LAMIT INDUSTRIES, INC. DESIGN LOAD CHARTS

Load charts contained in this manual are valid for structural insulated panels (SIPs) manufactured by Lamit Industries, Inc., Columbus, Ohio using APA 24/16 rated oriented strand board (OSB) facings of 7/16" thickness and expanded polystyrene (EPS) core of 0.95 pcf minimum density. The charts contained herein are based on established engineering theory for sandwich panel construction, with physical properties of materials verified by standard equivalency tests performed on the product. Standard properties and allowable stresses for No. 2 graded dimensional lumber and laminated veneer lumber (LVL) are considered for panels reinforced with such members. The following charts are valid for use in design of SIP structures:

Design Chart # 1:	Lamit Basic S.I.P. Properties
Design Load Table # 2A:	Allowable Uniform Transverse Loads (Roofs and Floors) using OSB surface splines
Design Load Table # 2B:	Allowable Uniform Transverse Loads (Walls) using OSB surface splines
Design Load Table # 3:	Allowable Uniform Transverse Loads (Walls, Roofs, and Floors) using single dimensional lumber splines
Design Load Table # 4A:	Allowable Uniform Transverse Loads (Roofs, and Floors) using single 1.9E Microlam splines
Design Load Table # 4B:	Allowable Uniform Transverse Loads (Walls) using single 1.9E Microlam splines
Design Load Table # 5:	Allowable Uniform Transverse Loads (Walls, Roofs, and Floors) using double dimensional lumber splines
Design Load Table # 6:	Allowable Uniform Axial Loads using OSB surface splines
Design Load Table # 7A:	Allowable Axial Loads with Transverse Load Interaction using OSB surface splines - L/180 Deflection
Design Load Table # 7B:	Allowable Axial Loads with Transverse Load Interaction using OSB surface splines - L/240 Deflection
Design Load Table # 8:	Allowable Uniform Header Loads - Panels 4 1/2" thru 12 1/4" thick – PLF

Minimum design loads shall be determined for the building in accordance with the governing local building code or other recognized standard. The competent designer of the structure must assume final responsibility for proper application of these charts to the design and end construction of the building.

DESIGN CHART # 1: Lamit Basic S.I.P Properties

LAMIT S.I.P. PROPERTIES - WEAK AXIS ORIENTED PARALLEL TO SPAN

Panel Thickness	Weight per Sq. Ft.	Core Thickness	Facing Area	Moment of Inertia	Section Modulus	Elastic Modulus	Shear Modulus	Shear Strength	Radius of Gyration	Allowable Compression	Allowable Tension	Allowable Flexural
inches	PSF	inches	inches^2	I inches^4	S inches^3	E psi	G psi	Fv psi	r inches	Fc psi	Ft psi	Fb psi
4 1/2"	3.17	3.625	10.5	43.49	19.33	771,000	300	6.67	2.035	355	245	245
6 1/2"	3.33	5.625	10.5	96.65	29.74	771,000	300	6.67	3.034	355	245	245
8 1/4"	3.47	7.375	10.5	160.38	38.88	771,000	300	6.67	3.908	355	245	245
10 1/4"	3.64	9.375	10.5	252.92	49.35	771,000	300	6.67	4.908	355	245	245
12 1/4"	3.81	11.375	10.5	366.45	59.83	771,000	300	6.67	5.908	355	245	245

LAMIT S.I.P. PROPERTIES - STRONG AXIS ORIENTED PARALLEL TO SPAN

Panel Thickness	Weight per Sq. Ft.	Core Thickness	Facing Area	Moment of Inertia	Section Modulus	Elastic Modulus	Shear Modulus	Shear Strength	Radius of Gyration	Allowable Compression	Allowable Tension	Allowable Flexural
T inches	PSF	inches	inches^2	I inches^4	S inches^3	E psi	G psi	Fv psi	r inches	Fc psi	Ft psi	Fb psi
4 1/2"	3.17	3.625	10.5	43.49	19.33	760,000	440	6.67	2.035	575	495	495
6 1/2"	3.33	5.625	10.5	96.65	29.74	760,000	440	6.67	3.034	575	495	495
8 1/4"	3.47	7.375	10.5	160.38	38.88	760,000	440	6.67	3.908	575	495	495
10 1/4"	3.64	9.375	10.5	252.92	49.35	760,000	440	6.67	4.908	575	495	495
12 1/4"	3.81	11.375	10.5	366.45	59.83	760,000	440	6.67	5.908	575	495	495

