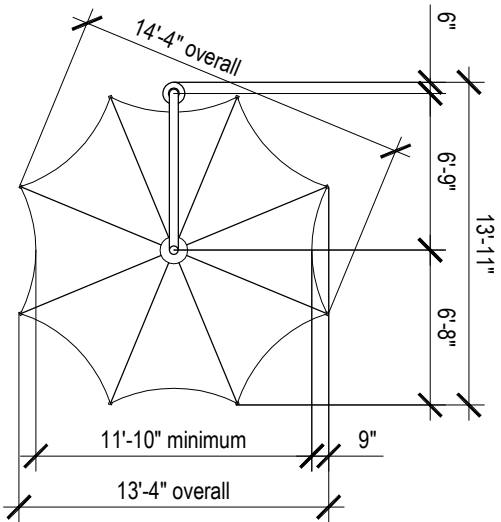


**LEVA OCTAGONAL 13'-4" - LO40**

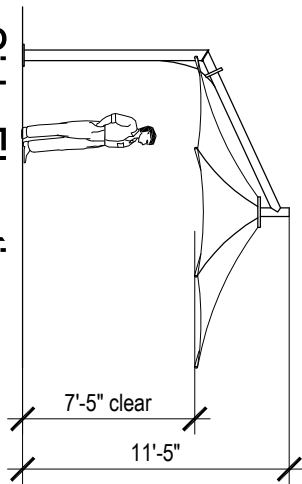
Designed to 90mph, Exp B  
 Rated when structure is fully erected.  
 Umbrella weight: 176 lb  
 Boom weight: 254 lb

Overall dimensions represent clearance dimensions for the complete structure. Membrane dimensions differ, depending on variations in tensioning and fabrication. All dimensions are nominal and have a tolerance of +/- 2"

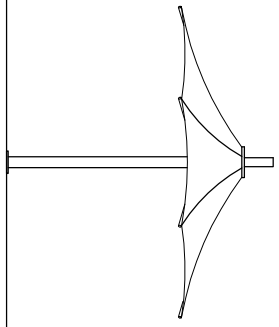
Note : The umbrellas must be closed and tied before wind speeds reach gusts of 60mph (100km/h) Refer note on Specification - Umbrella Design.



