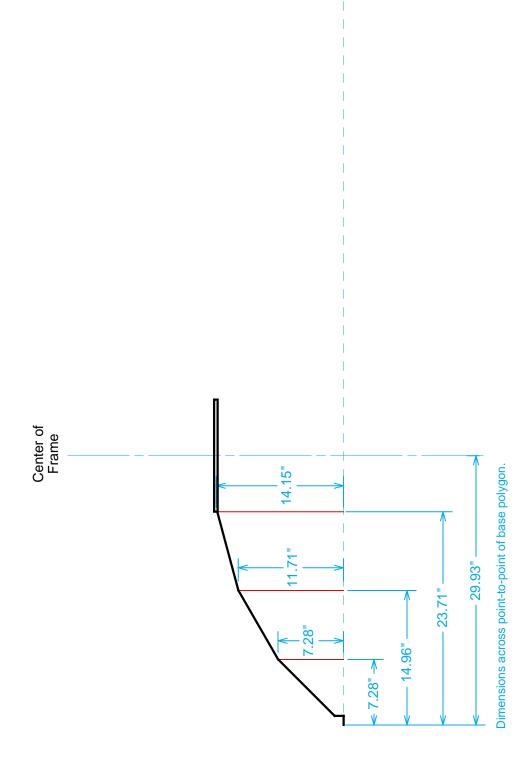
HORIZONTAL
MOULDING
SHEETROCK

# For 12-sided 57.8" frame Only!

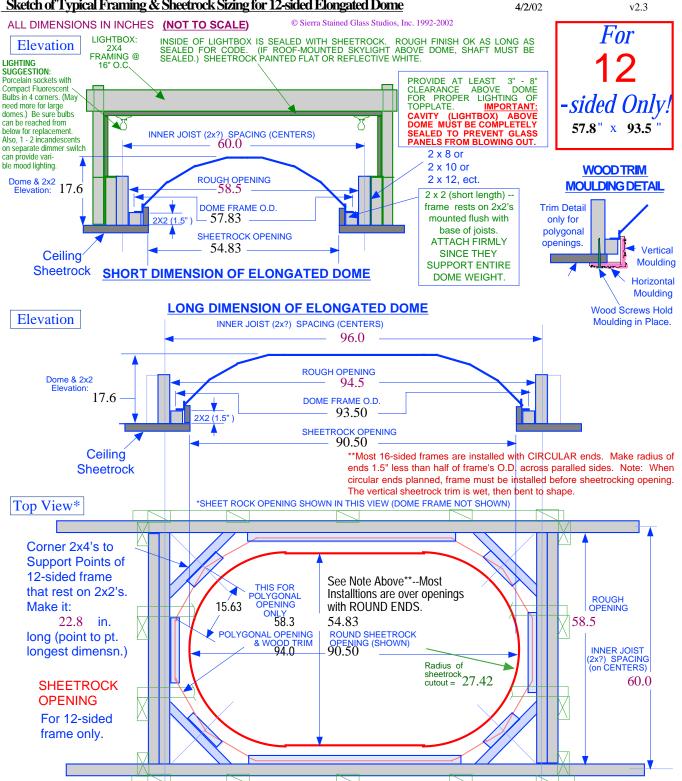
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v2.3

# Elevations, 5' Dome, along arms. Frame #5250-0



ALLOW AN EXTRA INCH IN ELEVATIONS FOR TOP SIDE OF T-BAR



### flush with base of framing joists. (Not SHEETROCK **ROUGH OPENING OPENING** needed for frames 58.5 <72".) (SAME ACROSS ALL PARALLEL SIDES) Radius to points of sheetrock SHEETROCK 60.0 cutout = 31.2 INNER JOIST (2x?) SPACING (on CENTERS) **OPENING:** For 8-sided 1/4" from 17.0 frame only. framing 17.0

## WOOD TRIM MOULDING DETAIL

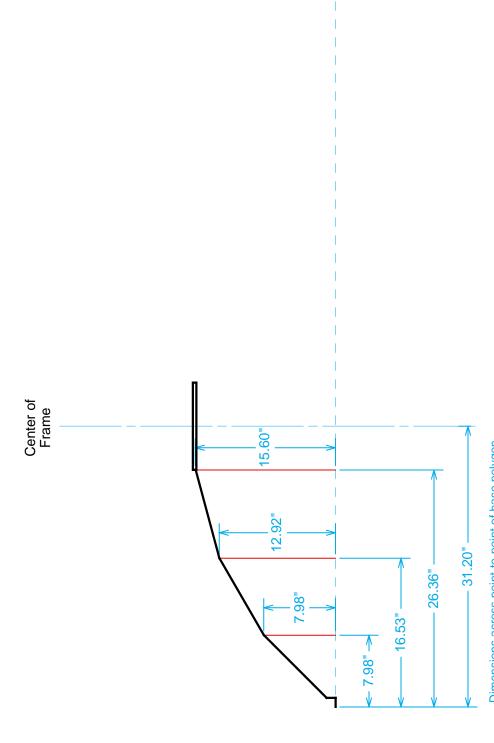
(Pre-Cut Kit shown is available separately only for polygonal openings.) **FRAME WOOD SCREWS VERTICAL** HOLD MOULDING MOULDING IN PLACE.▼ **HORIZONTAL MOULDING** 

**CEILING** 

SHEETROCK

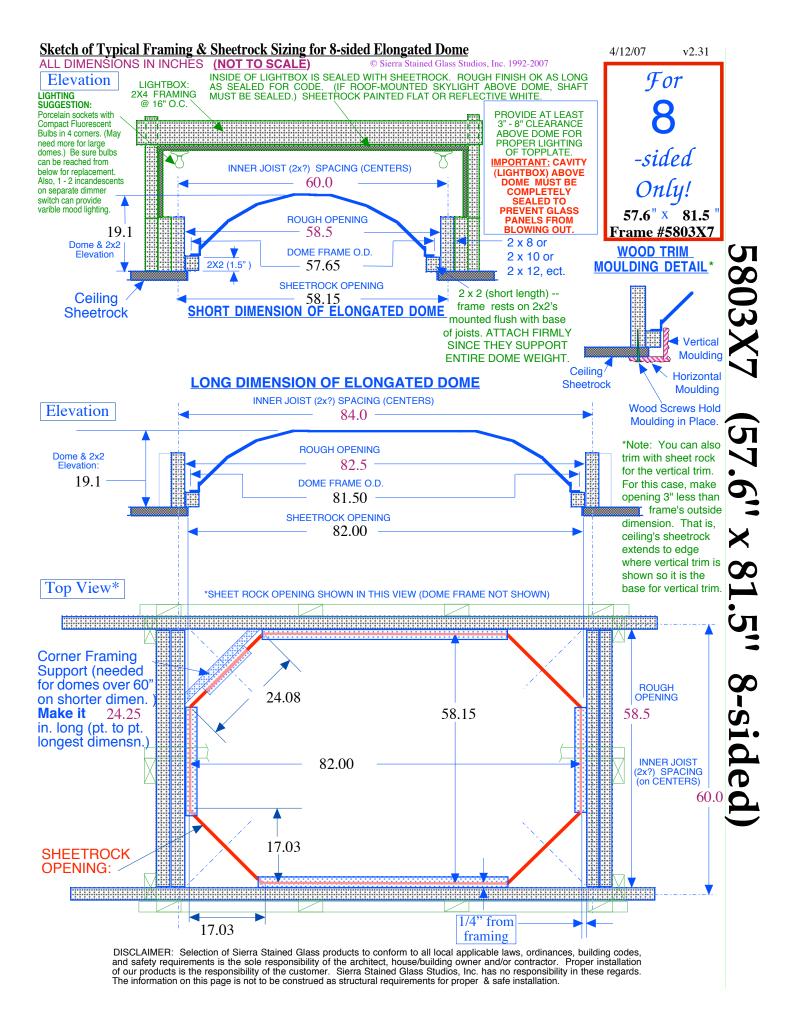
8-*sided* 57.6" **For** frame Only!

