

BULLETIN NO.	115
ISSUED:	July 30, 2008
REPLACES:	June 23, 2008

Technical Bulletin

Wall Panel Design Charts (OSB Spline) - US Model Codes

Page 1 of 2

This bulletin provides transverse design loads for the Insulspan® Structural Insulating Panel (SIP) System when used as a component in wall systems designed in accordance with the 2006 International Building Code® and International Residential Code®. Insulspan has completed structural testing of the Insulspan SIP System for this application using a third party testing laboratory following the requirements of ASTM E72, Standard Test Methods of Conducting Strength Tests of Panels for Building Construction.

The attached Wall Panel Design Load Charts dated May 13, 2008 summarize design loads for Insulspan SIP wall panels with OSB spline joint configurations as noted.

- Table W-1-S – Wall Panel Design Load without Axial Load, with 1,000 plf Axial Load and with 2,000 plf Axial Load (OSB Surface Spline or Insulspline)

Contact:

East: 1-800-726-3510

West: 1-866-848-8855

www.insulspan.com

Table W-1-S WALL PANEL DESIGN LOAD (psf)



OSB SURFACE SPLINE OR INSULSPLINE JOINTS											
Thickness		Allowable Deflection	PANEL SPAN (feet)								
SIP	EPS		8	9	10	11	12	13	14	15	16
TRANSVERSE LOAD with AXIAL LOAD = 0 plf											
4 1/2"	3 5/8"	L/240	42	35	29	25	21	-	-	-	-
		L/360	28	23	20	16	14	-	-	-	-
6 1/2"	5 5/8"	L/240	68	60	53	45	38	-	-	-	-
		L/360	52	43	38	30	25	-	-	-	-
8 1/4"	7 3/8"	L/240	75	66	60	54	50	44	39	34	29
		L/360	72	60	50	42	35	31	26	23	19
10 1/4"	9 3/8"	L/240	82	73	66	60	55	49	44	39	34
		L/360	82	73	66	60	54	47	41	36	31
TRANSVERSE LOAD with AXIAL LOAD = 1,000 plf											
4 1/2"	3 5/8"	L/240	30	25	20	-	-	-	-	-	-
		L/360	21	18	15	-	-	-	-	-	-
6 1/2"	5 5/8"	L/240	55	47	39	34	30	-	-	-	-
		L/360	38	33	28	24	20	-	-	-	-
8 1/4"	7 3/8"	L/240	68	61	55	48	41	37	33	-	-
		L/360	51	44	38	33	29	25	22	-	-
10 1/4"	9 3/8"	L/240	68	63	58	55	53	48	44	39	34
		L/360	67	58	50	44	38	34	31	27	24
TRANSVERSE LOAD with AXIAL LOAD = 2,000 plf											
4 1/2"	3 5/8"	L/240	24	20	16	-	-	-	-	-	-
		L/360	18	15	13	-	-	-	-	-	-
6 1/2"	5 5/8"	L/240	42	36	30	25	20	-	-	-	-
		L/360	34	29	25	22	20	-	-	-	-
8 1/4"	7 3/8"	L/240	50	45	40	39	38	31	25	-	-
		L/360	46	40	35	31	28	25	22	-	-
10 1/4"	9 3/8"	L/240	50	45	40	39	38	35	32	29	26
		L/360	50	45	40	38	36	32	29	26	24

Notes:

Revision : May 13, 2008

1. Table indicates transverse design load based upon design objectives as per 2006 International Building Code® and International Residential Code®.
2. **Transverse Design Load** in the table represents maximum specified wind load.
3. **Axial Load** represents maximum specified live plus dead axial load bearing on wall panel, e.g. dead loads due to gravity, live load due to snow, ice and rain from structure above.
4. Insulspan SIP System must be assembled as per Insulspan Installation Guide and recommended assembly details.
5. Insulspan SIP skins are nailed to the OSB splines at vertical panel joints using minimum 8d (0.113"x2.5") @ 6" o.c.
6. Insulspan SIP System core material is molded expanded polystyrene (EPS) insulation complying with the requirements of ASTM C 578, type I.
7. Insulspan SIP System exterior skins are minimum 7/16" thick structural grade oriented strand board (OSB) conforming to DOC PS2, exposure 1.