DESIGN LOAD TABLE # 2A:	Allowable Uniform Transverse Loads (Roofs and Floors) - Using O.S.B. Surface Splines

PANEL SPAN	4 1/2" Thick S.I.P.			6 1/2" Thick S.I.P.			8 1/4" Thick S.I.P.			10 1/4" Thick S.I.P.			12 1/4" Thick S.I.P.		
	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360
4'-0	147	110	74												
5'-0	112	84	56	175	131	87									
6'-0	88	66	44	135	105	70	161	139	93	180	179	119			
7'-0	64	53	35	99	86	57	130	115	76	146	146	99	161	161	122
8'-0	49	43	29	76	71	47	99	96	64	123	123	84	134	134	103
9'-0	59	44	30	90	78	52	97	97	72	106	106	96	115	115	115
10'-0	48	36	24	79	65	43	86	86	61	93	93	82	100	100	100
11'-0	40	30	20	71	54	36	77	77	52	83	83	70	89	89	89
12'-0	33	25	17	61	46	31	70	66	44	75	75	61	80	80	78
13'-0	28	21	14	52	39	26	64	57	38	69	69	53	73	73	68
14'-0	23	18	12	45	33	22	59	49	33	63	63	46	67	67	60
15'-0	20	15	10	38	29	19	55	43	29	58	58	40	62	62	53
16'-0	17	13	9	33	25	17	50	37	25	54	53	35	57	57	47
17'-0				29	22	14	44	33	22	51	47	31	53	53	41
18'-0				25	19	13	39	29	19	48	42	28	50	50	37
19'-0				22	17	11	34	26	17	45	37	25	47	47	33
20'-0				20	15	10	30	23	15	41	33	22	45	44	30
21'-0							27	20	13	37	30	20	42	40	27
22'-0							24	18	12	34	27	18	40	36	24
23'-0							22	16	11	31	24	16	37	33	22
24'-0							19	15	10	28	22	14	34	30	20

1. Color code GREEN indicates span controlled by deflection criteria. Color code PINK indicates span contolled by panel ultimate strength (safety factor = 3).
2. Listed values for spans 8'-0 or less are for weak axis panel orientation. Contact Lamit for strength increase possiblility using strong axis panel orientation.
3. For roof applications, listed values are the total combined transverse load (dead+live+snow). Refer to Table # 1 for dead load weight of panels.
4. For floor applications, listed values are the total combined transverse load (dead+live). Refer to Table # 1 for dead load weight of panels.
5. Deflection criteria shall be as determined by the designer based on serviceability requirements and/or requirements of the local building code.
6. Listed values for spans controlled by deflection (GREEN) are for short duration loading, not considering any effects of "creep" due to long term loads.

DESIGN LOAD TABLE # 2B:	Allowable Uniform Transverse Loads (Walls) - Using O.S.B. Surface Splines

PANEL	4 1/2" Thick S.I.P.			6 1/2" Thick S.I.P.			8 1/4" Thick S.I.P.			10 1/4" Thick S.I.P.			12 1/4" Thick S.I.P.		
SPAN	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360
4'-0	140	110	74	152	152	113	160	160	148	166	166	166	172	172	172
5'-0	112	84	56	122	122	87	128	128	115	133	133	133	138	138	138
6'-0	88	66	44	102	102	70	107	107	93	111	111	111	115	115	115
7'-0	64	53	35	87	86	57	91	91	76	95	95	95	98	98	98
8'-0	49	43	29	76	71	47	80	80	64	83	83	83	86	86	86
9'-0	59	44	30	68	68	52	71	71	71	74	74	74	76	76	76
10'-0	48	36	24	61	61	43	64	64	61	67	67	67	69	69	69
11'-0	40	30	20	55	54	36	58	58	52	61	61	61	63	63	63
12'-0	33	25	17	51	46	31	53	53	44	55	55	55	57	57	57
13'-0	28	21	14	47	39	26	49	49	38	51	51	51	53	53	53
14'-0	23	18	12	44	33	22	46	46	33	48	48	46	49	49	49
15'-0	20	15	10	38	29	19	43	43	29	44	44	40	46	46	46
16'-0	17	13	9	33	25	17	40	37	25	42	42	35	43	43	43
17'-0				29	22	14	38	33	22	39	39	31	40	40	40
18'-0				25	19	13	36	29	19	37	37	28	38	38	37
19'-0				22	17	11	34	26	17	35	35	25	36	36	33
20'-0				20	15	10	30	23	15	33	33	22	34	34	30
21'-0							27	20	13	32	30	20	33	33	27
22'-0							24	18	12	30	27	18	31	31	24
23'-0							22	16	11	29	24	16	30	30	22
24'-0							19	15	10	28	22	14	29	29	20