# Elevations, 5' Dome, along arms. Frame #5850-0



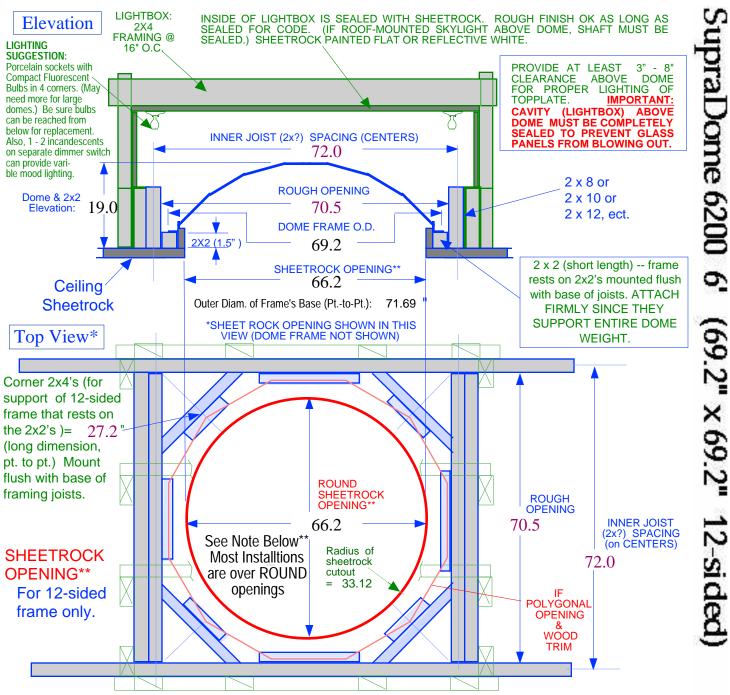
Dimensions across point-to-point of base polygon.

ALLOW AN EXTRA INCH IN ELEVATIONS FOR TOP SIDE OF T-BAR



ALL DIMENSIONS IN INCHES (NOT TO SCALE)

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\*\*Most 12-sided frames are installed over a CIRCULAR opening. Make diameter of opening 3" less than frame O.D. across paralled sides. Note: When circular opening planned, frame must be installed before sheetrocking circular opening. The vertical sheetrock trim is wet, then bent to shape.

## WOOD TRIM MOULDING DETAIL

(Wood trim detail applies only to non-standard polygonal openings.)

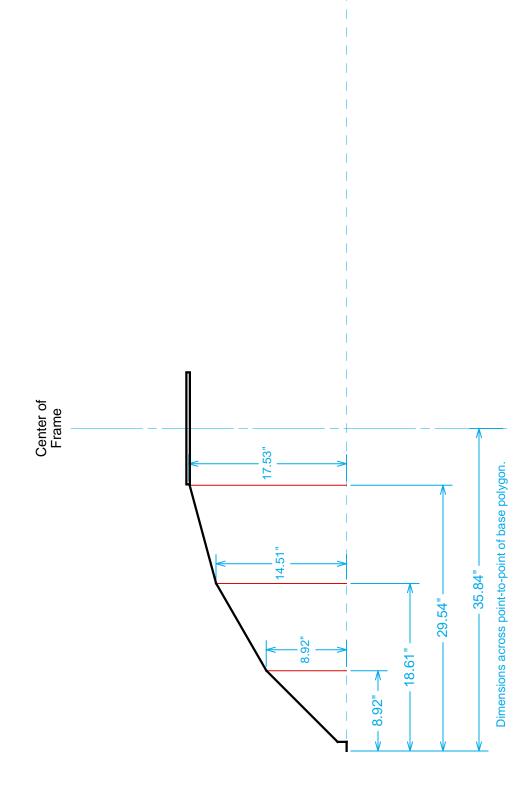
FRAME

WOOD SCREWS
HOLD MOULDING
IN PLACE.

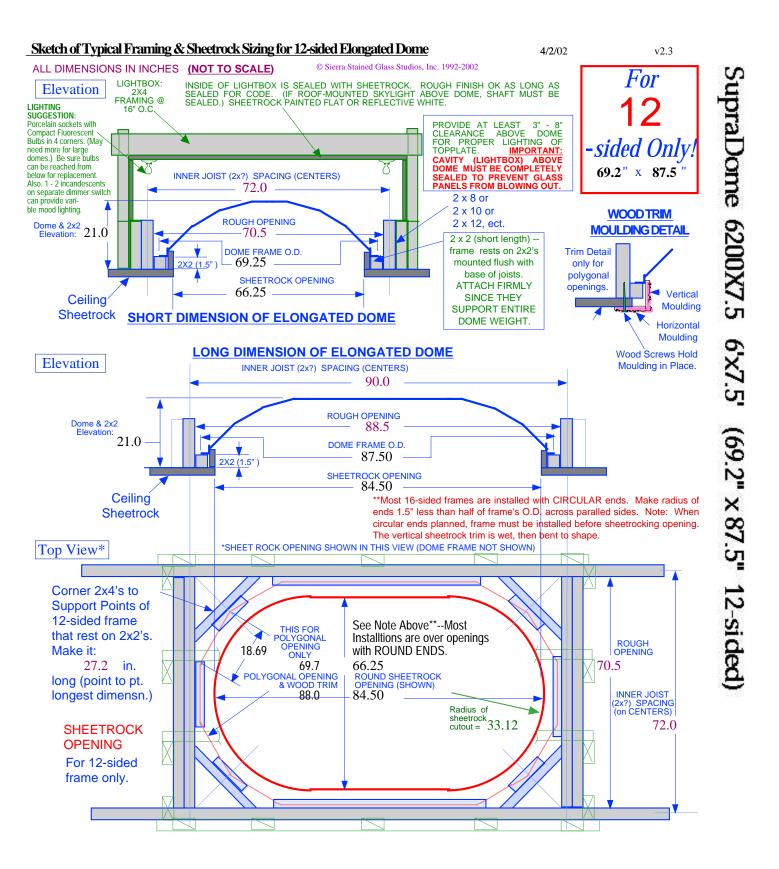
HORIZONTAL
MOULDING
SHEETROCK

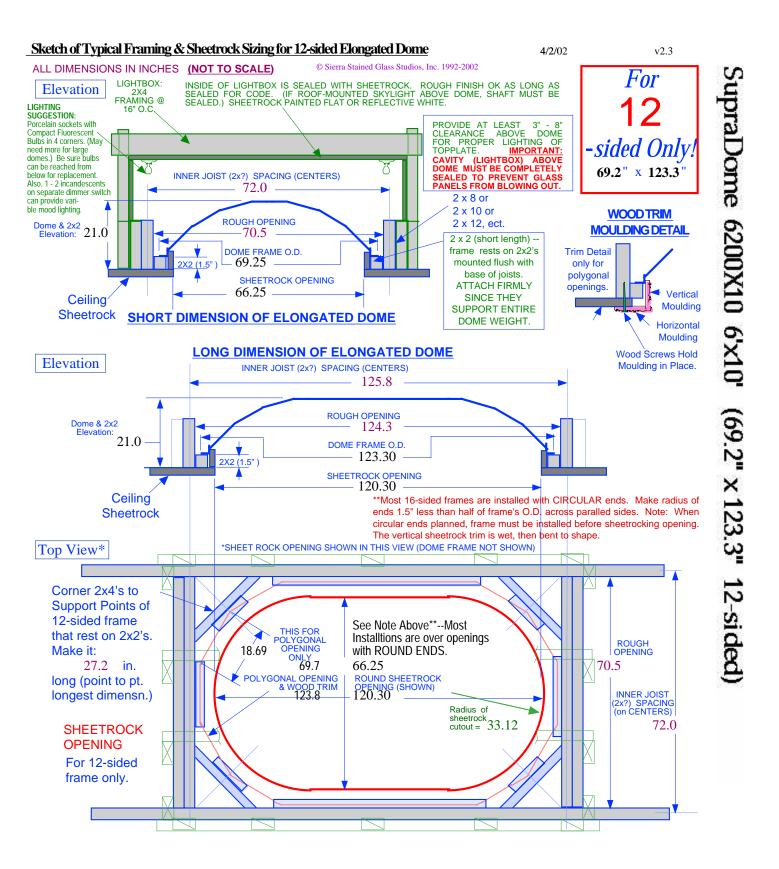
# For 12-sided 69.2" frame Only!

