ALLOWABLE STRESS DESIGN VALUES FOR DRY USE	
Grade	3200 F_b-2.3E
Modulus of Elasticity[4], E (X10[6] psi)	2.3
Bending Stress[1], F_b(psi)	3200
Shear F_v (psi)	300
Compression Stress Perpendicular to Grain, $F_{c\perp}$ (psi)	600

Note:

1. Reference bending design value in beam orientation is based on a reference depth of 12 inches. For other depths, the allowable bending stress, F_b, must be adjusted by multiplying F_b by $(12/d)^{0.25}$, where d is the depth of members in inches. For depths 3-1/2 inches or less, multiply F_b by 1.361.
2. Design stresses are based on 100% load duration.
3. $F_{c\perp}$ and E shall not be increased for duration of load.
4. Deflection calculations shall include both bending and shear deformations.

Deflection for a simple span, uniform load: $\Delta = \frac{270wL^4}{Ebd^3} + \frac{28.8wL^2}{}$

Where: Δ = deflection (in), w = uniform load (plf), L = design span (ft), E = modulus of elasticity (psi), b = width of beam (in), d = depth of beam (in)

Equations for other conditions can be found in engineering references.

DESIGN PROPERTIES

3200F_b-2.3E EVOLUTION LVL ALLOWABLE DESIGN VALUES FOR DRY USE											Width 1.5"	
Design Property	Depth											
	3.5"	5.5"	7.25"	9.25"	9.5"	11.25"	11.5"	11.875"	14"	16"	18"	24"
Allowable Moment (lbs-ft)	1111	2451	3975	6088	6379	8575	8911	9426	12573	15882	19518	32290
Allowable Shear (lbs.)	1050	1650	2175	2775	2850	3375	3450	3563	4200	4800	5400	7200
Moment of Inertia (in[4])	5	21	48	99	107	178	190	209	343	512	729	1728
Weight (lbs./ft.)	1.5	2.4	3.1	4.0	4.1	4.9	5.0	5.1	6.1	6.9	7.8	10.4

3200F_b-2.3E EVOLUTION LVL ALLOWABLE DESIGN VALUES FOR DRY USE											Width 1.75"	
Design Property	Depth											
	3.5"	5.5"	7.25"	9.25"	9.5"	11.25"	11.5"	11.875"	14"	16"	18"	24"
Allowable Moment (lbs-ft)	1297	2859	4637	7102	7442	10004	10396	10997	14668	18529	22771	37672
Allowable Shear (lbs.)	1225	1925	2538	3238	3325	3938	4025	4156	4900	5600	6300	8400
Moment of Inertia (in[4])	6	24	56	115	125	208	222	244	400	597	851	2016
Weight (lbs./ft.)	1.8	2.8	3.7	4.7	4.8	5.7	5.8	6.0	7.1	8.1	9.1	12.1

3200F_b-2.3E EVOLUTION LVL ALLOWABLE DESIGN VALUES FOR DRY USE											Width 3.5"	
Design Property	Depth											
	3.5"	5.5"	7.25"	9.25"	9.5"	11.25"	11.5"	11.875"	14"	16"	18"	24"
Allowable Moment (lbs-ft)	2593	5719	9274	14205	14883	20008	20792	21993	29336	37059	45542	75344
Allowable Shear (lbs.)	2450	3850	5075	6475	6650	7875	8050	8313	9800	11200	12600	16800
Moment of Inertia (in[4])	13	49	111	231	250	415	444	488	800	1195	1701	4032
Weight (lbs./ft.)	3.5	5.5	7.3	9.3	9.6	11.3	11.6	12.0	14.1	16.1	18.2	24.2

3200F_b-2.3E EVOLUTION LVL ALLOWABLE DESIGN VALUES FOR DRY USE											Width 5.25"	
Design Property	Depth											
	3.5"	5.5"	7.25"	9.25"	9.5"	11.25"	11.5"	11.875"	14"	16"	18"	24"
Allowable Moment (lbs-ft)	/	8578	13911	21307	22325	30012	31188	32990	44004	55588	68312	113016
Allowable Shear (lbs.)	/	5775	7612	9712	9975	11812	12075	12469	14700	16800	18900	25200
Moment of Inertia (in[4])	/	73	167	346	375	623	665	733	1201	1792	2552	6048
Weight (lbs./ft.)	/	8.3	11.0	14.0	14.4	17.0	17.4	18.0	21.2	24.2	27.2	36.3