1. Color code GREEN indicates span controlled by deflection criteria. Color code PINK indicates span contolled by panel ultimate strength (safety factor = 3).
2. Listed values for spans 8'-0 or less are for weak axis panel orientation. Contact Lamit for strength increase possiblility using strong axis panel orientation.
3. Listed values for wall loads are the allowable applied wind load only with axial load interaction not taken into consideration. See table 7A & 7B for combined loading.
4. Deflection criteria shall be as determined by the designer based on serviceability requirements and/or requirements of the local building code.
5. Wall applications require panel secured to 1.5" end plate using 8d nails @ 6" o.c. spacing both sides (Cv=0.86).

DESIGN LOAD TABLE # 3:	Allowable Uniform Transverse Loads (Walls, Roofs and Floors) - Using Single Lumber Splines

PANEL	4 1/2" Thick S.I.P.			6 1/2" Thick S.I.P.			8 1/4" Thick S.I.P.			10 1/4" Thick S.I.P.			12 1/4" Thick S.I.P.		
SPAN	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360
4'-0	111	111	111	175	175	175									
5'-0	91	91	81	133	133	133	185	185	185						
6'-0	79	79	59	109	109	109	146	146	146	194	194	194			
7'-0	70	67	44	93	93	93	121	121	121	161	161	161	196	196	196
8'-0	60	52	35	82	82	71	104	104	104	135	135	135	173	173	173
9'-0	68	51	34	88	88	69	108	108	108	135	135	135	167	167	167
10'-0	55	41	27	79	79	55	97	97	89	120	120	120	146	146	146
11'-0	45	33	22	71	68	45	87	87	73	107	107	107	130	130	130
12'-0	37	28	18	65	57	38	79	79	61	97	97	95	117	117	117
13'-0	31	23	15	59	47	32	72	72	51	88	88	79	106	106	106
14'-0	26	19	13	54	40	27	66	65	43	80	80	67	96	96	96
15'-0	22	16	11	46	34	23	60	55	37	73	73	58	88	88	84
16'-0	19	14	9	39	29	20	55	48	32	68	68	50	81	81	72
17'-0				34	26	17	51	41	28	62	62	43	75	75	63
18'-0				30	22	15	47	36	24	58	57	38	69	69	55
19'-0				26	19	13	42	32	21	54	50	33	64	64	48
20'-0				23	17	11	37	28	19	50	44	29	60	60	43
21'-0							33	25	17	47	39	26	56	56	38
22'-0							29	22	15	43	35	23	52	51	34
23'-0							26	20	13	40	31	21	49	46	30
24'-0							24	18	12	37	28	19	46	41	27

1. Color code GREEN indicates span controlled by deflection criteria. Color code PINK indicates span contolled by panel ultimate strength (safety factor = 3).
2. Color code TAN indicates span controlled by allowable stress on dimensional lumber spline (design values for repetitive member use).
3. Load values for spans 8'-0 or less are for weak axis or strong axis panel orientation (which ever case is most critical).
4. For wall applications, listed values are the allowable applied wind load only with axial load interaction not taken into consideration.
5. For roof applications, listed values are the total combined transverse load (dead+live+snow). Refer to Table # 1 for dead load weight of panels.
6. For floor applications, listed values are the total combined transverse load (dead+live). Refer to Table # 1 for dead load weight of panels.
7. Deflection criteria shall be as determined by the designer based on serviceability requirements and/or requirements of the local building code.
8. Load values for spans controlled by deflection (GREEN) are for short duration loading, not considering any effects of "creep" due to long term loads.
9. Wall applications require panel secured to 1.5" end plate using 8d nails @ 6" o.c. spacing both sides.
10. All edges of panel facings (both sides) must be secured to dimensional lumber spline using 8d nails @ 6" o.c.
11. Load chart is based on single dimensional lumber spline of No. 2 Grade Southern "Yellow" Pine spaced at 4'-0 o.c. maximum.
12. Load chart only valid if dimensional lumber spline runs full length of panel (un-broken and unspliced).