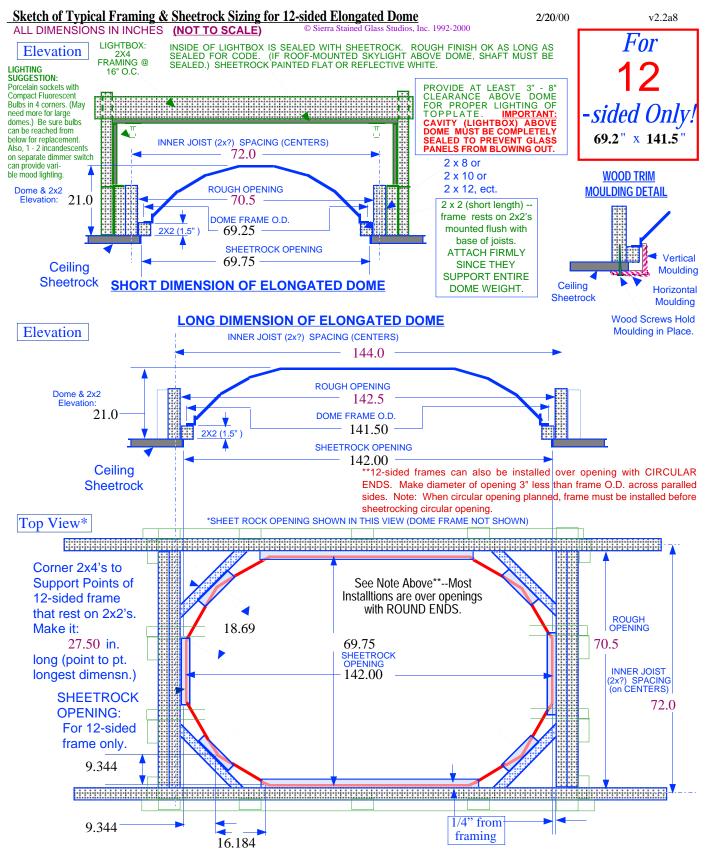
# Elevations, 6' Dome, along arms. Frame #6250-0



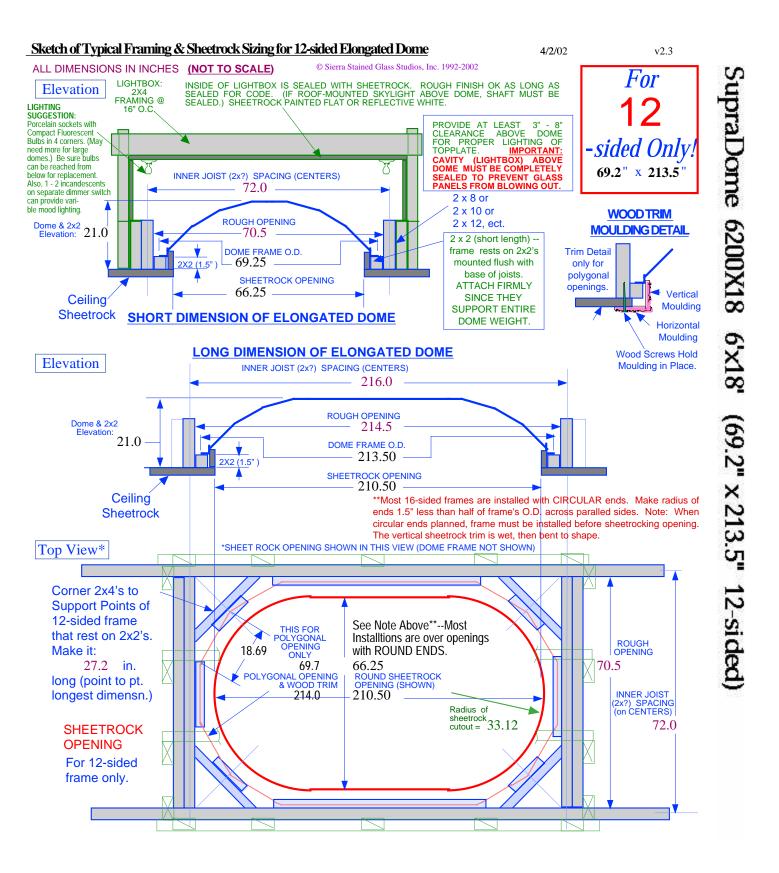
ALLOW AN EXTRA INCH IN ELEVATIONS FOR TOP SIDE OF T-BAR

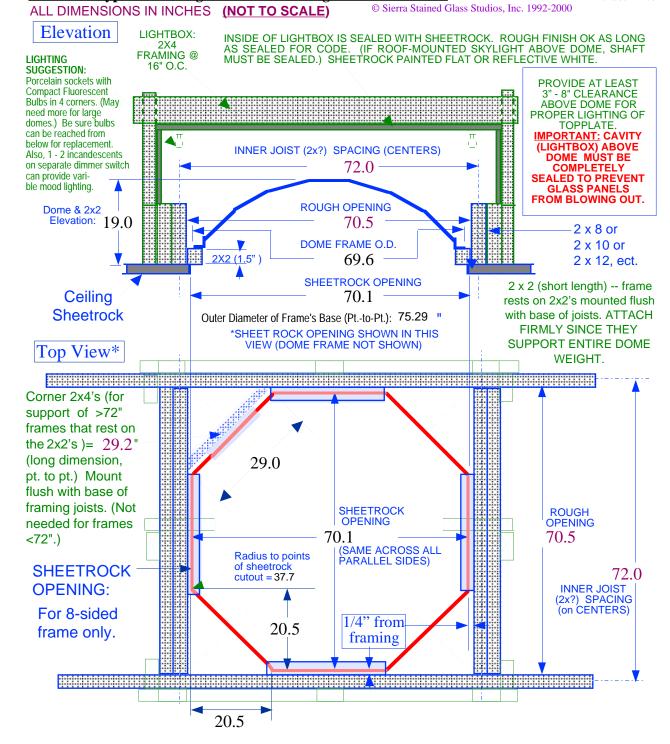






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## WOOD TRIM MOULDING DETAIL

(Pre-Cut Kit shown is available separately only for polygonal openings.)

