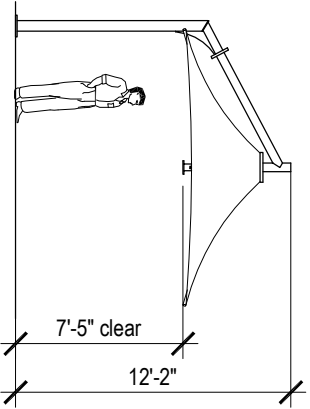
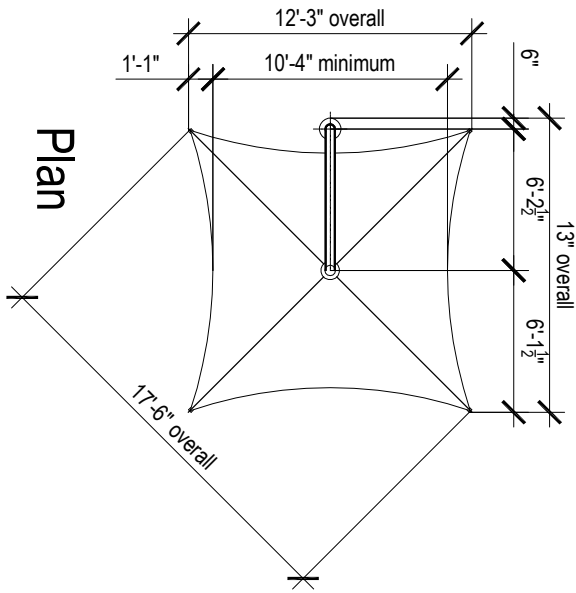


**LEVA SQUARE 12'-6" - LS38**

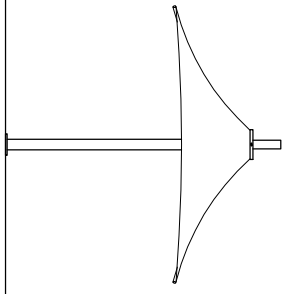
Designed to 90mph, Exp B  
 Rated when umbrella is fully erected.  
 Umbrella weight: 203 lb.  
 Boom weight: 243 lb.