DESIGN LOAD TABLE # 4A:	Allowable Uniform Transverse Loads (Roofs and Floors) - Using Single 1.9E Microlam Splines

PANEL SPAN	4 1/2" Thick S.I.P.			6 1/2" Thick S.I.P.			8 1/4" Thick S.I.P.			10 1/4" Thick S.I.P.			12 1/4" Thick S.I.P.		
	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360
4'-0	Spline Size Not Available														
5'-0	↓	↓	↓	279	279	224									
6'-0				222	222	149	299	299	274						
7'-0				186	160	107	242	242	191						
8'-0				129	121	81	204	204	141	267	267	243			
9'-0				130	113	75	170	170	126	229	229	208			
10'-0				111	90	60	142	142	100	186	186	163	242	242	242
11'-0				97	73	49	121	121	81	156	156	131	199	199	199
12'-0				81	61	40	106	100	67	134	134	108	168	168	163
13'-0				68	51	34	94	84	56	117	117	90	144	144	135
14'-0				57	43	29	85	71	47	104	104	76	127	127	113
15'-0				49	36	24	77	60	40	93	93	64	113	113	96
16'-0				42	31	21	69	52	35	85	83	55	101	101	82
17'-0				36	27	18	60	45	30	77	72	48	92	92	71
18'-0				31	23	16	52	39	26	71	62	42	84	84	62
19'-0				27	20	14	46	34	23	66	55	37	78	78	54
20'-0				24	18	12	40	30	20	60	48	32	72	72	48
21'-0							35	27	18	53	43	29	67	64	42
22'-0							31	24	16	48	38	25	63	57	38
23'-0							28	21	14	44	34	23	58	51	34
24'-0							25	19	13	40	30	20	53	45	30

1. Color code GREEN indicates span controlled by deflection criteria. Color code PINK indicates span contolled by panel ultimate strength (safety factor = 3).
2. Color code TAN indicates span controlled by allowable stress on Microlam spline (design values per Truss Joist MacMillan).
3. Load values for spans 8'-0 or less are for weak axis or strong axis panel orientation (which ever case is most critical).
4. For roof applications, listed values are the total combined transverse load (dead+live+snow). Refer to Table # 1 for dead load weight of panels.
5. For floor applications, listed values are the total combined transverse load (dead+live). Refer to Table # 1 for dead load weight of panels.
6. Deflection criteria shall be as determined by the designer based on serviceability requirements and/or requirements of the local building code.
7. Load values for spans controlled by deflection (GREEN) are for short duration loading, not considering any effects of "creep" due to long term loads.
8. All edges of panel facings (both sides) must be secured to Microlam spline using 8d nails @ 6" o.c.
9. Load chart is based on single Microlam spline Class 1.9E, spaced at 4'-0 o.c. maximum.
10. Load chart only valid if Microlam spline runs full length of panel (un-broken and unspliced).
11. Load chart NOT valid for wall applications (See chart # 4B).

DESIGN LOAD TABLE # 4B:	Allowable Uniform Transverse Loads (Walls) - Using Single 1.9E Microlam Splines