FRAME

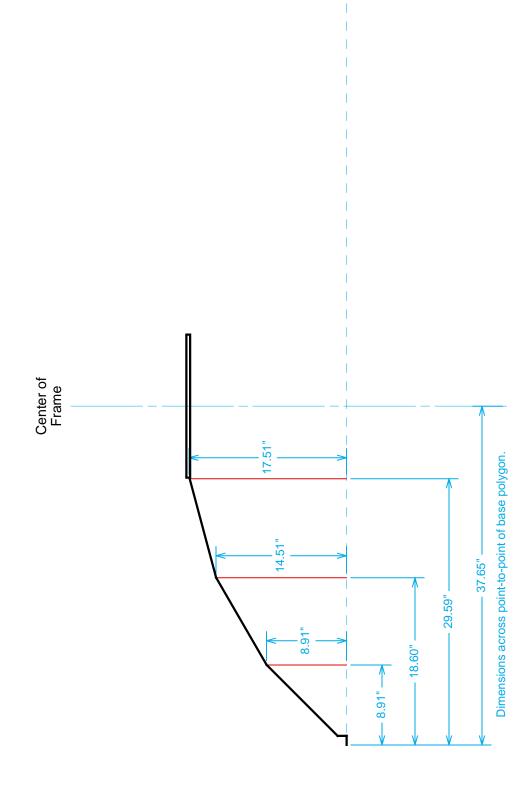
WOOD SCREWS
HOLD MOULDING
IN PLACE.

HORIZONTAL
MOULDING
CEILING

SHEETROCK

For 8-sided 69.6" frame Only!

# Elevations, 6' Dome, along arms. Frame #6850-0

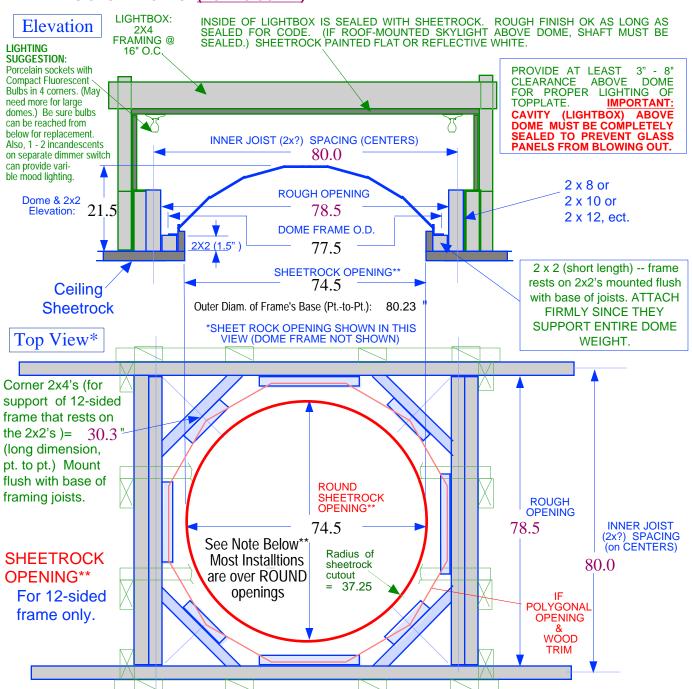


ALLOW AN EXTRA INCH IN ELEVATIONS FOR TOP SIDE OF T-BAR

77.5" x 77.5" 12-sided

ALL DIMENSIONS IN INCHES (NOT TO SCALE)

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\*\*Most 12-sided frames are installed over a CIRCULAR opening. Make diameter of opening 3" less than frame O.D. across paralled sides. Note: When circular opening planned, frame must be installed before sheetrocking circular opening. The vertical sheetrock trim is wet, then bent to shape.

## WOOD TRIM MOULDING DETAIL

(Wood trim detail applies only to non-standard polygonal openings.)

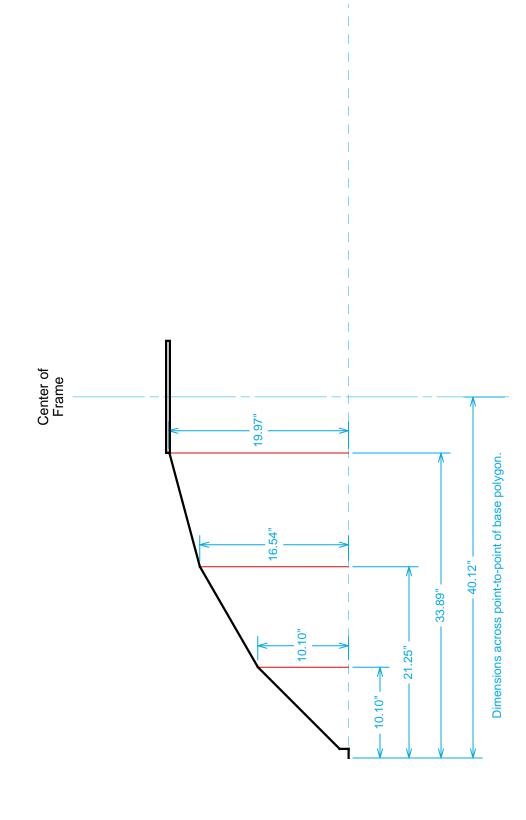
FRAME

WOOD SCREWS
HOLD MOULDING
IN PLACE.

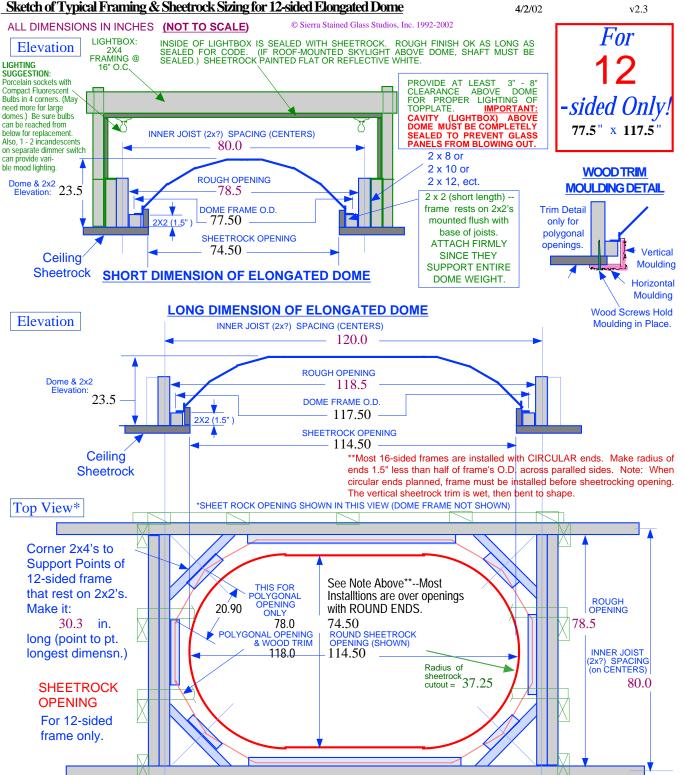
HORIZONTAL
MOULDING
SHEETROCK

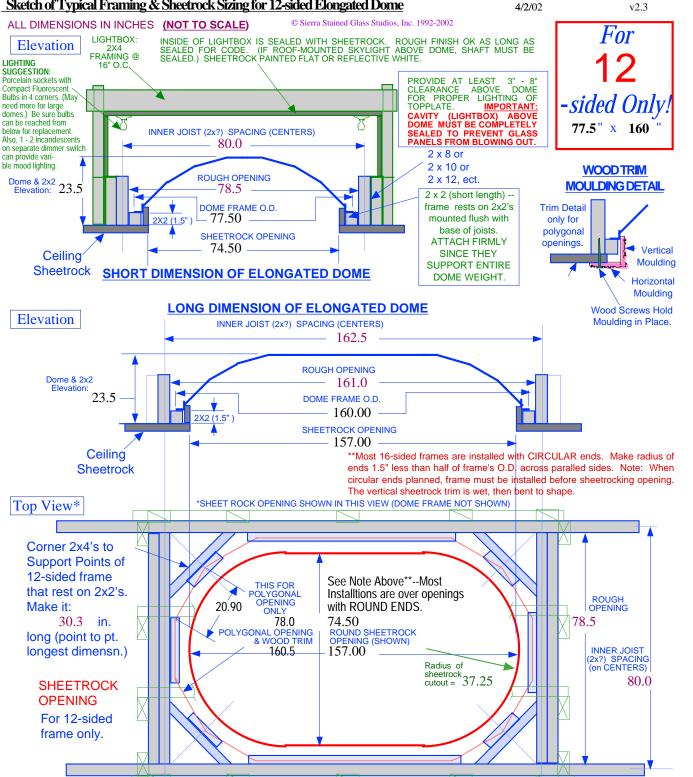
# For 12-sided 77.5" frame Only!