3200F_b-2.3E EVOLUTION LVL ALLOWABLE DESIGN VALUES FOR DRY USE											Width 7"	
Design Property	Depth											
	3.5"	5.5"	7.25"	9.25"	9.5"	11.25"	11.5"	11.875"	14"	16"	18"	24"
Allowable Moment (lbs-ft)	/	/	18548	28409	29766	40015	41585	43987	58673	74118	91083	150689
Allowable Shear (lbs.)	/	/	10150	12950	13300	15750	16100	16625	19600	22400	25200	33600
Moment of Inertia (in[4])	/	/	222	462	500	831	887	977	1601	2389	3402	8064
Weight (lbs./ft.)	/	/	14.6	18.7	19.2	22.7	23.2	24.0	28.2	32.3	36.3	48.4

Notes:

1. Lateral support of the beam compression edge shall be provided at intervals of 24" on-center or closer to prevent lateral torsional buckling.
2. Lateral support shall also be provided at all bearing locations to control lateral displacement at supports.
3. 1.5" and 1.75" wide LVL members with depths of 16", 18", and 24" are permitted for use in multiple-member built-up units only.
4. Allowable design values are based on 100% load duration.

ALLOWABLE UNIFORM LOADS (POUNDS PER LINEAL FOOT)

FLOOR 100% - 3200F_b-2.3E

1.5" WIDTH													
Span (ft)	**Condition**	**3.5"**	**5.5"**	**7.25"**	**9.25"**	**9.5"**	**11.25"**	**11.5"**	**11.875"**	**14"**	**16" ***	**18" ***	**24" ***
6	LL (L/360)	78	286	618									
	TL (L/240)	115	427	667	915	949	1211	1253	1318	1766	2468	3412	4406
	Bearing	1.5/3.5	1.6/4.0	2.5/6.3	3.5/8.6	3.6/8.9	4.6/11.3	4.7/11.7	5.0/12.3	6.6/16.5	9.2/23.0	12.7/31.7	16.4/40.9
7	LL (L/360)		184	403									
	TL (L/240)		274	553	746	772	968	998	1044	1340	1694	2207	3775
	Bearing		1.5/3.5	2.5/6.1	3.3/8.2	3.4/8.4	4.3/10.6	4.4/10.9	4.6/11.4	5.9/14.6	7.4/18.4	9.6/24.0	16.4/40.9
8	LL (L/360)		125	277	547	589							
	TL (L/240)		185	412	631	652	808	832	868	1091	1339	1643	3302
	Bearing		1.5/3.5	2.1/5.2	3.2/7.9	3.3/8.2	4.1/10.1	4.2/10.4	4.4/10.8	5.5/13.6	6.7/16.7	8.2/20.4	16.4/40.9
9	LL (L/360)		89	198	395	425	677						
	TL (L/240)		131	294	547	565	695	714	744	924	1116	1338	2465
	Bearing		1.5/3.5	1.7/4.2	3.1/7.7	3.2/8.0	3.9/9.8	4.0/10.0	4.2/10.5	5.2/13.0	6.3/15.6	7.5/18.7	13.8/34.4
10	LL (L/360)		65	146	293	316	508	539	589				
	TL (L/240)		95	216	436	471	609	626	651	802	960	1136	1868
	Bearing		1.5/3.5	1.5/3.5	2.8/6.8	3.0/7.4	3.8/9.5	3.9/9.8	4.1/10.2	5.0/12.5	6.0/15.0	7.1/17.7	11.6/29.0
11	LL (L/360)			111	224	241	389	414	453				
	TL (L/240)			163	332	358	534	555	579	709	843	990	1550
	Bearing			1.5/3.5	2.3/5.7	2.5/6.2	3.7/9.2	3.9/9.6	4.0/10.0	4.9/12.2	5.8/14.5	6.8/17.0	10.6/26.5
12	LL (L/360)			86	174	188	305	324	355	561			
	TL (L/240)			126	257	278	448	465	492	636	752	878	1336
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.4	3.5/8.8	3.7/9.3	4.8/11.9	5.7/14.1	6.6/16.4	10.0/25.0
13	LL (L/360)			68	138	149	243	259	283	450	649		
	TL (L/240)			99	203	220	359	383	419	559	679	789	1178
	Bearing			1.5/3.5	1.7/4.2	1.8/4.5	3.0/7.4	3.2/7.8	3.5/8.6	4.6/11.4	5.6/13.8	6.4/16.0	9.6/23.9