PANEL SPAN	4 1/2" Thick S.I.P.			6 1/2" Thick S.I.P.			8 1/4" Thick S.I.P.			10 1/4" Thick S.I.P.			12 1/4" Thick S.I.P.		
	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360
4'-0	Spline Size Not Available														
5'-0	↓	↓	↓	279	279	224									
6'-0				222	222	149	299	299	274						
7'-0				186	160	107	242	242	191						
8'-0				129	121	81	204	204	141	267	267	243			
9'-0				112	112	75	146	146	126	197	197	197	263	263	263
10'-0				95	90	60	122	122	100	160	160	160	208	208	208
11'-0				83	73	49	104	104	81	134	134	131	171	171	171
12'-0				74	61	40	91	91	67	115	115	108	144	144	144
13'-0				66	51	34	81	81	56	100	100	90	124	124	124
14'-0				57	43	29	73	71	47	89	89	76	109	109	109
15'-0				49	36	24	66	60	40	80	80	64	97	97	96
16'-0				42	31	21	61	52	35	73	73	55	87	87	82
17'-0				36	27	18	56	45	30	67	67	48	79	79	71
18'-0				31	23	16	52	39	26	61	61	42	72	72	62
19'-0				27	20	14	46	34	23	57	55	37	67	67	54
20'-0				24	18	12	40	30	20	53	48	32	62	62	48
21'-0							35	27	18	50	43	29	58	58	42
22'-0							31	24	16	47	38	25	54	54	38
23'-0							28	21	14	44	34	23	51	51	34
24'-0							25	19	13	40	30	20	48	45	30

1. Color code GREEN indicates span controlled by deflection criteria. Color code PINK indicates span contolled by panel ultimate strength (safety factor = 3).
2. Color code TAN indicates span controlled by allowable stress on Microlam spline (design values per Truss Joist MacMillan).
3. Load values for spans 8'-0 or less are for weak axis or strong axis panel orientation (which ever case is most critical).
4. For wall applications, listed values are the allowable applied wind load only with axial load interaction not taken into consideration.
5. Deflection criteria shall be as determined by the designer based on serviceability requirements and/or requirements of the local building code.
6. Wall applications require panel secured to 1.5" end plate using 8d nails @ 6" o.c. spacing both sides (Cv=0.86).
7. All edges of panel facings (both sides) must be secured to Microlam spline using 8d nails @ 6" o.c.
8. Load chart is based on single Microlam spline Class 1.9E, spaced at 4'-0 o.c. maximum.
9. Load chart only valid if Microlam spline runs full length of panel (un-broken and unspliced).

DESIGN LOAD TABLE # 5:	Allowable Uniform Transverse Loads (Walls, Roofs and Floors) - Using Double Dimensional Lumber Splines

PANEL	4 1/2" Thick S.I.P.			6 1/2" Thick S.I.P.			8 1/4" Thick S.I.P.			10 1/4" Thick S.I.P.			12 1/4" Thick S.I.P.		
SPAN	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360
4'-0	155	155	155	285	285	285									
5'-0	120	120	107	204	204	204									
6'-0	99	99	73	158	158	158	231	231	231						
7'-0	84	81	54	129	129	129	183	183	183	263	263	263			
8'-0	71	62	41	109	109	96	151	151	151	213	213	213	288	288	288
9'-0	77	58	38	110	110	86	146	146	146	197	197	197	258	258	258
10'-0	61	46	31	97	97	68	127	127	117	170	170	170	220	220	220
11'-0	49	37	25	86	82	55	112	112	94	148	148	148	191	191	191
12'-0	40	30	20	77	67	45	100	100	77	131	131	129	168	168	168
13'-0	34	25	17	69	56	37	90	90	64	117	117	106	149	149	149
14'-0	28	21	14	63	47	31	81	80	53	106	106	89	134	134	134
15'-0	24	18	12	53	40	27	74	68	45	96	96	75	121	121	115
16'-0	20	15	10	45	34	23	67	58	39	87	87	64	110	110	98
17'-0				39	29	20	62	50	33	80	80	55	100	100	84
18'-0				34	25	17	57	43	29	73	72	48	92	92	73
19'-0				30	22	15	51	38	25	67	63	42	85	85	64
20'-0				26	19	13	44	33	22	62	55	37	78	78	56
21'-0							39	29	20	58	49	32	73	73	49
22'-0							35	26	17	54	43	29	67	66	44
23'-0							31	23	15	49	38	26	63	59	39
24'-0							28	21	14	45	34	23	59	52	35