# Elevations, 77.5" Dome, along arms. Frame #7250-0



ALLOW AN EXTRA INCH IN ELEVATIONS FOR TOP SIDE OF T-BAR





ALL DIMENSIONS IN INCHES (NOT TO SCALE) © Sierra Stained Glass Studios, Inc. 1992-2002 LIGHTBOX: INSIDE OF LIGHTBOX IS SEALED WITH SHEETROCK. ROUGH FINISH OK AS LONG AS SEALED FOR CODE. (IF ROOF-MOUNTED SKYLIGHT ABOVE DOME, SHAFT MUST BE SEALED.) SHEETROCK PAINTED FLAT OR REFLECTIVE WHITE. Elevation FRAMING @ raDome LIGHTING 16" O.C SUGGESTION: Porcelain sockets with PROVIDE AT LEAST 3" - 8" CLEARANCE ABOVE DOME FOR PROPER LIGHTING OF Compact Fluorescent Bulbs in 4 corners. (May need more for large TOPPLATE. **IMPORTANT:** domes.) Be sure bulbs CAVITY (LIGHTBOX) ABOVE can be reached from DOME MUST BE COMPLETELY below for replacement. SEALED TO PREVENT GLASS INNER JOIST (2x?) SPACING (CENTERS) Also, 1 - 2 incandescents PANELS FROM BLOWING OUT. on separate dimmer switch 96.0 can provide varible mood lighting. 2 x 8 or **ROUGH OPENING** Dome & 2x2 2 x 10 or 24.2 94.5 Elevation: 2 x 12, ect. DOME FRAME O.D. 2X2 (1.5") 93.5 2 x 2 (short length) -- frame SHEETROCK OPENING\*\* rests on 2x2's mounted flush 90.5 Ceiling with base of joists. ATTACH Sheetrock Outer Diam. of Frame's Base (Pt.-to-Pt.): FIRMLY SINCE THEY \*SHEET ROCK OPENING SHOWN IN THIS VIEW (DOME FRAME NOT SHOWN) SUPPORT ENTIRE DOME (93.5" × 93.5" Top View\* WEIGHT. Corner 2x4's (for support of 12-sided frame that rests on the 2x2's )= 36.3" (long dimension, pt. to pt.) Mount flush with base of **ROUND** framing joists. SHEETROCK OPENING\*\* **ROUGH OPENING** 12-sided **INNER JOIST** 90.5 94.5 (2x?) SPACING (on CENTERS) See Note Below\* Radius of **SHEETROCK** Most Installtions 96.0 sheetrock are over ROUND **OPENING\*\*** cutout 45.25 openings For 12-sided **POLYGONAL** frame only. **OPENING** WÕOD TRIM

\*\*Most 12-sided frames are installed over a CIRCULAR opening. Make diameter of opening 3" less than frame O.D. across paralled sides. Note: When circular opening planned, frame must be installed before sheetrocking circular opening. The vertical sheetrock trim is wet, then bent to shape.

## WOOD TRIM MOULDING DETAIL

(Wood trim detail applies only to non-standard polygonal openings.)

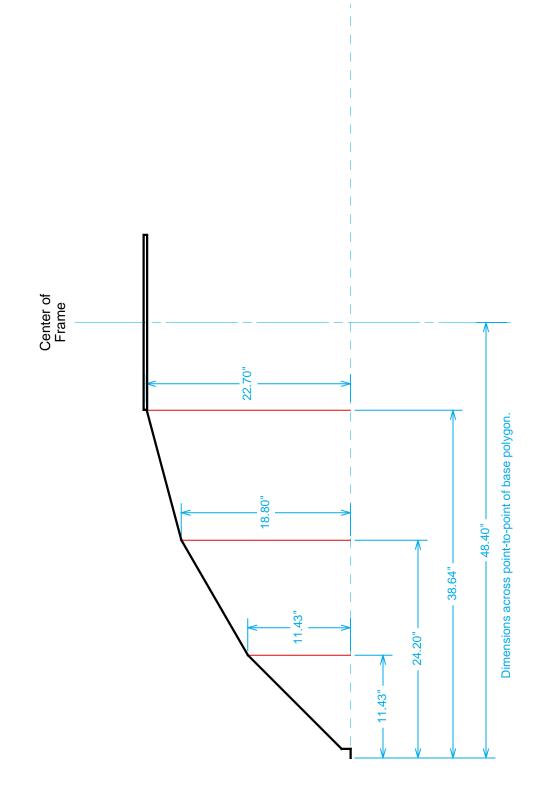
FRAME

WOOD SCREWS
HOLD MOULDING
IN PLACE.