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

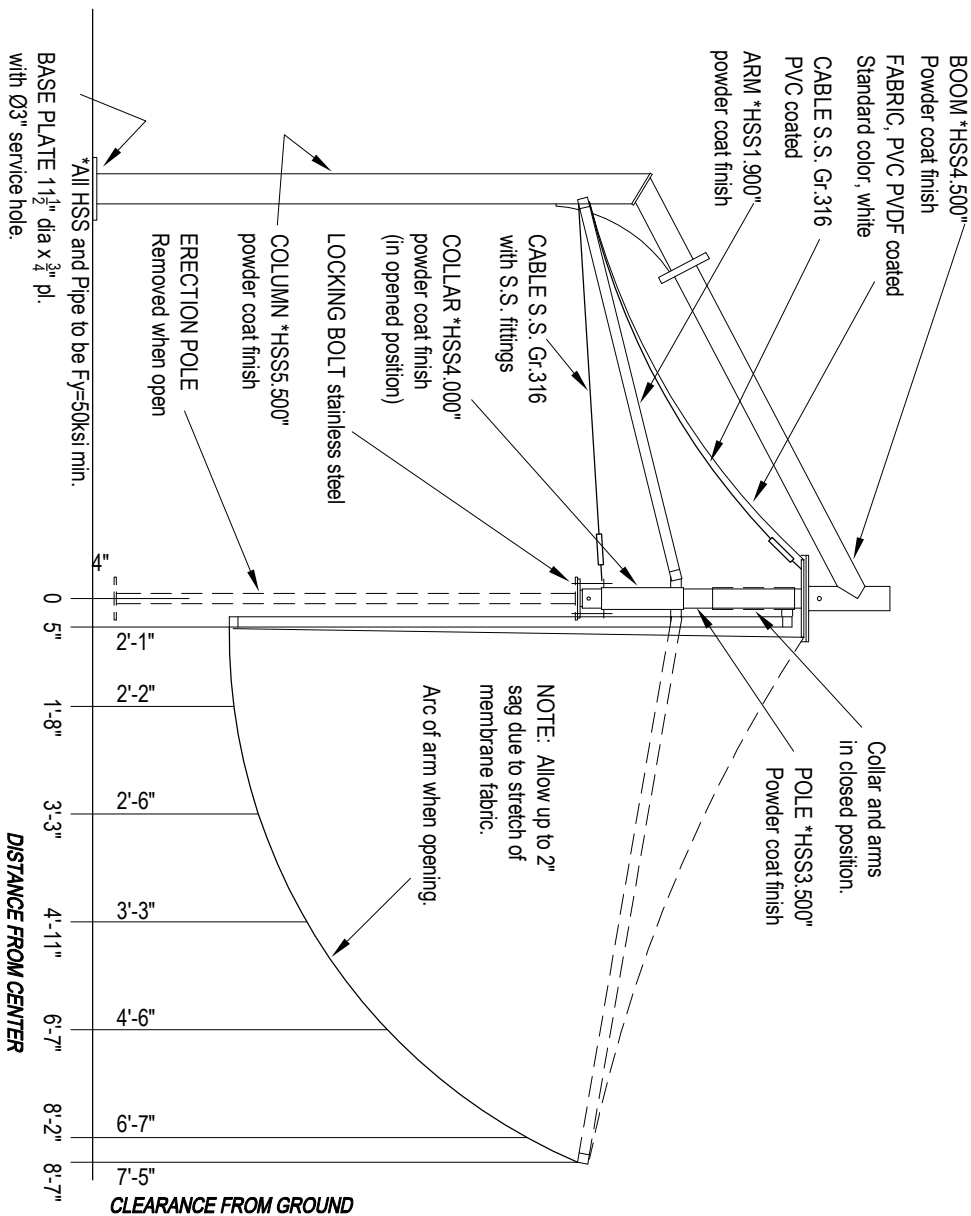
Note : The umbrellas must be closed and tied before wind speeds reach gusts of 60mph (100km/h). Refer note on Specification - Umbrella Design.