14	LL (L/360)				112	121	196	209	229	366	530		
	TL (L/240)				163	177	290	309	339	481	609	717	1055
	Bearing				1.5/3.7	1.6/4.0	2.6/6.4	2.8/6.8	3.0/7.5	4.3/10.6	5.4/13.4	6.3/15.7	9.3/23.1
15	LL (L/360)				91	99	161	172	188	301	438	606	
	TL (L/240)				133	144	237	252	277	419	530	651	956
	Bearing				1.5/3.5	1.5/3.5	2.3/5.6	2.4/6.0	2.7/6.6	4.0/9.9	5.0/12.5	6.2/15.3	9.0/22.4
16	LL (L/360)				75	82	134	142	156	251	366	508	
	TL (L/240)				109	118	196	209	229	367	465	572	875
	Bearing				1.5/3.5	1.5/3.5	2.0/5.0	2.2/5.3	2.4/5.8	3.7/9.3	4.7/11.7	5.8/14.4	8.8/21.9
17	LL (L/360)				63	68	112	119	131	211	308	429	
	TL (L/240)				91	98	163	174	192	310	411	505	807
	Bearing				1.5/3.5	1.5/3.5	1.8/4.5	1.9/4.7	2.1/5.2	3.4/8.3	4.4/11.0	5.4/13.5	8.6/21.5
18	LL (L/360)					58	95	101	111	179	262	366	
	TL (L/240)					83	137	147	161	262	366	450	747
	Bearing					1.5/3.5	1.6/4.0	1.7/4.3	1.9/4.7	3.0/7.5	4.2/10.4	5.1/12.8	8.5/21.1
19	LL (L/360)						81	86	95	153	225	314	
	TL (L/240)						117	125	137	223	327	403	669
	Bearing						1.5/3.6	1.6/3.8	1.7/4.2	2.7/6.8	4.0/9.9	4.9/12.1	8.0/20.0
20	LL (L/360)						70	74	82	132	194	272	
	TL (L/240)						100	106	117	192	284	363	603
	Bearing						1.5/3.5	1.5/3.5	1.6/3.8	2.5/6.2	3.6/9.0	4.6/11.5	7.6/19.0
21	LL (L/360)						60	64	71	114	169	236	530
	TL (L/240)						86	92	101	166	246	329	546
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.3/5.6	3.3/8.2	4.4/11.0	7.3/18.1
22	LL (L/360)							56	62	100	147	207	466
	TL (L/240)							79	87	144	214	299	497
	Bearing							1.5/3.5	1.5/3.5	2.1/5.1	3.1/7.6	4.2/10.5	6.9/17.3
23	LL (L/360)									88	130	182	412
	TL (L/240)									126	187	265	454
	Bearing									1.9/4.7	2.8/6.9	3.9/9.7	6.6/16.5
24	LL (L/360)									78	114	161	366
	TL (L/240)									110	165	234	416
	Bearing									1.8/4.4	2.6/6.4	3.6/9.0	6.4/15.8
25	LL (L/360)									69	102	143	326
	TL (L/240)									97	146	207	382
	Bearing									1.6/4.0	2.4/5.9	3.4/8.3	6.1/15.2
26	LL (L/360)									61	91	128	292
	TL (L/240)									86	129	184	353
	Bearing									1.5/3.7	2.2/5.5	3.1/7.7	5.9/14.6
27	LL (L/360)									55	81	114	262
	TL (L/240)									76	115	164	326
	Bearing									1.5/3.5	2.1/5.1	2.9/7.2	5.7/14.1
28	LL (L/360)										73	103	236
	TL (L/240)										103	147	303
	Bearing										1.9/4.8	2.7/6.7	5.5/13.6
29	LL (L/360)										66	93	214
	TL (L/240)										92	132	281
	Bearing										1.8/4.5	2.5/6.3	5.3/13.1
30	LL (L/360)										60	84	194
	TL (L/240)										82	118	262
	Bearing										1.7/4.2	2.4/5.9	5.1/12.7
31	LL (L/360)											76	176
	TL (L/240)											107	245
	Bearing											2.2/5.5	4.9/12.3
32	LL (L/360)											70	161
	TL (L/240)											97	229
	Bearing											2.1/5.2	4.8/11.9

Bearing=Minimum End / Intermediate Bearing Length (inches).

* All 16'', 18'' and 24'' beam depths are to be used in multiple member units only.