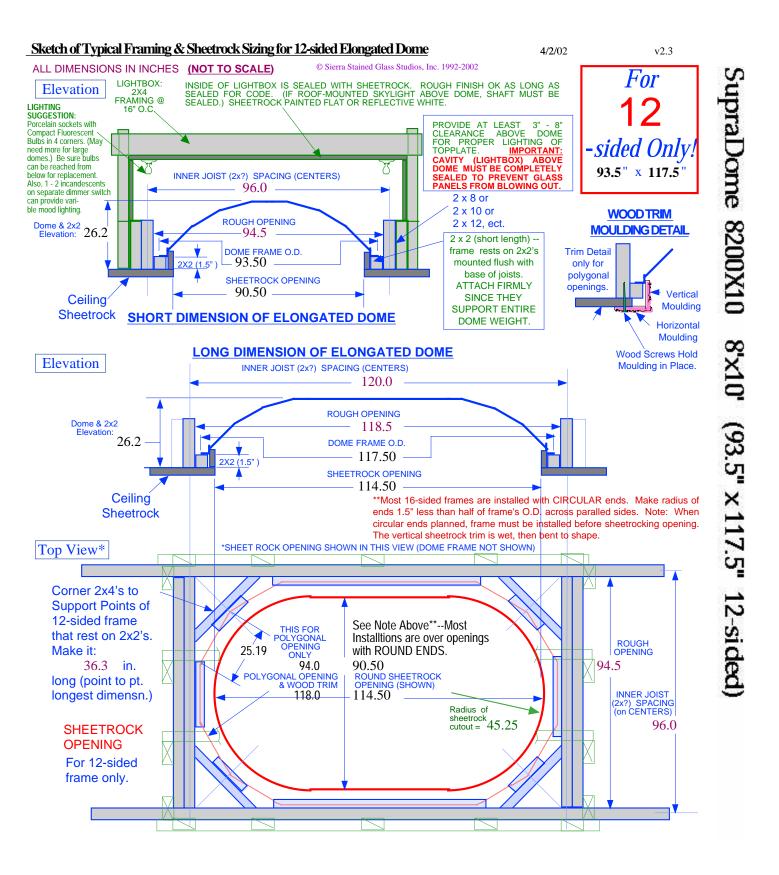
HORIZONTAL
MOULDING
SHEETROCK

# For 12-sided 93.5" frame Only!

# Elevations, 8' Dome, along arms. Frame #8250-0



ALLOW AN EXTRA INCH IN ELEVATIONS FOR TOP SIDE OF T-BAR

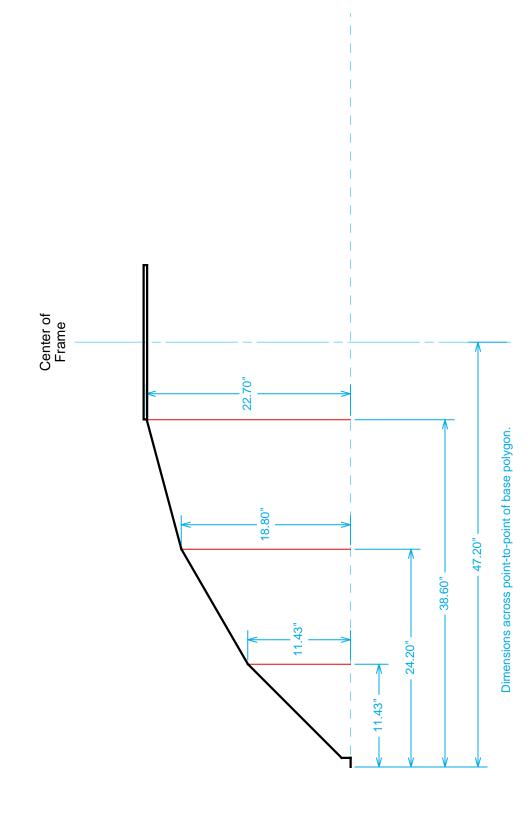


**MOULDING** 

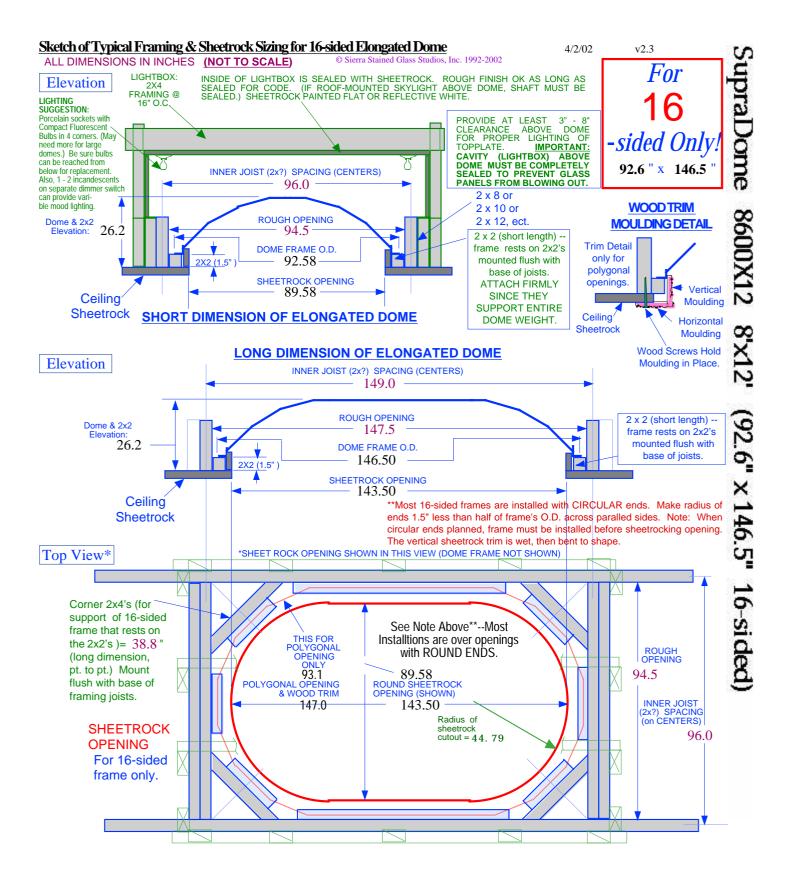
**CEILING SHEETROCK**  responsibility of the customer. Sierra Stained Glass Studios, Inc. has no responsibility in these regards. The information on this page is not to

be construed as structural requirements for proper & safe installation.

# Elevations, 8' Dome, along arms. Frame #8650-0



ALLOW AN EXTRA INCH IN ELEVATIONS FOR TOP SIDE OF T-BAR



framing

# )ome 8806 8'x8' (93.5"x93.5" 8-sided base, 16-sectns.

opening will be trimmed with sheetrock instead of wood mouldings, make polygonal opening 3" less than frame O.D. across paralled sides. Frame should be in place BEFORE sheetrocking done. Above drawing's opening assumes wood trim used.

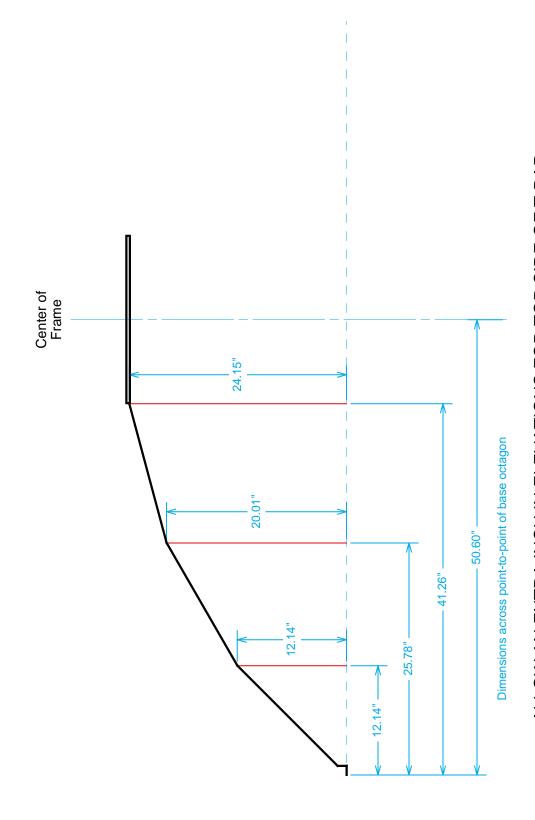
## WOOD TRIM MOULDING DETAIL

27.5

(Wood trim detail applies to polygonal openings sized as shown above.) FRAME **WOOD SCREWS VERTICAL** HOLD MOULDING **MOULDING** IN PLACE. HORIZONTAL MOULDING **CEILING** SHEETROCK<sup>1</sup>

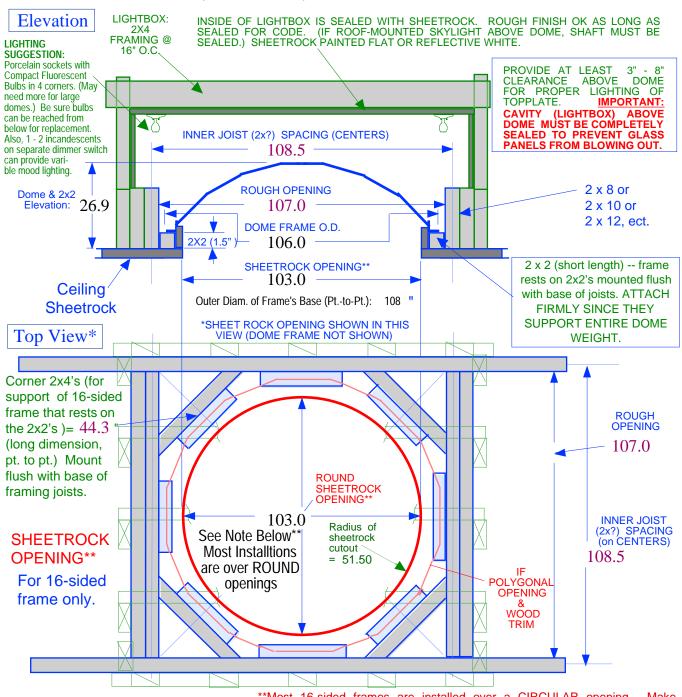
**O**-*sided* 93.5" For frame Only!

