

SHORT SPAN LOAD DESIGN CHART FOR TRANSVERSE HIGH LOAD CONDITIONS

Premier Building Systems has completed full scale transverse load testing of our structural building panels at an independent code recognized testing agency. This testing was designed to determine the transverse load carrying capacities of our panels when subjected to extreme load conditions found in roof and floor applications.

Premier's panels are capable of carrying substantial loads using various methods of connecting the panels; however maximum spans and load carrying capacity are achieved when a double 2x-spline connection is utilized. The detail for this application can be found within the Details Booklet. All panels tested and represented in following Load Design Chart are based on the double 2x connection where all 2x's are continuous through the length of the panel as shown in the details.

Panels with Double 2x's 4' o.c. (Hem-Fir #2)			
EPS Core Thickness	Deflection	4' Span (psf)	8' Span (psf)
3 ½"	L/360	98	45
	L/240	215	67
	L/180	298*	90
5 ½"	L/360	241	128
	L/240	288*	182*
	L/180	288*	182*
7 ¼"	L/360	241	168
	L/240	288*	188*
	L/180	288*	188*
9 ¼"	L/360	274	188*
	L/240	326*	188*
	L/180	326*	188*
11 ¼"	L/360	326*	188*
	L/240	326*	188*
	L/180	326*	188*
* Ultimate load divided by a safety factor of three (3).			
Note: 4' span is a minimum 2 span condition			