

DESIGN PROPERTIES

1 3/4" 1.8E RIGIDLAM LVL

Depth	Maximum Vertical Shear (lbs)			Maximum Bending Moment (ft-lbs)			EI (x 10 ⁶ lbs-in ²)	Weight (plf)
	100%	115%	125%	100%	115%	125%		
5 1/2"	1829	2103	2286	2107	2424	2634	44	2.41
7 1/4"	2411	2772	3013	3538	4068	4422	100	3.17
9 1/4"	3076	3537	3845	5586	6424	6982	208	4.05
9 1/2"	3159	3633	3948	5872	6753	7340	225	4.16
11 1/4"	3741	4302	4676	8063	9272	10079	374	4.92
11 7/8"	3948	4541	4936	8923	10262	11154	440	5.20
14"	4655	5353	5819	12150	13972	15187	720	6.13
16"	5320	6118	6650	15606	17947	19508	1075	7.00
18"	5985	6883	7481	19463	22383	24329	1531	7.88

THREE-PLY 1 3/4" 1.8E RIGIDLAM LVL

Depth	Maximum Vertical Shear (lbs)			Maximum Bending Moment (ft-lbs)			EI (x 10 ⁶ lbs-in ²)	Weight (plf)
	100%	115%	125%	100%	115%	125%		
5 1/2"	5486	6309	6858	6322	7271	7903	131	7.22
7 1/4"	7232	8317	9040	10613	12205	13266	300	9.52
9 1/4"	9227	10611	11534	16758	19271	20947	623	12.14
9 1/2"	9476	10898	11845	17617	20259	22021	675	12.47
11 1/4"	11222	12905	14027	24188	27817	30236	1121	14.77
11 7/8"	11845	13622	14807	26769	30785	33462	1319	15.59
14"	13965	16060	17456	36449	41917	45561	2161	18.38
16"	15960	18354	19950	46819	53842	58524	3226	21.00
18"	17955	20648	22444	58389	67148	72987	4593	23.63

1.8E RIGIDLAM LVL Allowable Design Stresses⁽¹⁾

- Modulus of Elasticity E = 1,800,000 psi⁽²⁾
- Bending F_b = 2,600 psi⁽³⁾⁽⁴⁾
- Horizontal Shear (joist) F_v = 285 psi
- Compression Perpendicular to Grain (joist) F_{c⊥} = 700 psi⁽²⁾
- Compression Parallel to Grain F_c = 2,400 psi

1 3/4" 2.0E RIGIDLAM LVL

Depth	Maximum Vertical Shear (lbs)			Maximum Bending Moment (ft-lbs)			EI (x 10 ⁶ lbs-in ²)	Weight (plf)
	100%	115%	125%	100%	115%	125%		
5 1/2"	1829	2103	2286	2351	2703	2938	49	2.41
7 1/4"	2411	2772	3013	3946	4538	4932	111	3.17
9 1/4"	3076	3537	3845	6230	7165	7788	231	4.05
9 1/2"	3159	3633	3948	6550	7532	8187	250	4.16
11 1/4"	3741	4302	4676	8993	10342	11241	415	4.92
11 7/8"	3948	4541	4936	9953	11446	12441	488	5.20
14"	4655	5353	5819	13552	15584	16940	800	6.13
16"	5320	6118	6650	17407	20018	21759	1195	7.00
18"	5985	6883	7481	21709	24965	27136	1701	7.88

5 1/4" 2.0E RIGIDLAM LVL

Depth	Maximum Vertical Shear (lbs)			Maximum Bending Moment (ft-lbs)			EI (x 10 ⁶ lbs-in ²)	Weight (plf)
	100%	115%	125%	100%	115%	125%		
9 1/2"	9476	10898	11845	19650	22597	24562	750	12.47
11 7/8"	11845	13622	14807	29858	34337	37322	1465	15.59
14"	13965	16060	17456	40655	46753	50819	2401	18.38
16"	15960	18354	19950	52221	60054	65277	3584	21.00
18"	17955	20648	22444	65127	74896	81408	5103	23.63

2.0E RIGIDLAM LVL Allowable Design Stresses⁽¹⁾

- Modulus of Elasticity E = 2,000,000 psi⁽²⁾
- Bending F_b = 2,900 psi⁽³⁾⁽⁴⁾
- Horizontal Shear (joist) F_v = 285 psi
- Compression Perpendicular to Grain (joist) F_{c⊥} = 750 psi⁽²⁾
- Compression Parallel to Grain F_c = 2,750 psi

TWO-PLY 1 3/4" 1.8E RIGIDLAM LVL

Depth	Maximum Vertical Shear (lbs)			Maximum Bending Moment (ft-lbs)			EI (x 10 ⁶ lbs-in ²)	Weight (plf)
	100%	115%	125%	100%	115%	125%		
5 1/2"	3658	4206	4572	4215	4847	5269	87	4.81
7 1/4"	4821	5544	6027	7075	8137	8844	200	6.34
9 1/4"	6151	7074	7689	11172	12848	13965	416	8.09
9 1/2"	6318	7265	7897	11745	13506	14681	450	8.31
11 1/4"	7481	8603	9352	16126	18545	20157	748	9.84
11 7/8"	7897	9081	9871	17846	20523	22308	879	10.39
14"	9310	10707	11638	24299	27944	30374	1441	12.25
16"	10640	12236	13300	31213	35895	39016	2150	14.00
18"	11970	13766	14963	38926	44765	48658	3062	15.75

