

TYPE S PANEL CAPACITIES

In an effort to offer our customers the optimum in energy efficiency, Premier Building Systems utilizes the Premier spline to connect our structural insulated panels. By utilizing the Premier spline, PBS eliminates material that is not insulation from coming into contact with both the interior and exterior faces of the panels, thereby reducing thermal short circuiting. To determine the capacities of Type S panels, Premier Building Systems has conducted full-scale destructive transverse load testing with a major university and an independent code recognized laboratory.

The following load chart summarizes the testing PBS has completed. Minimum bearing that is required to support the panel end is 1-½". Loads indicated in the chart for spans greater than limited for floors and roofs are used for wall design.

Premier Panels Type S - 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	99	38	28	21	16	10	NA	NA	NA	NA
	L/240	151	54	43	32	24	16	NA	NA	NA	NA
	L/180	154*	61*	57	45	34	21	NA	NA	NA	NA
5 1/2"	L/360	102	49	38	30	24	18	14	11	NA	NA
	L/240	159	78	57	45	32	28	22	16	NA	NA
	L/180	166*	80*	60*	46*	40*	34*	29	21	NA	NA
7 1/4"	L/360	119	59	60	41	34	26	20	15	13	11
	L/240	160*	84	75*	60	50	39	31	23	19	18
	L/180	160*	85*	75*	69*	60*	50*	41	31	27	24
9 1/4"	L/360	138	78	64	53	41	33	27	22	20	17
	L/240	160*	86*	65*	57*	51*	46*	41	34	29	25
	L/180	160*	86*	65*	57*	51*	46*	42*	39*	37*	34
11 1/4"	L/360	115	94*	75	51	49	47	38	28	24	21
	L/240	160*	94*	76*	59*	55*	51*	45*	39*	36	31
	L/180	160*	94*	76*	59*	55*	51*	45*	39*	36*	33*
<i>Note: * indicates ultimate / 3 for the capacity</i>											
<i>3 1/2" & 5 1/2" core panels limited to 12' span for floors and roofs.</i>											
<i>7 1/4" core panels limited to 14' span for floors and roofs.</i>											
<i>9 1/4" & 11 1/4" core panels limited to 16' span for floors and roofs.</i>											
<i>Panels require a minimum of 1-½" of bearing.</i>											