1. Color code GREEN indicates span controlled by deflection criteria. Color code PINK indicates span contolled by panel ultimate strength (safety factor = 3).
2. Color code TAN indicates span controlled by allowable stress on dimensional lumber spline (design values for repetitive member use).
3. Load values for spans 8'-0 or less are for weak axis or strong axis panel orientation (which ever case is most critical).
4. For wall applications, listed values are the allowable applied wind load only with axial load interaction not taken into consideration.
5. For roof applications, listed values are the total combined transverse load (dead+live+snow). Refer to Table # 1 for dead load weight of panels.
6. For floor applications, listed values are the total combined transverse load (dead+live). Refer to Table # 1 for dead load weight of panels.
7. Deflection criteria shall be as determined by the designer based on serviceability requirements and/or requirements of the local building code.
8. Load values for spans controlled by deflection (GREEN) are for short duration loading, not considering any effects of "creep" due to long term loads.
9. Wall applications require panel secured to 1.5" end plate using 8d nails @ 6" o.c. spacing both sides.
10. All edges of panel facings (both sides) must be secured to dimensional lumber spline using 8d nails @ 6" o.c.
11. Load chart is based on double dimensional lumber spline of No. 2 Grade Southern "Yellow" Pine spaced at 4'-0 o.c. maximum.
12. Load chart only valid if dimensional lumber spline runs full length of panel (un-broken and unspliced).

DESIGN LOAD TABLE # 6:	Allowable Uniform Axial Loads - Using O.S.B. Surface Splines				
PANEL SPAN	**4 1/2" Thick S.I.P.**	**6 1/2" Thick S.I.P.**	**8 1/4 Thick S.I.P.**	**10 1/4" Thick S.I.P.**	**12 1/4" Thick S.I.P.**
4'-0	**2577**	**2660**	**2694**	**2717**	**2732**
5'-0	**2547**	**2647**	**2686**	**2712**	**2728**
6'-0	**2510**	**2631**	**2677**	**2706**	**2724**
7'-0	**2466**	**2611**	**2665**	**2699**	**2719**
8'-0	**2413**	**2589**	**2652**	**2690**	**2713**
9'-0	**3504**	**4016**	**4191**	**4293**	**4350**
10'-0	**3323**	**3934**	**4144**	**4264**	**4330**
11'-0	**3130**	**3842**	**4090**	**4231**	**4308**
12'-0	**2929**	**3741**	**4031**	**4194**	**4284**
13'-0	**2726**	**3630**	**3965**	**4154**	**4257**
14'-0	**2526**	**3510**	**3894**	**4110**	**4227**
15'-0	**2322**	**3382**	**3816**	**4063**	**4195**
16'-0	**2120**	**3249**	**3732**	**4011**	**4161**
17'-0		**3111**	**3643**	**3955**	**4124**
18'-0		**2970**	**3548**	**3896**	**4084**
19'-0		**2829**	**3448**	**3832**	**4041**
20'-0		**2689**	**3345**	**3765**	**3996**
21'-0			**3238**	**3694**	**3948**
22'-0			**3128**	**3619**	**3897**
23'-0			**3017**	**3541**	**3843**
24'-0			**2906**	**3461**	**3787**

1. Allowable load capacity for spans 8'-0 or less are for weak axis panel orientation. Contact Lamit for strength increase using strong axis panel orientation.
2. Listed values are for normal duration loading. Allowable capacity for permanent duration loading is 50% of the above listed values.
3. Ends of both facings must bear solidly on supporting foundation or other structure below to achieve listed values.
4. Listed load capacities are based on concentric application of load to top of panels (load bearing off center no more than 1/6 of the panel thickness).
5. Listed load capacities are based on uniformly applied loads or loads applied through repetitive joists, rafters, or trusses spaced no more than 24" o.c.
6. Listed load capacities are for pure axial loading only with transverse load interaction not taken into consideration.