# Elevations, 8' Dome, along arms. Frame #8856-0 (8-sided, 16-sections)



ALLOW AN EXTRA INCH IN ELEVATIONS FOR TOP SIDE OF T-BAR

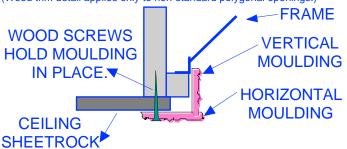
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\*\*Most 16-sided frames are installed over a CIRCULAR opening. diameter of opening 3" less than frame O.D. across paralled sides. Note: When circular opening planned, frame must be installed before sheetrocking circular opening. The vertical sheetrock trim is wet, then bent to shape.

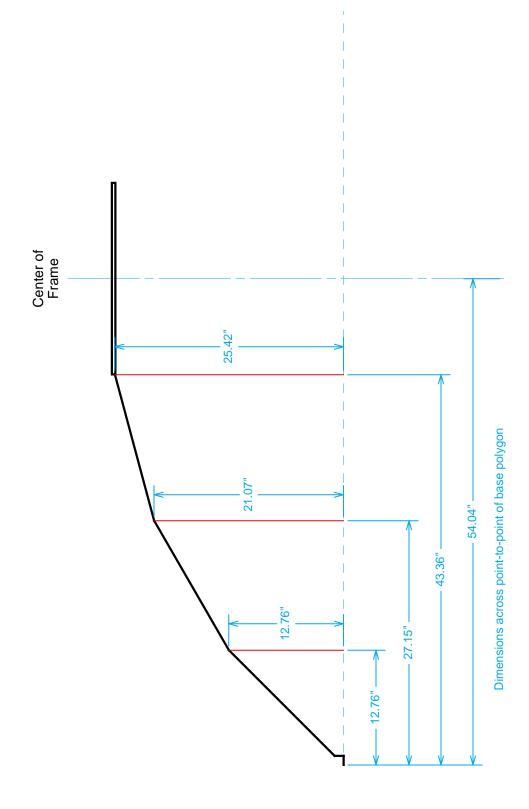
### WOOD TRIM DETAIL

(Wood trim detail applies only to non-standard polygonal openings.)



## For 16-sided 106.0" frame Only!

# Elevations, 9' (106") Dome, along arms. Frame #9653-0 (16-sided)

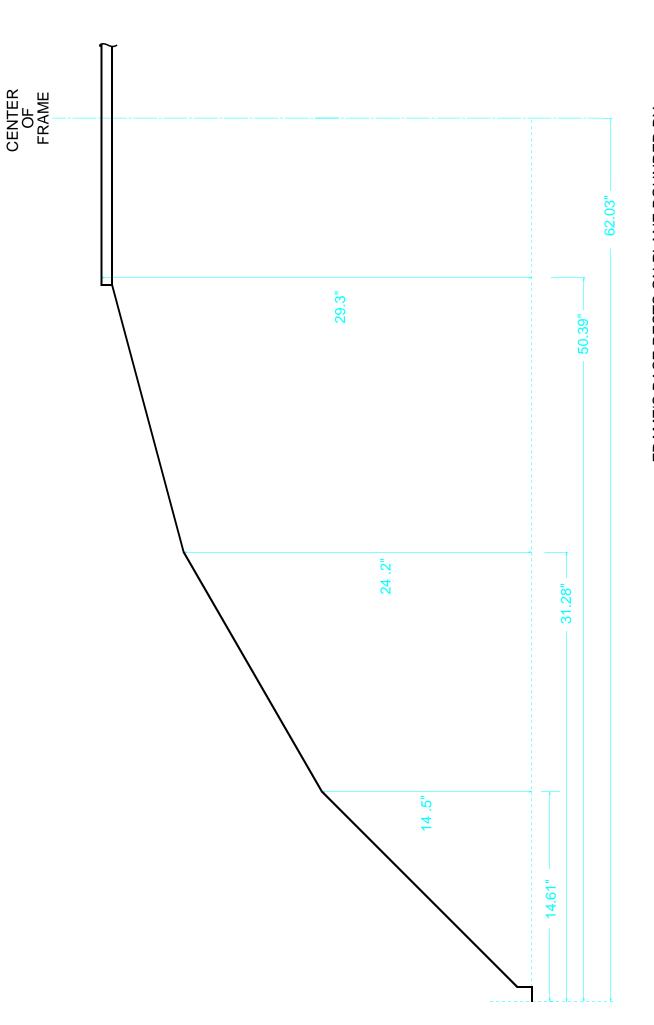


ALLOW AN EXTRA INCH IN ELEVATIONS FOR TOP SIDE OF T-BAR

─ Dome Frame sits atop support "doughnut". Inside dimension of frame is 121". (Outer Dimension of frame at base is 123" across parallel sides, 124.1" across points of polygon.) Frame Height is 29"; allow approx. 37" at center for best back-lighting of top center ring. Opening is - 10'-0" -– 11'-6" – Note: Absolute MINIMUM PLATFORM O.D. is 124.1" or 10'-4.1" Supporting "donut" typically made from glue-laminated plywood.



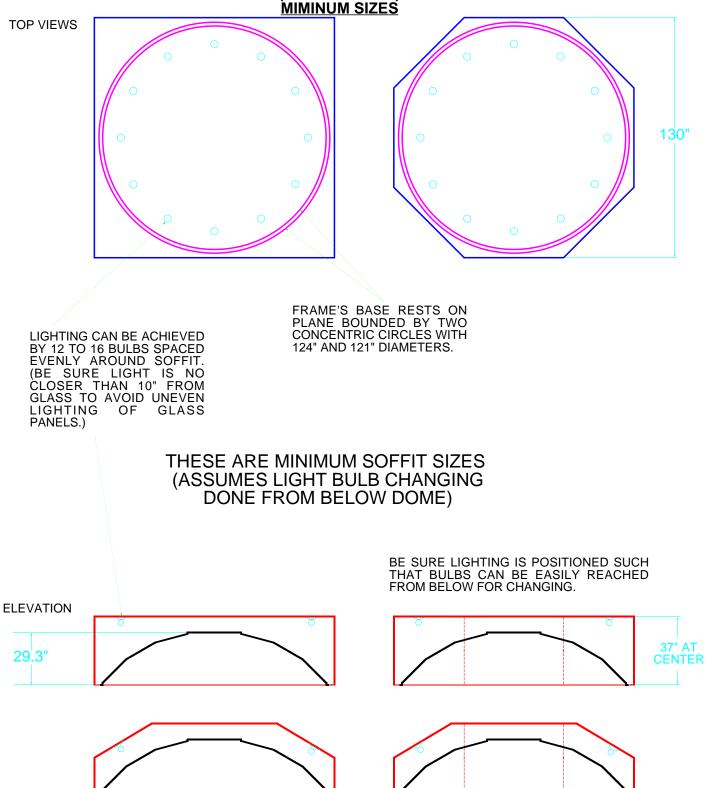
Typical support for 10' SupraDome (24-sided) Frame and glass weighs approx. 380 lbs. (Entire base of dome frame must be supported on flat surface.)



Elevations, 10' Dome, along arms. Frame #10450-0

FRAME'S BASE RESTS ON PLANE BOUNDED BY TWO CONCENTRIC CIRCLES WITH 124" AND 121" DIAMETERS.