ALLOWABLE UNIFORM LOADS (POUNDS PER LINEAL FOOT)

FLOOR 100% - 3200F_b-2.3E

1.75" WIDTH													
Span (ft)	**Condition**	**3.5"**	**5.5"**	**7.25"**	**9.25"**	**9.5"**	**11.25"**	**11.5"**	**11.875"**	**14"**	**16" ***	**18" ***	**24" ***
6	LL (L/360)	90	334	721									
	TL (L/240)	134	498	779	1067	1107	1413	1462	1538	2060	2879	3981	5140
	Bearing	1.5/3.5	1.6/4.0	2.5/6.3	3.5/8.6	3.6/8.9	4.6/11.3	4.7/11.7	5.0/12.3	6.6/16.5	9.2/23.0	12.7/31.7	16.4/40.9
7	LL (L/360)	57	215	471									
	TL (L/240)	84	319	645	871	901	1129	1164	1218	1563	1977	2575	4404
	Bearing	1.5/3.5	1.5/3.5	2.5/6.1	3.3/8.2	3.4/8.4	4.3/10.6	4.4/10.9	4.6/11.4	5.9/14.6	7.4/18.4	9.6/24.0	16.4/40.9
8	LL (L/360)		146	323	639	687							
	TL (L/240)		216	481	736	761	943	970	1013	1273	1562	1917	3852
	Bearing		1.5/3.5	2.1/5.2	3.2/7.9	3.3/8.2	4.1/10.1	4.2/10.4	4.4/10.8	5.5/13.6	6.7/16.7	8.2/20.4	16.4/40.9
9	LL (L/360)		104	231	461	496	790						
	TL (L/240)		153	343	638	659	810	833	868	1078	1302	1561	2875
	Bearing		1.5/3.5	1.7/4.2	3.1/7.7	3.2/8.0	3.9/9.8	4.0/10.0	4.2/10.5	5.2/13.0	6.3/15.6	7.5/18.7	13.8/34.4
10	LL (L/360)		76	170	342	369	592	629	687				
	TL (L/240)		111	252	509	549	711	730	760	936	1120	1325	2180
	Bearing		1.5/3.5	1.5/3.5	2.8/6.8	3.0/7.4	3.8/9.5	3.9/9.8	4.1/10.2	5.0/12.5	6.0/15.0	7.1/17.7	11.6/29.0
11	LL (L/360)		57	129	261	282	454	483	528				
	TL (L/240)		83	190	387	418	623	647	676	828	983	1154	1808
	Bearing		1.5/3.5	1.5/3.5	2.3/5.7	2.5/6.2	3.7/9.2	3.9/9.6	4.0/10.0	4.9/12.2	5.8/14.5	6.8/17.0	10.6/26.5
12	LL (L/360)			100	203	220	356	378	414	655			
	TL (L/240)			147	300	325	522	543	574	742	877	1024	1558
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.4	3.5/8.8	3.7/9.3	4.8/11.9	5.7/14.1	6.6/16.4	10.0/25.0
13	LL (L/360)			79	161	174	283	302	330	525	758		
	TL (L/240)			115	237	257	419	447	489	653	792	921	1374
	Bearing			1.5/3.5	1.7/4.2	1.8/4.5	3.0/7.4	3.2/7.8	3.5/8.6	4.6/11.4	5.6/13.8	6.4/16.0	9.6/23.9
14	LL (L/360)			64	130	141	229	244	268	427	618		
	TL (L/240)			92	190	206	338	360	395	562	710	836	1231
	Bearing			1.5/3.5	1.5/3.7	1.6/4.0	2.6/6.4	2.8/6.8	3.0/7.5	4.3/10.6	5.4/13.4	6.3/15.7	9.3/23.1
15	LL (L/360)				106	115	188	200	220	351	511	707	
	TL (L/240)				155	168	276	294	323	488	618	760	1116
	Bearing				1.5/3.5	1.5/3.5	2.3/5.6	2.4/6.0	2.7/6.6	4.0/9.9	5.0/12.5	6.2/15.3	9.0/22.4
16	LL (L/360)				88	95	156	166	182	292	427	592	
