

TYPE L PANEL CAPACITIES

Premier Building Systems utilizes Type L panels when the structural design loads exceed the capacities of our standard Type S and Type I panels. Details PBS-308 and PBS-007, found in the Structural Insulated Panels Details Book, depict the Type L panel and connection. The double 2x's used, as the spline mechanism, must extend the full length of the panel. Premier Building Systems has conducted full-scale destructive transverse load testing with an independent code recognized testing laboratory to determine the capacity of our Type L panels for various spans.

The following load chart summarizes the testing PBS has completed. The minimum bearing that is required to support the panel end is 1-1/2". Loads indicated in the chart for spans greater than limited for floors and roofs are used for wall design.

Premier Panels Type L - Transverse Load Chart											
Panel Core Thickness	Deflection	Panel Span (ft)									
		4	8	10	12	14	16	18	20	22	24
3 1/2"	L/360	98	45	32	24	16	11	NA	NA	NA	NA
	L/240	225	67	47	34	24	16	NA	NA	NA	NA
	L/180	298*	90	61	44	34	22	NA	NA	NA	NA
5 1/2"	L/360	241	128	57	41	32	25	20	15	NA	NA
	L/240	288*	182*	86	60	49	37	29	22	NA	NA
	L/180	288*	182*	112*	79	65	49	39	29	NA	NA
7 1/4"	L/360	241	168	80	65	54	42	33	24	NA	NA
	L/240	288*	188*	126	99	81	61	49	34	NA	NA
	L/180	288*	188*	133*	117*	105	80	62	44	NA	NA
9 1/4"	L/360	274	188*	116	100	80	58	47	36	32	28
	L/240	326*	188*	147*	134*	120	90	70	52	46	41
	L/180	326*	188*	147*	134*	121*	108*	93	68	61	53
11 1/4"	L/360	327*	188*	167*	140	116	90	75	57	47	36
	L/240	327*	188*	167*	153*	132*	110*	97*	83*	69	53
	L/180	327*	188*	167*	153*	132*	110*	97*	83*	83*	70
<i>3 1/2" core panels limited to 12' span for floors and roofs.</i>											
<i>5 1/2" core panels limited to 14' span for floors and roofs.</i>											
<i>7 1/4" core panels limited to 16' span for floors and roofs.</i>											
<i>9 1/4" core panels limited to 20' span for floors and roofs.</i>											
<i>11 1/4" core panels limited to 24' span for floors and roofs.</i>											
<i>Note: * indicates ultimate/3 for the capacity</i>											
<i>Note: 4' span is a minimum two span condition.</i>											
<i>2x's are Hem-Fir #2 or equivalent.</i>											
<i>Panels require a minimum of 1-1/2" of bearing.</i>											