DESIGN LOAD TABLE # 7A:	Allowable Axial Loads with Transverse Load Interaction - Using O.S.B. Surface Splines - L/180 Deflection

PANEL SPAN	4 1/2" Thick S.I.P.			6 1/2" Thick S.I.P.			8 1/4" Thick S.I.P.			10 1/4" Thick S.I.P.			12 1/4" Thick S.I.P.		
	TRANSVERSE WIND LOAD (PSF)			TRANSVERSE WIND LOAD (PSF)			TRANSVERSE WIND LOAD (PSF)			TRANSVERSE WIND LOAD (PSF)			TRANSVERSE WIND LOAD (PSF)		
	15	20	25	15	20	25	15	20	25	15	20	25	15	20	25
4'-0	2302	2210	2118	2398	2311	2223	2441	2357	2273	2472	2391	2309	2494	2414	2335
5'-0	2205	2091	1977	2321	2213	2104	2371	2266	2161	2407	2305	2203	2430	2331	2232
6'-0	2081	1938	1794	2243	2113	1984	2300	2174	2049	2340	2218	2097	2367	2249	2130
7'-0	1892	1700	1509	2161	2011	1862	2227	2081	1935	2273	2131	1989	2304	2165	2027
8'-0	1679	1434	1189	2077	1907	1736	2154	1988	1822	2205	2043	1882	2240	2082	1924
9'-0	2617	2321	2025	3126	2830	2533	3306	3010	2715	3423	3133	2843	3496	3211	2927
10'-0	2291	1947	1603	2965	2642	2319	3171	2847	2523	3304	2984	2663	3386	3071	2757
11'-0	1950	1557	1164	2802	2455	2108	3034	2682	2330	3182	2832	2483	3274	2929	2585
12'-0	1601	1158	715	2636	2268	1900	2897	2518	2140	3060	2683	2305	3163	2789	2415
13'-0	1251	760	268	2469	2082	1695	2756	2353	1950	2937	2531	2126	3050	2648	2245
14'-0	908	369	0	2300	1896	1493	2616	2190	1764	2815	2383	1951	2936	2505	2075
15'-0	574	0	0	2060	1620	1179	2472	2024	1577	2690	2233	1775	2821	2363	1905
16'-0	256	0	0	1784	1295	807	2333	1866	1400	2565	2083	1601	2709	2226	1742
17'-0	0	0	0	1500	963	426	2190	1705	1221	2442	1937	1433	2593	2082	1572
18'-0	0	0	0	1213	627	41	2049	1549	1049	2317	1790	1264	2480	1946	1411
19'-0	0	0	0	925	290	0	1909	1396	883	2194	1649	1103	2367	1808	1250
20'-0	0	0	0	639	0	0	1686	1133	580	2069	1504	938	2254	1673	1092
21'-0	0	0	0	358	0	0	1436	836	235	1946	1363	781	2137	1533	930
22'-0	0	0	0	83	0	0	1182	533	0	1827	1230	633	2029	1407	784
23'-0	0	0	0	0	0	0	925	227	0	1709	1099	488	1915	1272	630
24'-0	0	0	0	0	0	0	667	0	0	1587	962	337	1808	1148	488

1. Listed values are the allowable applied axial load with combined transverse wind load as indicated.
2. Color code GREEN indicates span controlled by deflection criteria. Color code PINK indicates span contolled by panel ultimate strength (safety factor = 3).
3. Load values for spans 8'-0 or less are for weak axis panel orientation. Contact Lamit for strength increase due to strong axis panel orientation.
4. Deflection criteria indicated shall be approved by the designer based on serviceability requirements and/or requirements of the local building code.
5. Load values are for short duration loading, not considering any effects of "creep" due to long term loads.
6. Wall applications require panel secured to 1.5" end plate using 8d nails @ 6" o.c. spacing both sides.
7. A zero "0" value indicates that no axial load may be applied. Panel span exceeds or is at maximum allowable capacity under the transverse wind load indicated.

DESIGN LOAD TABLE # 7B:	Allowable Axial Loads with Transverse Load Interaction - Using O.S.B. Surface Splines - L/240 Deflection