	TL (L/240)				127	138	228	243	267	428	542	667	1021
	Bearing				1.5/3.5	1.5/3.5	2.0/5.0	2.2/5.3	2.4/5.8	3.7/9.3	4.7/11.7	5.8/14.4	8.8/21.9
17	LL (L/360)				74	80	131	139	153	246	360	501	
	TL (L/240)				106	115	190	203	223	362	479	590	941
	Bearing				1.5/3.5	1.5/3.5	1.8/4.5	1.9/4.7	2.1/5.2	3.4/8.3	4.4/11.0	5.4/13.5	8.6/21.5
18	LL (L/360)				62	67	111	118	130	209	306	427	
	TL (L/240)				89	96	160	171	188	306	427	525	872
	Bearing				1.5/3.5	1.5/3.5	1.6/4.0	1.7/4.3	1.9/4.7	3.0/7.5	4.2/10.4	5.1/12.8	8.5/21.1
19	LL (L/360)					57	94	101	111	179	262	366	
	TL (L/240)					81	136	145	160	261	382	470	781
	Bearing					1.5/3.5	1.5/3.6	1.6/3.8	1.7/4.2	2.7/6.8	4.0/9.9	4.9/12.1	8.0/20.0
20	LL (L/360)						81	87	95	154	226	317	
	TL (L/240)						116	124	137	224	331	424	704
	Bearing						1.5/3.5	1.5/3.5	1.6/3.8	2.5/6.2	3.6/9.0	4.6/11.5	7.6/19.0
21	LL (L/360)						70	75	83	134	197	276	618
	TL (L/240)						100	107	118	193	287	383	637
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.3/5.6	3.3/8.2	4.4/11.0	7.3/18.1
22	LL (L/360)						61	66	72	117	172	241	544
	TL (L/240)						86	92	102	168	250	348	579
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.1	3.1/7.6	4.2/10.5	6.9/17.3
23	LL (L/360)							57	63	102	151	212	481
	TL (L/240)							80	89	147	219	310	529
	Bearing							1.5/3.5	1.5/3.5	1.9/4.7	2.8/6.9	3.9/9.7	6.6/16.5
24	LL (L/360)								56	90	134	188	427
	TL (L/240)								78	129	192	273	485
	Bearing								1.5/3.5	1.8/4.4	2.6/6.4	3.6/9.0	6.4/15.8
25	LL (L/360)									80	119	167	380
	TL (L/240)									113	170	241	446
	Bearing									1.6/4.0	2.4/5.9	3.4/8.3	6.1/15.2
26	LL (L/360)									71	106	149	340
	TL (L/240)									100	151	214	411
	Bearing									1.5/3.7	2.2/5.5	3.1/7.7	5.9/14.6
27	LL (L/360)									64	95	134	306
	TL (L/240)									89	134	191	381
	Bearing									1.5/3.5	2.1/5.1	2.9/7.2	5.7/14.1
28	LL (L/360)									57	85	120	276
	TL (L/240)									79	120	171	353
	Bearing									1.5/3.5	1.9/4.8	2.7/6.7	5.5/13.6
29	LL (L/360)										77	108	249
	TL (L/240)										107	154	328
	Bearing										1.8/4.5	2.5/6.3	5.3/13.1
30	LL (L/360)										70	98	226
	TL (L/240)										96	138	306
	Bearing										1.7/4.2	2.4/5.9	5.1/12.7
31	LL (L/360)										63	89	206
	TL (L/240)										87	125	286
	Bearing										1.6/3.9	2.2/5.5	4.9/12.3
32	LL (L/360)										57	81	188
	TL (L/240)										78	113	267
	Bearing										1.5/3.7	2.1/5.2	4.8/11.9

