

49 foot Low Profile

This dome is sized to optimize the use of material available in ten foot lengths, so long pieces are paired with short pieces in the table to minimize the use of ten foot pieces.

The tubing recommended is top rail, as used along the tops of chain link fences. The pattern shown in the table below is repeated six times around the circle. Be advised that as of this writing, I have not actually built this dome.

I would recommend bolt diameters of 3/8".

	Chord factor	Radius	strut length	Plus 0.5" on ends	Qty needed	Pair	total length	sum of factors	number required
AB	0.25195	24.5	6.1727	6.2727	6	DF, BC	0.5805	0.7805	6
BB	0.25000	24.5	6.1250	6.2250	6	DF, CE	0.6084	0.8084	6
BC	0.26700	24.5	6.5415	6.6415	6				
BD	0.32370	24.5	7.9307	8.0307	12	BD, EF	0.5842	0.7842	12
CD	0.25882	24.5	6.3411	6.4411	12				
CF	0.36352	24.5	8.9062	9.0062	12	CF, FF	0.6240	0.8240	12
CE	0.29481	24.5	7.2229	7.3229	6	CF, GHI	0.6246	0.8246	6
DF	0.31354	24.5	7.6818	7.7818	12	EG, GHI	0.5932	0.7932	12
EF	0.26047	24.5	6.3816	6.4816	12				
EH	0.40182	24.5	9.8447	9.9447	12	EH, BB	0.6518	0.8518	6
EG	0.33219	24.5	8.1387	8.2387	6	EH, AB	0.6538	0.8538	6
FF	0.26047	24.5	6.3816	6.4816	6				
FH	0.34068	24.5	8.3465	8.4465	12	FH, GHI	0.5995	0.7995	12
FI	0.36488	24.5	8.9396	9.0396	12	FI, CD	0.6237	0.8237	12
GHI	0.26105	24.5	6.3958	6.4958	24				

