DEAD LOAD

Calculate the weight of the parabolic frames assuming 2" dia x $\frac{1}{16}$" wall steel tubing throughout.

Upper chords	34'	}	121'
Lower chords	39'		
diagonals	36'		
T2, T3, T4	12'		
Torsion diagonals (bottom only)	27'	}	51'
Circumferentials (bottom, no rim)	24'		

17 2 feet per truss @ 1.3 lb/ft = 240 lb/truss

This is only 10% of the wind load (2360lb) per truss. Therefore the stresses will be safe and the wind loads may be used for proportioning the hub structure.

Weight of frame 24 @ 240 lb = 5760 lb

Weight of skin 2800 ft^2 @ 1.8 lb/ft^2 ($\frac{1}{8}$" aluminum)

= 5000 lb or 200 lb/truss

[Later we find we can halve weight of skin]