Bearing=Minimum End / Intermediate Bearing Length (inches).

* All 16'', 18'' and 24'' beam depths are to be used in multiple member units only.

ALLOWABLE UNIFORM LOADS (POUNDS PER LINEAL FOOT)

FLOOR 100% - 3200F_b-2.3E

3.5" WIDTH													
Span (ft)	**Condition**	**3.5"**	**5.5"**	**7.25"**	**9.25"**	**9.5"**	**11.25"**	**11.5"**	**11.875"**	**14"**	**16"**	**18"**	**24"**
6	LL (L/360)	181	667	1441									
	TL (L/240)	268	996	1557	2134	2214	2827	2924	3076	4120	5759	7962	10280
	Bearing	1.5/3.5	1.6/4.0	2.5/6.3	3.5/8.6	3.6/8.9	4.6/11.3	4.7/11.7	5.0/12.3	6.6/16.5	9.2/23.0	12.7/31.7	16.4/40.9
7	LL (L/360)	115	430	941									
	TL (L/240)	169	639	1290	1742	1802	2258	2328	2437	3127	3954	5151	8808
	Bearing	1.5/3.5	1.5/3.5	2.5/6.1	3.3/8.2	3.4/8.4	4.3/10.6	4.4/10.9	4.6/11.4	5.9/14.6	7.4/18.4	9.6/24.0	16.4/40.9
8	LL (L/360)		292	646	1277	1374							
	TL (L/240)		433	962	1473	1522	1886	1941	2025	2547	3125	3834	7704
	Bearing		1.5/3.5	2.1/5.2	3.2/7.9	3.3/8.2	4.1/10.1	4.2/10.4	4.4/10.8	5.5/13.6	6.7/16.7	8.2/20.4	16.4/40.9
9	LL (L/360)		207	462	921	992	1581						
	TL (L/240)		305	685	1276	1318	1621	1666	1736	2156	2604	3123	5751
	Bearing		1.5/3.5	1.7/4.2	3.1/7.7	3.2/8.0	3.9/9.8	4.0/10.0	4.2/10.5	5.2/13.0	6.3/15.6	7.5/18.7	13.8/34.4
10	LL (L/360)		152	341	685	738	1184	1258	1374				
	TL (L/240)		223	504	1018	1098	1422	1461	1519	1872	2239	2651	4359
	Bearing		1.5/3.5	1.5/3.5	2.8/6.8	3.0/7.4	3.8/9.5	3.9/9.8	4.1/10.2	5.0/12.5	6.0/15.0	7.1/17.7	11.6/29.0
11	LL (L/360)		115	258	522	563	909	966	1057				
	TL (L/240)		167	380	774	835	1245	1294	1352	1655	1967	2309	3617
	Bearing		1.5/3.5	1.5/3.5	2.3/5.7	2.5/6.2	3.7/9.2	3.9/9.6	4.0/10.0	4.9/12.2	5.8/14.5	6.8/17.0	10.6/26.5
12	LL (L/360)			200	407	439	711	757	828	1309			
	TL (L/240)			293	601	649	1045	1086	1149	1484	1755	2048	3117
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.4	3.5/8.8	3.7/9.3	4.8/11.9	5.7/14.1	6.6/16.4	10.0/25.0
13	LL (L/360)			159	323	349	567	603	661	1049	1515		
	TL (L/240)			230	475	513	839	893	977	1305	1585	1841	2748
	Bearing			1.5/3.5	1.7/4.2	1.8/4.5	3.0/7.4	3.2/7.8	3.5/8.6	4.6/11.4	5.6/13.8	6.4/16.0	9.6/23.9
14	LL (L/360)			127	260	281	458	488	535	853	1237		
	TL (L/240)			184	381	412	676	721	791	1123	1421	1673	2461
	Bearing			1.5/3.5	1.5/3.7	1.6/4.0	2.6/6.4	2.8/6.8	3.0/7.5	4.3/10.6	5.4/13.4	6.3/15.7	9.3/23.1
15	LL (L/360)				213	230	376	400	439	702	1022	1414	
	TL (L/240)				310	335	552	589	647	977	1236	1520	2231
	Bearing				1.5/3.5	1.5/3.5	2.3/5.6	2.4/6.0	2.7/6.6	4.0/9.9	5.0/12.5	6.2/15.3	9.0/22.4
