



NATRON WOOD PRODUCTS

Panel 2_Load Spans

Tables derived on: October 28, 2010
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Design Capacities

Along Panel			Across Panel		
MOE	MOR	F _a	I	KS	F _a lb/Q
1,500,000	1,190	63	0.31	0.51	0.14
			0.67	0.51	0.51
			6.71	5.31	5.31
EI	F _b S	F _a lb/Q	EI	F _b S	F _a lb/Q
459,791	795	423	215,925	602	335

← Based on wet stresses, S-2 stress level, Form Y510

Panel Thickness (in.)	0.760
Duration of Load Factor	1.25
Experience Factor	1.30
Bending and Shear Deflection	2

Note: 1 = combined, 2 = separate

No. of Spans	
SW =	PDS [enter "PDS" or actual support width (in.)]
Spans =	PDS [enter "PDS" or actual number of spans up to 3]
Panel length (in.) =	96
Panel width (in.) =	48

PDS note: For spans <48 in., SW assumed to be nominal 2x, for spans >= 48 in. nominal 4x assumed.
PDS note: When panel strength axis is across supports; spans <= 32 in., 3 spans are assumed, for spans >32 in. 2 spans are assumed. When panel strength axis is parallel supports; spans <= 16 in., 3 spans are assumed, for 16 in. >spans >=24 in. 2 spans are assumed, spans > 24 in., 1 span is assumed.

Panel Strength Axis Across Supports, Spans (o.c.)

	4	8	12	16	19.2	24	30	32	36	40	48	60
Applied SW =	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.5	3.5
L ₁ (in.) =	4	8	12	16	19.2	24	30	32	36	40	48	60
L ₂ (in.) =	2.5	6.5	10.5	14.5	17.7	22.5	28.5	30.5	34.5	38.5	44.5	56.5
L ₃ (in.) =	3	7	11	15	18	23	29	31	35	39	45	57
SW Factor (in.) =	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.625	0.625
Applied Spans =	3	3	3	3	3	3	3	3	2	2	2	2

Panel Strength Axis Parallel to Supports, Spans (o.c.)

	4	8	12	16	19.2	24	30	32	36	40	48	60
Applied SW =	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.5	3.5
L ₁ (in.) =	4	8	12	16	19.2	24	30	32	36	40	48	60
L ₂ (in.) =	2.5	6.5	10.5	14.5	17.7	22.5	28.5	30.5	34.5	38.5	44.5	56.5
L ₃ (in.) =	3	7	11	15	18	23	29	31	35	39	45	57
SW Factor (in.) =	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.625	0.625
Applied Spans =	3	3	3	3	2	2	1	1	1	1	1	1

Panel Strength Axis Across Supports, Spans (o.c.)

	4	8	12	16	19.2	24	30	32	36	40	48	60
L/360	13,775	3,015	1,180	565	345	185	95	80	70	50	35	15
L/270	18,365	4,020	1,575	755	460	245	130	105	95	70	45	25
Bending	9,690	2,425	1,075	605	420	270	170	150	95	80	55	35
Shear	5,500	2,115	1,310	950	775	610	480	450	385	345	295	235
Deflection*	0.00	0.02	0.03	0.05	0.07	0.10	0.15	0.17	0.14	0.17	0.22	0.35

Panel Strength Axis Parallel to Supports, Spans (o.c.)

	4	8	12	16	19.2	24	30	32	36	40	48	60
L/360	11,975	2,145	720	315	225	115	25	20	15	10	5	5
L/270	15,965	2,860	960	420	300	155	35	30	20	15	10	5
Bending	7,335	1,835	815	460	255	165	105	90	70	60	40	25
Shear	4,350	1,675	1,035	750	590	465	460	430	380	340	295	230
Deflection*	0.00	0.02	0.04	0.06	0.06	0.09	0.34	0.38	0.47	0.63	0.76	1.22

* Average deflection at maximum recommended load based on strength (in.)

The Following is a Short Table of Net Results From The Load-Span Table:
(Recommended loads less than 100 psf are not shown - English units only)

	Panel Strength Axis Across Supports, Spans (o.c.)											
	4	8	12	16	19.2	24	30	32	36	40	48	60
L/360	5,500	2,115	1,075	565	345	185	—	—	—	—	—	—
L/270	5,500	2,115	1,075	605	420	245	130	105	—	—	—	—
	Panel Strength Axis Parallel to Supports, Spans (o.c.)											
	4	8	12	16	19.2	24	30	32	36	40	48	60
L/360	4,350	1,675	720	315	225	115	—	—	—	—	—	—
L/270	4,350	1,675	815	420	255	155	—	—	—	—	—	—