Pitched and Tapered Curved Beams
(Curved Length = 1/4 Span)

**This table contains selected spans, roof pitches and loadings. Configurations
and dimensions for these PTC beams are symmetrical about the centerline.**

Total Load	Roof Pitch	40 Ft Span					50 Ft Span				
		Width	End Depth (Plumb)	Centerline Depth	Depth at Tangent	Soffit Radius	Width	End Depth (Plumb)	Centerline Depth	Depth at Tangent	Soffit Radius
plf		in.	in.	in.	in.	ft	in.	in.	in.	in.	ft
400	2/12	5	10	33	28.8	33.3	5	12.5	41 1/2	33.0	68.6
		6 3/4	13 1/2	27 1/2	23.9	22.0	6 3/4	13 1/2	37	29.1	54.4
	3/12	5	10	35 1/2	26.8	24.7	5	12 1/2	44	34.5	26.7
		6 3/4	13 1/2	30	21.0	23.4	6 3/4	13 1/2	39 1/2	29.4	27.1
	4/12	5	10	39	24.8	21.4	5	12 1/2	48	32.8	22.5
		6 3/4	13 1/2	33 1/2	18.5	21.8	6 3/4	13 1/2	43	28.1	21.5
600	2/12	5	15	35	29.3	40.7	6 3/4	14	42	34.0	62.1
		6 3/4	13 1/2	32	28.2	25.8	8 1/2	17	37	30.5	41.8
	3/12	5	15	38	26.0	32.9	6 3/4	14	44 1/2	35.4	25.2
		6 3/4	13 1/2	34 1/2	25.6	23.7	8 1/2	17	39 1/2	29.4	27.0
	4/12	5	15	41 1/2	26.8	21.5	6 3/4	14	48 1/2	32.9	22.9
		6 3/4	13 1/2	38	23.3	21.4	8 1/2	17	43	27.5	22.1
800	2/12	5	19 1/2	36	31.4	29.0	6 3/4	18 1/2	43 1/2	36.7	48.4
		6 3/4	14 1/2	35	29.9	36.6	8 1/2	17	41	35.1	41.2
	3/12	5	19 1/2	42	28.5	36.4	6 3/4	18 1/2	47	33.3	37.6
		6 3/4	14 1/2	38	26.5	31.9	8 1/2	17	43 1/2	34.3	24.4
	4/12	5	19 1/2	48	28.0	29.7	6 3/4	18 1/2	50	34.1	22.8
		6 3/4	14 1/2	41 1/2	25.6	23.5	8 1/2	17	47 1/2	31.5	23.1
1000	2/12	5	23 1/2	40	33.5	41.6	6 3/4	22 1/2	45	37.8	47.8
		6 3/4	18	36	30.5	36.7	8 1/2	18 1/2	43 1/2	37.0	45.9
	3/12	5	26	45 1/2	31.6	36.0	6 3/4	22 1/2	51	35.9	41.0
		6 3/4	18	40 1/2	28.0	33.9	8 1/2	18 1/2	47	33.7	36.4
	4/12	5	29 1/2	50	35.6	24.0	6 3/4	22 1/2	54 1/2	39.4	21.2
		6 3/4	18	46	31.6	21.0	8 1/2	18 1/2	50	34.1	22.8

Table Specifications:

Lamination thickness = 1-3/8 in. Deflection limit = 1/180 of span for total load. Total load includes the weight of the beam. The length of curve on the soffit face of the beam is 1/4 the span length.

Beams shall be laterally supported with adequate bracing along the length at the top and at the bottom at the ends.

Designs are based on uniformly distributed loads using load duration factor for snow loads, C_D = 1.15. Beams

Design values used for the table are F_{bx} = 2400 psi F_{vx} = 200 psi

E_x = 1700000 psi F_{rt} = 67 psi

Span , L, = the distance between centerlines of the bearings. Beam depth/width ratios are approximately 9 to1 for centerline depth and 6 to 1 for tangent point depth.

**While these designs have been prepared in accordance with recognized engineering principles and
are based on accurate technical data available, designs should not be used without competent
professional examination and verification of the accuracy, suitability, and applicability
by a licensed design professional.**