FOUR-PLY 1 3/4" 1.8E RIGIDLAM LVL

Depth	Maximum Vertical Shear (lbs)			Maximum Bending Moment (ft-lbs)			EI (x 10 ⁶ lbs-in ²)	Weight (plf)
	100%	115%	125%	100%	115%	125%		
5 1/2"	7315	8412	9144	8430	9694	10537	175	9.63
7 1/4"	9643	11089	12053	14150	16273	17688	400	12.69
9 1/4"	12303	14148	15378	22344	25695	27929	831	16.19
9 1/2"	12635	14530	15794	23489	27013	29362	900	16.63
11 1/4"	14963	17207	18703	32251	37089	40314	1495	19.69
11 7/8"	15794	18163	19742	35692	41046	44615	1758	20.78
14"	18620	21413	23275	48599	55889	60749	2881	24.50
16"	21280	24472	26600	62425	71789	78032	4301	28.00
18"	23940	27531	29925	77852	89530	97316	6124	31.50

(1) These allowable design stresses apply to dry service conditions.

(2) No increase is allowed for load duration.

(3) Multiply by $(\frac{12}{d})^{1/8}$ where d = depth of member [in].

(4) A factor of 1.04 may be applied for repetitive members as defined in the National Design Specification[®] for Wood Construction.

3 1/2" 2.0E RIGIDLAM LVL

Depth	Maximum Vertical Shear (lbs)			Maximum Bending Moment (ft-lbs)			EI (x 10 ⁶ lbs-in ²)	Weight (plf)
	100%	115%	125%	100%	115%	125%		
5 1/2"	3658	4206	4572	4701	5406	5877	97	4.81
7 1/4"	4821	5544	6027	7892	9075	9864	222	6.34
9 1/4"	6151	7074	7689	12461	14330	15576	462	8.09
9 1/2"	6318	7265	7897	13100	15065	16375	500	8.31
11 1/4"	7481	8603	9352	17986	20684	22483	831	9.84
11 7/8"	7897	9081	9871	19905	22891	24882	977	10.39
14"	9310	10707	11638	27103	31169	33879	1601	12.25
16"	10640	12236	13300	34814	40036	43518	2389	14.00
18"	11970	13766	14963	43418	49930	54272	3402	15.75

7" 2.0E RIGIDLAM LVL

Depth	Maximum Vertical Shear (lbs)			Maximum Bending Moment (ft-lbs)			EI (x 10 ⁶ lbs-in ²)	Weight (plf)
	100%	115%	125%	100%	115%	125%		
9 1/2"	12635	14530	15794	26199	30129	32749	1000	16.63
11 7/8"	15794	18163	19742	39811	45782	49763	1954	20.78
14"	18620	21413	23275	54206	62337	67758	3201	24.50
16"	21280	24472	26600	69628	80073	87035	4779	28.00
18"	23940	27531	29925	86835	99861	108544	6804	31.50

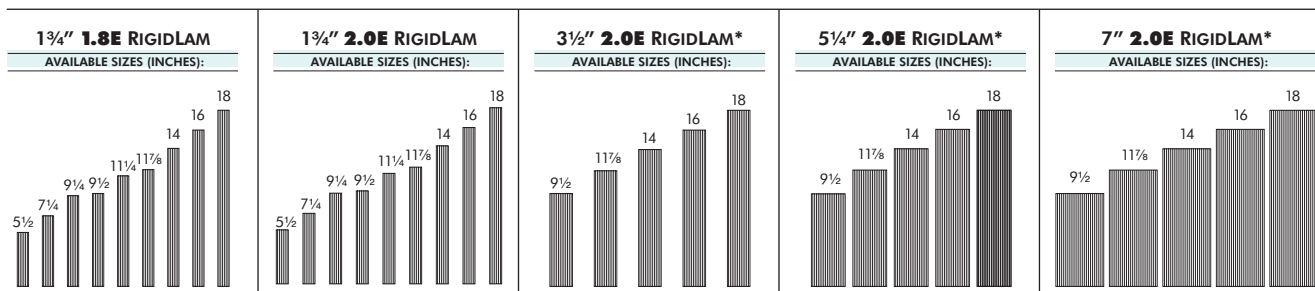
(1) These allowable design stresses apply to dry service conditions.

(2) No increase is allowed for load duration.

(3) Multiply by $(\frac{12}{d})^{1/8}$ where d = depth of member [in].

(4) A factor of 1.04 may be applied for repetitive members as defined in the National Design Specification[®] for Wood Construction.

AVAILABLE SIZES



*Multiple plies of 1 3/4" 2.0E RIGIDLAM LVL may be substituted when properly attached.