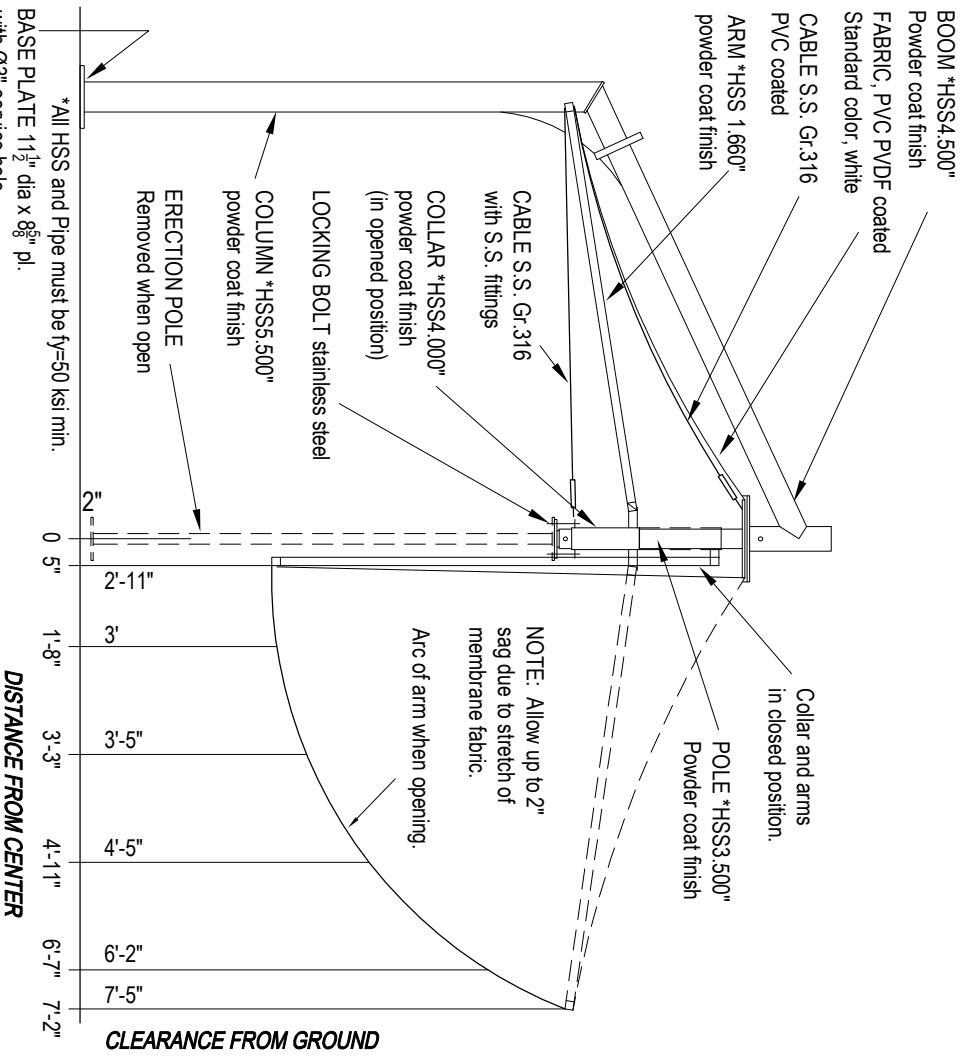
**Plan**



**Side Elevation**



**Elevation**

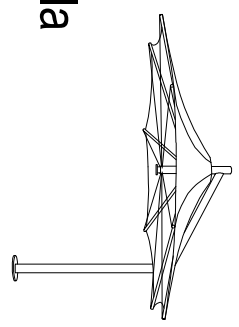


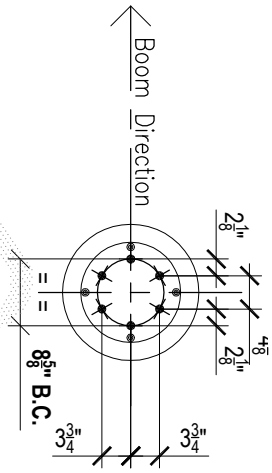
\*All HSS and Pipe must be fy=50 ksi min.  
 BASE PLATE 1 1/2" dia x 8 3/8" pl. with Ø3" service hole.  
 6- 3/4" hold down bolts on 8 3/8" B.C. F1554 Gr. 36 galvanized or stainless steel Gr.316. With dome nuts and leveling nuts.

**OPENED POSITION**  
 View square to boom

**CLOSED POSITION**  
 View square to arm

**13'-4" Side Support Octagonal Umbrella**  
**Leva - Model LO40**





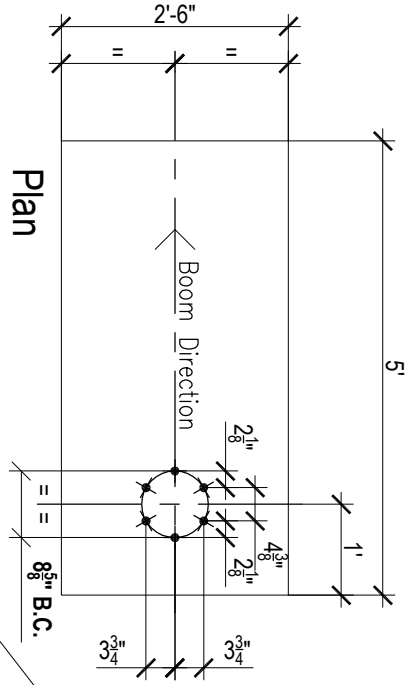
**Notes:**  
Designed to 90mph, Exp B

Assumed soil conditions:  
Pad - bearing capacity 14.5 psf  
Pier - cu=7.25 psf (stiff clay)