16	LL (L/360)				176	190	312	332	365	585	853	1184	
	TL (L/240)				255	276	456	487	535	857	1084	1334	2042
	Bearing				1.5/3.5	1.5/3.5	2.0/5.0	2.2/5.3	2.4/5.8	3.7/9.3	4.7/11.7	5.8/14.4	8.8/21.9
17	LL (L/360)				147	159	261	279	306	492	719	1001	
	TL (L/240)				212	230	381	406	447	723	958	1179	1883
	Bearing				1.5/3.5	1.5/3.5	1.8/4.5	1.9/4.7	2.1/5.2	3.4/8.3	4.4/11.0	5.4/13.5	8.6/21.5
18	LL (L/360)				125	135	221	236	259	417	612	853	
	TL (L/240)				178	193	321	342	377	612	853	1050	1743
	Bearing				1.5/3.5	1.5/3.5	1.6/4.0	1.7/4.3	1.9/4.7	3.0/7.5	4.2/10.4	5.1/12.8	8.5/21.1
19	LL (L/360)					115	189	201	221	357	524	733	
	TL (L/240)					163	272	291	320	521	764	941	1562
	Bearing					1.5/3.5	1.5/3.6	1.6/3.8	1.7/4.2	2.7/6.8	4.0/9.9	4.9/12.1	8.0/20.0
20	LL (L/360)						163	173	190	308	453	634	
	TL (L/240)						232	248	274	448	663	847	1407
	Bearing						1.5/3.5	1.5/3.5	1.6/3.8	2.5/6.2	3.6/9.0	4.6/11.5	7.6/19.0
21	LL (L/360)						141	150	165	267	393	551	1237
	TL (L/240)						200	214	236	387	574	767	1274
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.3/5.6	3.3/8.2	4.4/11.0	7.3/18.1
22	LL (L/360)						123	131	144	233	344	483	1088
	TL (L/240)						173	185	204	336	500	697	1159
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.1	3.1/7.6	4.2/10.5	6.9/17.3
23	LL (L/360)							115	126	205	302	425	961
	TL (L/240)							161	178	293	437	619	1058
	Bearing							1.5/3.5	1.5/3.5	1.9/4.7	2.8/6.9	3.9/9.7	6.6/16.5
24	LL (L/360)								111	181	267	376	853
	TL (L/240)								155	257	384	545	970
	Bearing								1.5/3.5	1.8/4.4	2.6/6.4	3.6/9.0	6.4/15.8
25	LL (L/360)									160	237	334	761
	TL (L/240)									227	340	483	892
	Bearing									1.6/4.0	2.4/5.9	3.4/8.3	6.1/15.2
26	LL (L/360)									143	211	298	681
	TL (L/240)									200	301	429	823
	Bearing									1.5/3.7	2.2/5.5	3.1/7.7	5.9/14.6
27	LL (L/360)									128	189	267	612
	TL (L/240)									178	268	382	761
	Bearing									1.5/3.5	2.1/5.1	2.9/7.2	5.7/14.1
28	LL (L/360)									115	170	240	551
	TL (L/240)									158	239	342	706
	Bearing									1.5/3.5	1.9/4.8	2.7/6.7	5.5/13.6
29	LL (L/360)										154	217	499
	TL (L/240)										214	307	657
	Bearing										1.8/4.5	2.5/6.3	5.3/13.1
30	LL (L/360)										139	196	453
	TL (L/240)										192	276	612
	Bearing										1.7/4.2	2.4/5.9	5.1/12.7
31	LL (L/360)										126	178	412
	TL (L/240)										173	249	572
	Bearing										1.6/3.9	2.2/5.5	4.9/12.3
32	LL (L/360)										115	163	376
	TL (L/240)										156	226	535
	Bearing										1.5/3.7	2.1/5.2	4.8/11.9

