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DOMES INSTALLATION INSTRUCTIONS



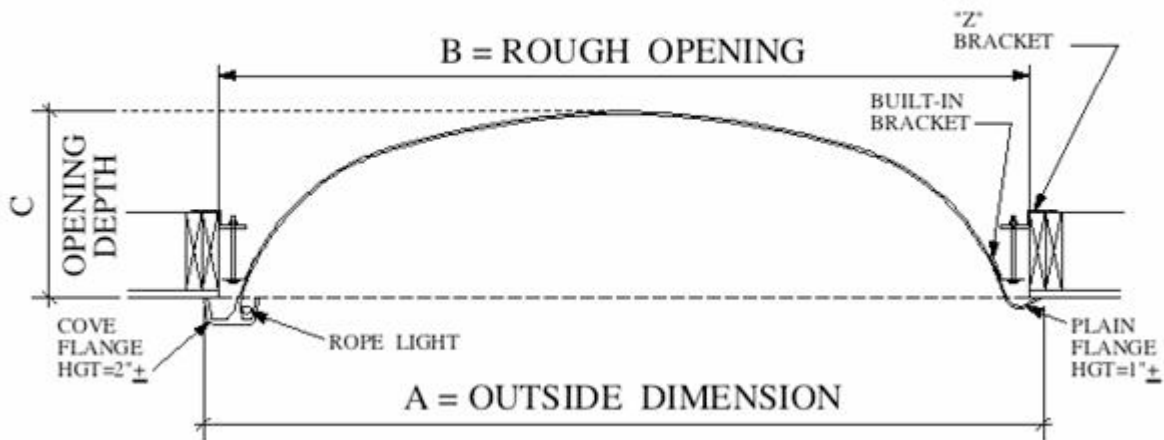
Note: Compared to other manufacturers this is the least labor intensive system of installation. It is simple, has no repairs and we provide the parts you will need.

It is the builder's responsibility to ensure the structural integrity of the ceiling system.

Bill of Materials:

- One dome
- Four "Z" brackets
- Twelve 1/4" nuts
- Eight flat washers for 1/4" threaded rods
- Eight pan head Phillips wood screws
- Four 6"X 1/4" diameter all thread bolts

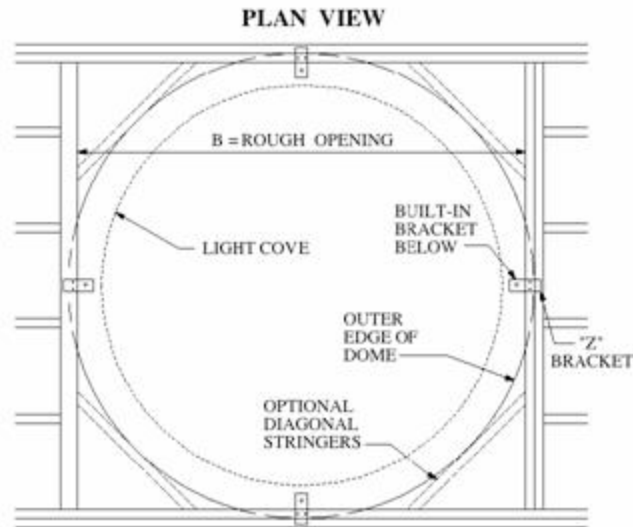
DOME DIMENSION DIAGRAM



Drawing	Reference	A	B	C	EST.	ROPE
ITEM NO.	SHAPE	OUTSIDE	ROUGH	OPENING	MEDALLION	LIGHT
WILTON		DIM.	OPENING	DEPTH	SIZE	LENGTH
XD20	Round	40.25	36.5	7.25	10	
XD22	Round	52.25	49.5	15	10	
XD30	Round	65.125	60.75	12.75	14	
XD31	Round	77.375	75.5	16.5	18	
XD40	Round	89.25	84.75	14.75	20	
XD60	Elliptical	41 X 54	35.5 X 48.5	7.5	10	
XD70	Elliptical	58.75 X 78	54 X 73.5	10.25	14	
RONDEL						
XD23	Round	41.875	36.5	7.25	10	
XD33	Round	65.75	60.75	12.75	14	
XD63	Elliptical	41 X 54	35.5 X 48.5	8	10	
XD73	Elliptical	58.75 X 78	54 X 73.5	10.25	14	
COVE LIGHTING						
XD20C	Plain Round	42	36.5	6.25	10	116
XD22C	Plain Round	54	49.5	14	10	156
XD30C	Plain Round	67	60.75	11.75	14	194
XD21C	Decorative Rd.	78.625	73.5	15.5	18	238
XD50C	Plain Round	78.625	73.5	15.5	18	238
XD40C	Plain Round	91.25	84.75	13.75	20	273
XD60C	Plain Elliptical	43 X 56	35.5 X 48.5	6.5	10	135
XD70C	Plain Elliptical	61 X 80	54 X 73.5	9.25	14	204
WESLEY RIMLESS						
XD25	Round	35.875	36	7.25	10	
XD35	Round	60	60.25	12.75	14	
XD45	Round	84	84.75	14.75	20	

To convert these numbers to Focal Points Domes add 985 before the number.

Example: XD20 is a Wilton 40" number 98520.