PANEL SPAN	4 1/2" Thick S.I.P. TRANSVERSE WIND LOAD (PSF)			6 1/2" Thick S.I.P. TRANSVERSE WIND LOAD (PSF)			8 1/4" Thick S.I.P. TRANSVERSE WIND LOAD (PSF)			10 1/4" Thick S.I.P. TRANSVERSE WIND LOAD (PSF)			12 1/4" Thick S.I.P. TRANSVERSE WIND LOAD (PSF)		
	15	20	25	15	20	25	15	20	25	15	20	25	15	20	25
4'-0	2227	2110	1993	2398	2311	2223	2441	2357	2273	2472	2391	2309	2494	2414	2335
5'-0	2091	1939	1787	2321	2213	2104	2371	2266	2161	2407	2305	2203	2430	2331	2232
6'-0	1938	1747	1556	2243	2113	1984	2300	2174	2049	2340	2218	2097	2367	2249	2130
7'-0	1765	1531	1297	2153	2000	1848	2227	2081	1935	2273	2131	1989	2304	2165	2027
8'-0	1570	1290	1009	2042	1860	1677	2154	1988	1822	2205	2043	1882	2240	2082	1924
9'-0	2321	1926	1532	3126	2830	2533	3306	3010	2715	3423	3133	2843	3496	3211	2927
10'-0	1947	1489	1030	2965	2642	2319	3171	2847	2523	3304	2984	2663	3386	3071	2757
11'-0	1557	1033	508	2778	2423	2069	3034	2682	2330	3182	2832	2483	3274	2929	2585
12'-0	1158	568	0	2516	2108	1699	2897	2518	2140	3060	2683	2305	3163	2789	2415
13'-0	760	104	0	2234	1768	1303	2756	2353	1950	2937	2531	2126	3050	2648	2245
14'-0	369	0	0	1934	1409	884	2616	2190	1764	2815	2383	1951	2936	2505	2075
15'-0	0	0	0	1620	1033	445	2472	2024	1577	2690	2233	1775	2821	2363	1905
16'-0	0	0	0	1295	644	0	2234	1735	1236	2565	2083	1601	2709	2226	1742
17'-0	0	0	0	963	247	0	1976	1421	865	2442	1937	1433	2593	2082	1572
18'-0	0	0	0	627	0	0	1705	1091	477	2317	1790	1264	2480	1946	1411
19'-0	0	0	0	290	0	0	1424	749	74	2194	1649	1103	2367	1808	1250
20'-0	0	0	0	0	0	0	1133	396	0	2053	1483	912	2254	1673	1092
21'-0	0	0	0	0	0	0	836	35	0	1819	1194	569	2137	1533	930
22'-0	0	0	0	0	0	0	533	0	0	1574	893	211	2029	1407	784
23'-0	0	0	0	0	0	0	227	0	0	1321	581	0	1915	1272	630
24'-0	0	0	0	0	0	0	0	0	0	1059	259	0	1808	1148	488

1. Listed values are the allowable applied axial load with combined transverse wind load as indicated.
2. Color code GREEN indicates span controlled by deflection criteria. Color code PINK indicates span contolled by panel ultimate strength (safety factor = 3).
3. Load values for spans 8'-0 or less are for weak axis panel orientation. Contact Lamit for strength increase due to strong axis panel orientation.
4. Deflection criteria indicated shall be approved by the designer based on serviceability requirements and/or requirements of the local building code.
5. Load values are for short duration loading, not considering any effects of "creep" due to long term loads.
6. Wall applications require panel secured to 1.5" end plate using 8d nails @ 6" o.c. spacing both sides.
7. A zero "0" value indicates that no axial load may be applied. Panel span exceeds or is at maximum allowable capacity under the transverse wind load indicated.

DESIGN LOAD TABLE # 8:	Allowable Uniform Header Loads - Panels 4 1/2" thru 12 1/4" Thick - PLF

HEADER SPAN	12" DEEP HEADER			18" DEEP HEADER			24" DEEP HEADER		
	L/240	L/360	L/480	L/240	L/360	L/480	L/240	L/360	L/480
4'-0	742	742	742	751	751	751	812	812	812
5'-0	594	594	594	601	601	601	650	650	650
6'-0	424	424	424	500	500	500	541	541	541
7'-0	311	311	311	429	429	429	464	464	464
8'-0	238	238	238	375	375	375	406	406	406
9'-0	188	188	188	334	334	334	361	361	361
10'-0	153	153	153	300	300	300	325	325	325

1. Load chart is for standard S.I.P. with 7/16" O.S.B. facings used as a header with single top and bottom plate.
2. Listed values are contolled by panel ultimate strength (safety factor = 3).
3. Listed values are for short duration loading, not considering any effects of "creep" due to long term loads.
4. O.S.B. facings shall be secured along both sides of top and bottom plate using 8d nails spaced 6" o.c. maximum.