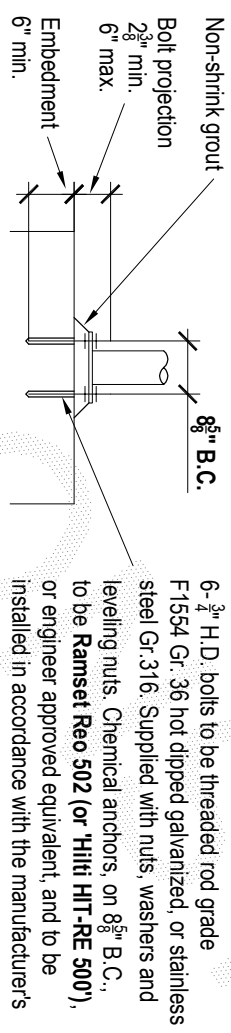
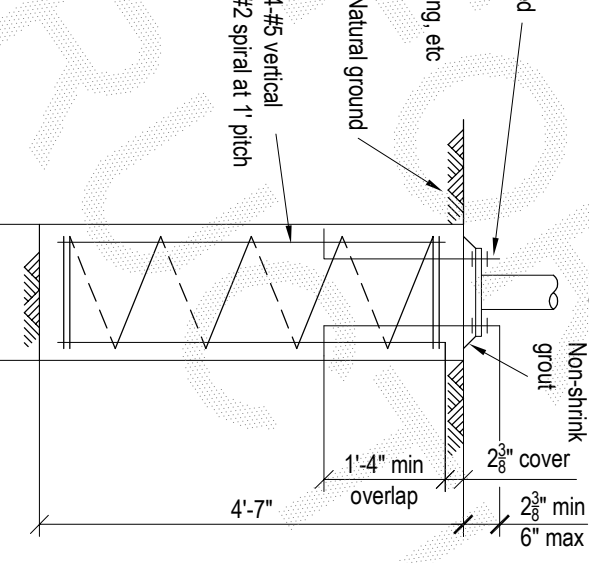
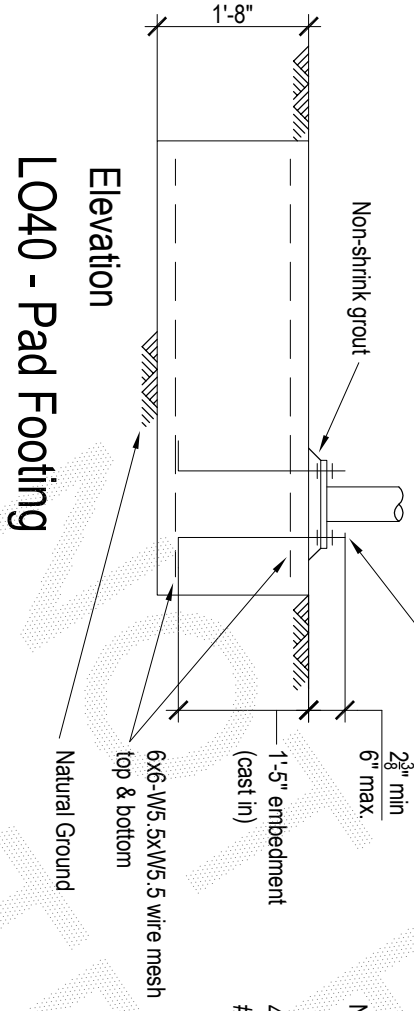
Minimum 2 3/8\"/>

**Anchor bolt location tolerances per Australian Standard AS 4800-1998**

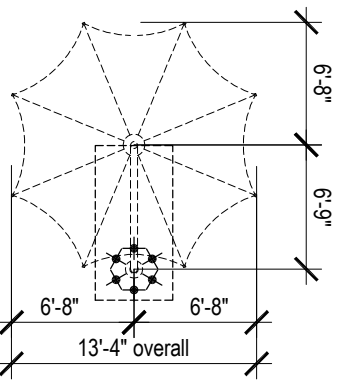
- 3mm for anchor bolt centers within an anchor bolt group.
- 6mm for adjacent anchor bolt group centers.
- Maximum accumulation of 6mm per 30m not to exceed a total of 25mm.
- 6mm from anchor bolt group center to column line center.



6- 3/4" F1554 Gr. 36 galvanized H.D. bolts with nuts and leveling nuts - 4" hook to suit level of top of paving, tiling, etc



6- 3/4" H.D. bolts to be threaded rod grade F1554 Gr. 36 hot dipped galvanized, or stainless steel Gr. 316. Supplied with nuts, washers and leveling nuts. Chemical anchors, on 8 5/8" B.C., to be **Ranset Reo 502 (or "Hilit HIT-RE 500")**, or engineer approved equivalent, and to be installed in accordance with the manufacturer's instructions.



**H.D. Bolt Layout Plan**  
Not to scale