1. For **New Construction** frame a square box that conforms to the rough opening size for this dome. See the above table for dimensions. Double up the ceiling joists to transfer the load of cut joists to full length joists. Use 2 X 6's or larger, depending upon structural requirements of the ceiling system. Spread the load to uncut joists with a T-top. For additional strength, 45 degree diagonal bracing can be added to the corners. Sheet rock should be installed prior to installing the dome. Remember the dome flange must rest on the sheet rock and extend passed it. The shape of a dome can support a lot of weight, but if you are installing a particularly heavy chandelier a wooden frame member can be erected over the center of the dome to support the electrical box and chandelier attachment. **Note: Photographs of the framing are shown below.**

We prefer the bolt or threaded rod method of installing the dome as described in sections 7 - 10. It allows easy height adjustment and solid support. That said many builders use:

- Wire hangers to the dome brackets and even turnbuckles
- Unistrut slotted angle suspended from structure above is also used.

2. For **Old Construction** draw the rough opening on the ceiling where you want the dome to reside. Remove insulation in the attic over the area where the dome and framing will rest. Be sure to score the cut line with a razor trim knife so the outside paper surface of the dry wall does not tear when the circle falls. Using a Saber saw or dry wall saw cut away the dome circle. Wearing a dust mask is a must through out this operation. If there is any questions about the rough opening size build the framing that will be used in the attic and set it over the dome on the floor.



3. **Add "T" Supports** outside of where the joists will be cut and extending over onto the joists that will remain. Make sure all the joists are firmly attached to the T. Using screws instead of nails will assure the best support.
4. **Cut Away the Joists** as square as possible. A reciprocal saw works best.



5. **Frame Members**. Double the members on each side and perpendicular to ceiling joists. Consult a structural engineer as required. For additional strength, 45 degree diagonal bracing can be added in the corners as shown.



6. **Preparing the Dome:**

- If you are planning to add a chandelier or light fixture drill a hole in the center of the dome for the wiring and electrical box.
- If you plan to paint the dome, sanding and preparation should be done per the instructions below.
- If you have a cove lite dome it will need a 1/2 to 1 inch hole drilled in the lower dome edge for wiring, where it cannot be seen from the floor. This hole allows the power cord to be passed through to the rope lights.
- If you ordered decorative trim for a plain cove rim dome now is the time to install and paint it. See "Decorative Trim Instructions".

7. **Install the support hardware** as shown with the Z brackets loosely fitted. The 6-inch bolts provided, work with 2 X 4's thru 2 X 8's. Larger rafters or other attachment systems may require cutting ¼ inch all-thread to suit. Assembling the hardware on the ground and turning it inward will save time and frustration when attaching to the ceiling joists.

In all cases use a lock nut or 2 jam nuts where the threaded rod exits the permanent dome bracket for safety.

CAUTION: Lifting the dome in place requires at least 3 workers. Two to lift the dome and one above the ceiling to make the bolt and nut connections

8. **Lift the dome** and insert in the ceiling opening. Rotate the dome so that the bolts and Z brackets are aligned with the center of each of the ceiling joists. You can also lift the dome with a pulley system attached to the roof rafters. Note: The hole to power the rope lighting should be turned toward the source.



9. With the "Z" brackets flush against the ceiling joist, screw the two wood screws through the holes provided. Do not split the joist.
10. **Adjust previously installed nuts** sequentially to lift the dome for a tight rim to ceiling fit. **Do not over tighten.** The dome can be easily re-adjusted at a later date.
11. For **rimless domes** the framing must be very accurate as the dome is secured by drilling through the dome from the inside and screwing the dome directly to the joist. Shims can be used to take up space between the dome and joists. 45 degree diagonal bracing is mandatory to provide additional attachment points. Screw holes should be finished out with Bondo then sanded. Final finish with standard drywall techniques.
12. For **lay-in or suspended ceilings**, thread construction wire through the built-in brackets; attach the wire to suspended ceiling supports. When in place, the acoustical ceiling tiles will rest on the top edge of the dome flange.



13. Caulk the gap between the ceiling and dome. When installing a medallion and chandelier, wait 24 hours for settling before final caulking of any gaps.

Warning: Do not step or climb on installed dome.

14. Additional Information:

Finding the dome center

There is a small mark on the inside of the dome that marks the **approximate** center.

Finishing and Painting Instructions:

The dome is manufactured with fiberglass and polyester resin, the same as a motor boat. The finish coating is ceiling white gelcoat. It can be washed with soap and water or any paint solvent. Lacquer thinner is preferred. Most end users do not paint their dome. But if you wish to change the color or add a mural, lightly sand the surface with fine grit sandpaper (80 to 220 grit). Apply any quality latex, oil base or lacquer paint. We have had customers go as far as using gold metal flake to create a Venetian look.

A better solution to adding color is to have us make the dome the color you want in the first place for a small extra charge.

15. Rope Lighting Installation:

The approximate length of UL approved rope lighting is provided in the specification chart. It can be purchased from our web site or a local electrical supply house. The rope lighting can be overlapped or even doubled up if desired.



Recommended rope lighting should be approximately .46 watts per bulb or greater with bulbs 1 inch or less apart. Clear rope will give a warm candle light colored glow to the dome. You want the light defused so each individual bulb does not project a streak on the surface. To that end we have added a reflective finish inside the cove. For the best effect use a rheostat on the wall switch independent of the controls for the chandelier. The plug we provide may be removed to pass the wire from the cove into the attic.