

## PREMIER PANELS WITH I-JOIST'S

In an effort to offer our customers the optimum in energy efficiency, Premier Building Systems utilizes APA rated I-Joists in our structural insulated panels. By utilizing the I-Joist spline, PBS minimizes the amount of material that is in contact with both the interior and exterior faces of the panels because only the web of the I-Joist is continuous between the flanges of the I-Joist. 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 I panels for various spans.

The following load chart summarizes the testing PBS has completed. It should be noted that when an I-Joist is used as a spline member it is spaced at 4' on center and extends the full length of the panel. See PBS detail PBS-309, in the PBS Details Book. The minimum bearing required to support the panel ends is 1-1/2". In the case of a single span roof panel, the 2x blocking at the top and bottom of the panel will not be continuous because the I-Joist extends to the panel edges.

Premier Panels Type I Transverse Load Design Chart											
Panel Core Thickness	Deflection	Panel Span (ft)									
		4	8	10	12	14	16	18	20	22	24
7 1/4"	L/360	132	136	93	60	48	40	29	21	19	16
	L/240	318*	148*	107*	91	70	54	42	31	27	23
	L/180	318*	148*	107*	92*	85	54	48	41	36	30
9 1/4"	L/360	197	164*	124*	72	66	61	48	34	29	24
	L/240	318*	164*	124*	107*	96*	84*	70	49	43	36
	L/180	318*	164*	124*	107*	96*	84*	76*	65	56	47
11 1/4"	L/360	258	143*	103*	86	83	77*	61	42	37	32
	L/240	318*	143*	103*	93*	85*	77*	68*	59*	54*	47
	L/180	318*	143*	103*	93*	85*	77*	68*	59*	54*	49*
<i>Note: * indicates ultimate/3 for the capacity</i> <i>4' values based on minimum two span condition</i> <i>I-Joists are spaced 4' on center</i> <i>Panels require a minimum of 1-1/2" of bearing</i>											