### SOFFIT LAYOUTS FOR 10' DOME (SD10/24-SIDED)



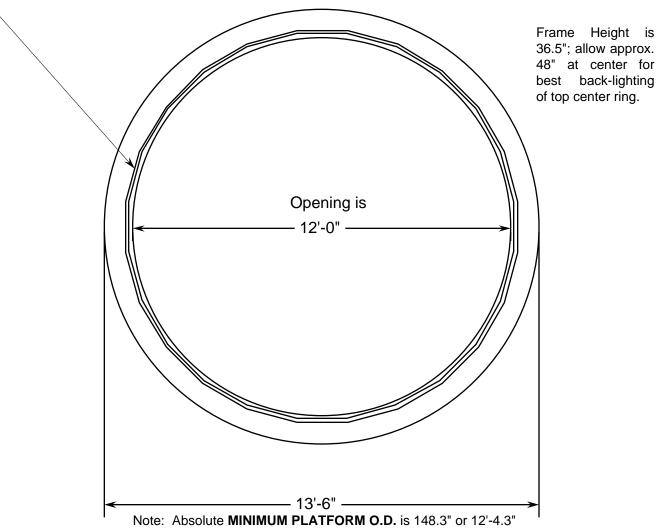
CAUTION: SOFFIT MUST BE COMPLETELY SEALED TO PREVENT GLASS PANELS FROM LIFTING OUT OF FRAME. INSIDE OF SOFFIT SHOULD BE SEALED WITH SHEETROCK AND TAPED FOR TIGHT SEAL. (ROUGH FINISH IS OK AS LONG AS COMPLETELY SEALED.) IF ROOF-MOUNTED SKYLIGHT IS PLACED ABOVE DOME, SHAFT MUST ALSO BE SEALED. THE SHEETROCK SHOULD BE PAINTED FLAT OR REFLECTIVE WHITE.

FAILURE TO OBSERVE THIS CAUTION CAN RESULT IN GLASS PANELS LIFTING OUT OF FRAME AND FAILING. (FOR EXAMPLE, ON A WINDY DAY WHEN A WINDOW OR DOOR IS OPENED TO THE WIND, AIR PRESSURE CAN BLOW OR SUCK OUT GLASS PANELS IF THE AREA ABOVE DOME HAS ANY EXPOSURE TO BUILDING'S EXTERIOR.)

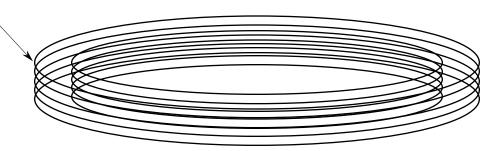
### 12' SupraDome Installation Guidelines (Frame Series #12400)

This frame is not self-supporting -- each arm requires a 1/16" - 5/64" cable supported from structure.

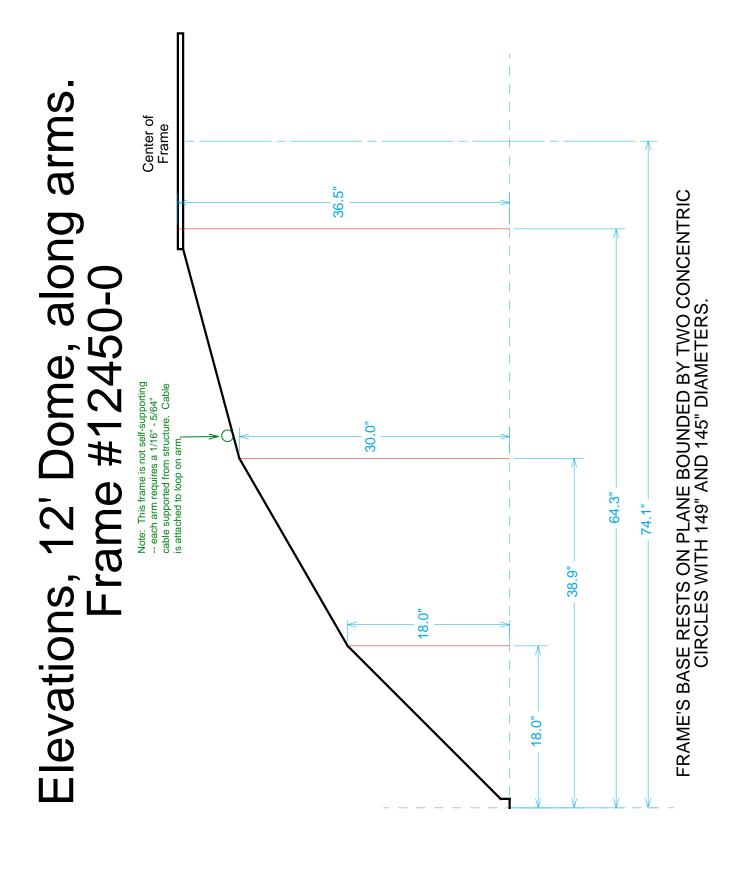
Dome Frame sits atop support "doughnut". Inside dimension of frame is 145".
 (Outer Dimension of frame at base is 147" across parallel sides, 148.3" across points of polygon.)



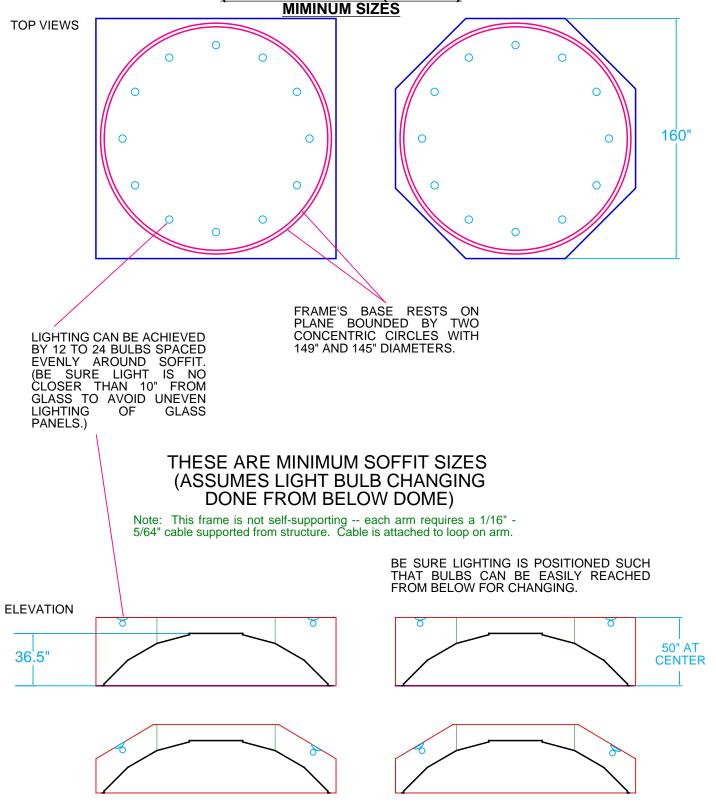
Supporting "donut" typically made from glue-laminated plywood.



Typical support for 12' SupraDome (24-sided) Frame and glass weighs approx. 565 lbs. (Entire base of dome frame must be supported on flat surface.)



# (Frame Series #12400 (24-SIDED)



CAUTION: SOFFIT MUST BE COMPLETELY SEALED TO PREVENT GLASS PANELS FROM LIFTING OUT OF FRAME. INSIDE OF SOFFIT SHOULD BE SEALED WITH SHEETROCK AND TAPED FOR TIGHT SEAL. (ROUGH FINISH IS OK AS LONG AS COMPLETELY SEALED.) IF ROOF-MOUNTED SKYLIGHT (non-opening type) IS PLACED ABOVE DOME, SHAFT MUST ALSO BE SEALED. THE SHEETROCK SHOULD BE PAINTED FLAT OR REFLECTIVE WHITE.