Side Elevation



Elevation



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

**OPENED POSITION**

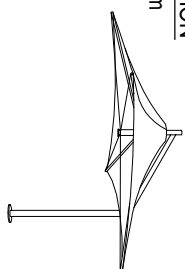
View square to boom

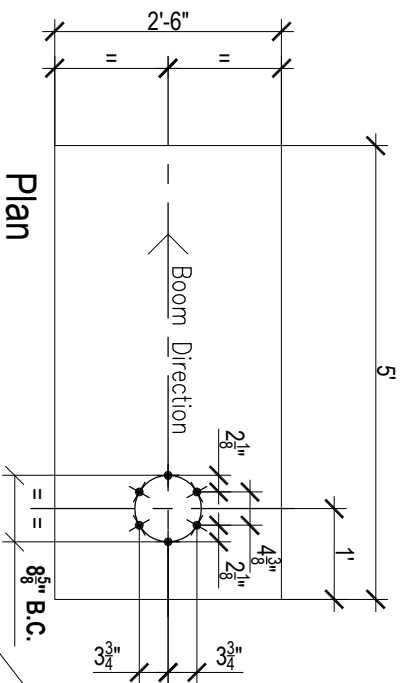
**12'-6" Side Support Square Umbrella**

**Leva - Model LS38**

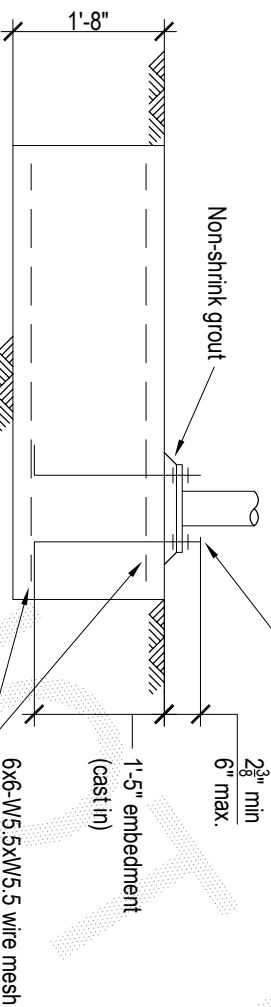
**CLOSED POSITION**

View square to arm



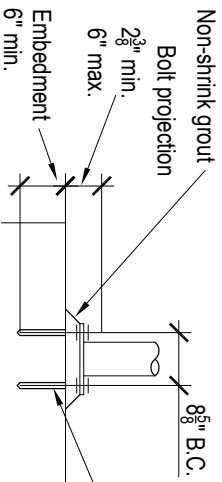


Plan



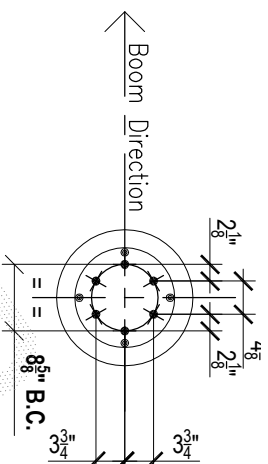
Elevation

### LS38 - Pad Footing

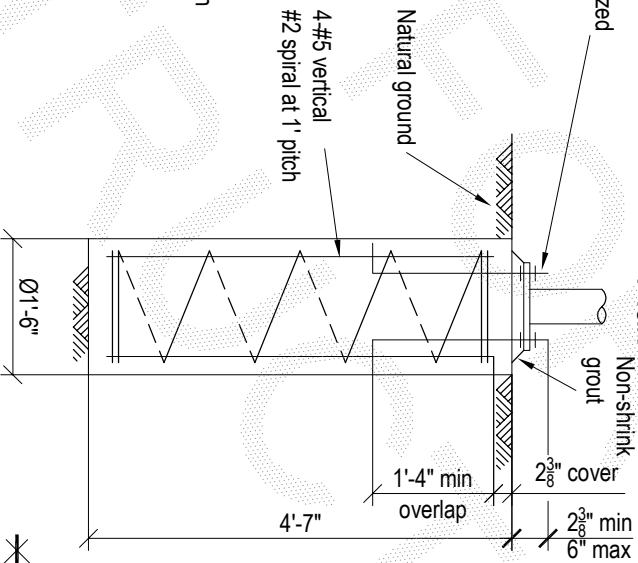


### Chemical Anchor Detail

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

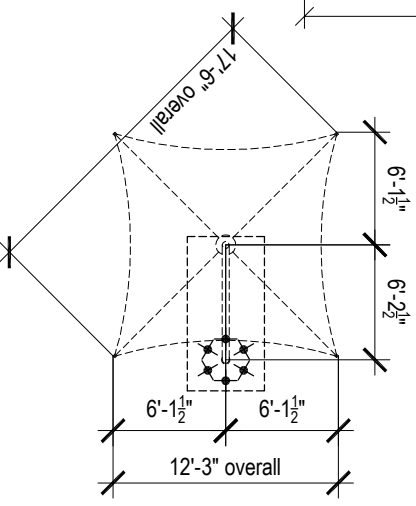


Plan



Elevation

### LS38 - Pier Footing



### H.D. Bolt Layout Plan

Not to scale

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

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

Minimum  $2\frac{3}{8}$ " cover to all reinforcement  
Concrete strength - f'c 3600 psi  
 $\frac{3}{4}$ " aggregate size  
Slump  $2\frac{1}{2}$ "

**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.