Bearing=Minimum End / Intermediate Bearing Length (inches).

ALLOWABLE UNIFORM LOADS (POUNDS PER LINEAL FOOT)

FLOOR 100% - 3200F_b-2.3E

5.25" WIDTH													
Span (ft)	**Condition**	**3.5"**	**5.5"**	**7.25"**	**9.25"**	**9.5"**	**11.25"**	**11.5"**	**11.875"**	**14"**	**16"**	**18"**	**24"**
6	LL (L/360)		1001	2162									
	TL (L/240)		1493	2336	3202	3320	4240	4386	4614	6181	8638	11943	15420
	Bearing		1.6/4.0	2.5/6.3	3.5/8.6	3.6/8.9	4.6/11.3	4.7/11.7	5.0/12.3	6.6/16.5	9.2/23.0	12.7/31.7	16.4/40.9
7	LL (L/360)		645	1412									
	TL (L/240)		958	1935	2612	2703	3387	3493	3655	4690	5931	7726	13212
	Bearing		1.5/3.5	2.5/6.1	3.3/8.2	3.4/8.4	4.3/10.6	4.4/10.9	4.6/11.4	5.9/14.6	7.4/18.4	9.6/24.0	16.4/40.9
8	LL (L/360)		438	969	1916	2061							
	TL (L/240)		649	1443	2209	2283	2829	2911	3038	3820	4687	5752	11556
	Bearing		1.5/3.5	2.1/5.2	3.2/7.9	3.3/8.2	4.1/10.1	4.2/10.4	4.4/10.8	5.5/13.6	6.7/16.7	8.2/20.4	16.4/40.9
9	LL (L/360)		311	692	1382	1489	2371						
	TL (L/240)		458	1028	1914	1976	2431	2499	2603	3234	3906	4684	8626
	Bearing		1.5/3.5	1.7/4.2	3.1/7.7	3.2/8.0	3.9/9.8	4.0/10.0	4.2/10.5	5.2/13.0	6.3/15.6	7.5/18.7	13.8/34.4
10	LL (L/360)		228	511	1027	1108	1777	1888	2061				
	TL (L/240)		334	756	1527	1647	2133	2191	2279	2808	3359	3976	6539
	Bearing		1.5/3.5	1.5/3.5	2.8/6.8	3.0/7.4	3.8/9.5	3.9/9.8	4.1/10.2	5.0/12.5	6.0/15.0	7.1/17.7	11.6/29.0
11	LL (L/360)		172	388	783	845	1363	1449	1585				
	TL (L/240)		250	570	1161	1253	1868	1942	2027	2483	2950	3463	5425
	Bearing		1.5/3.5	1.5/3.5	2.3/5.7	2.5/6.2	3.7/9.2	3.9/9.6	4.0/10.0	4.9/12.2	5.8/14.5	6.8/17.0	10.6/26.5
12	LL (L/360)			301	610	659	1067	1135	1243	1964			
	TL (L/240)			440	901	974	1567	1629	1723	2226	2632	3072	4675
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.4	3.5/8.8	3.7/9.3	4.8/11.9	5.7/14.1	6.6/16.4	10.0/25.0
13	LL (L/360)			238	484	523	850	905	991	1574	2273		
	TL (L/240)			346	712	770	1258	1340	1466	1958	2377	2762	4121
	Bearing			1.5/3.5	1.7/4.2	1.8/4.5	3.0/7.4	3.2/7.8	3.5/8.6	4.6/11.4	5.6/13.8	6.4/16.0	9.6/23.9
14	LL (L/360)			191	390	422	687	732	803	1280	1855		
	TL (L/240)			276	571	618	1014	1081	1186	1685	2131	2509	3692
	Bearing			1.5/3.5	1.5/3.7	1.6/4.0	2.6/6.4	2.8/6.8	3.0/7.5	4.3/10.6	5.4/13.4	6.3/15.7	9.3/23.1
15	LL (L/360)				319	345	564	601	659	1054	1533	2121	
	TL (L/240)				465	503	828	883	970	1465	1853	2280	3347
	Bearing				1.5/3.5	1.5/3.5	2.3/5.6	2.4/6.0	2.7/6.6	4.0/9.9	5.0/12.5	6.2/15.3	9.0/22.4
16	LL (L/360)				264	286	468	498	547	877	1280	1777	
	TL (L/240)				382	414	684	730	802	1285	1626	2001	3063
	Bearing				1.5/3.5	1.5/3.5	2.0/5.0	2.2/5.3	2.4/5.8	3.7/9.3	4.7/11.7	5.8/14.4	8.8/21.9
17	LL (L/360)				221	239	392	418	459	738	1079	1502	
	TL (L/240)				318	344	571	610	670	1085	1438	1769	2824
	Bearing				1.5/3.5	1.5/3.5	1.8/4.5	1.9/4.7	2.1/5.2	3.4/8.3	4.4/11.0	5.4/13.5	8.6/21.5
18	LL (L/360)				187	202	332	354	389	626	917	1280	
	TL (L/240)				266	289	481	513	565	918	1280	1575	2615
	Bearing				1.5/3.5	1.5/3.5	1.6/4.0	1.7/4.3	1.9/4.7	3.0/7.5	4.2/10.4	5.1/12.8	8.5/21.1
19	LL (L/360)					172	283	302	332	536	786	1099	
	TL (L/240)					244	408	436	480	782	1146	1411	2343
	Bearing					1.5/3.5	1.5/3.6	1.6/3.8	1.7/4.2	2.7/6.8	4.0/9.9	4.9/12.1	8.0/20.0
20	LL (L/360)						244	260	286	462	679	950	
	TL (L/240)						349	373	411	671	994	1271	2111
	Bearing						1.5/3.5	1.5/3.5	1.6/3.8	2.5/6.2	3.6/9.0	4.6/11.5	7.6/19.0
21	LL (L/360)						211	225	248	401	590	827	1855
	TL (L/240)						300	321	353	580	861	1150	1911
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.3/5.6	3.3/8.2	4.4/11.0	7.3/18.1
22	LL (L/360)						184	197	216	350	516	724	1632
	TL (L/240)						259	277	306	504	749	1045	1738
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.1	3.1/7.6	4.2/10.5	6.9/17.3
23	LL (L/360)							172	190	307	453	637	1442
	TL (L/240)							241	266	440	656	929	1587
	Bearing							1.5/3.5	1.5/3.5	1.9/4.7	2.8/6.9	3.9/9.7	6.6/16.5
24	LL (L/360)								167	271	401	564	1280
	TL (L/240)								233	386	577	818	1455
	Bearing								1.5/3.5	1.8/4.4	2.6/6.4	3.6/9.0	6.4/15.8
25	LL (L/360)									241	356	501	1141
	TL (L/240)									340	509	724	1338
	Bearing									1.6/4.0	2.4/5.9	3.4/8.3	6.1/15.2
26	LL (L/360)									214	317	447	1021
	TL (L/240)									301	452	643	1234
	Bearing									1.5/3.7	2.2/5.5	3.1/7.7	5.9/14.6
27	LL (L/360)									192	284	401	917
	TL (L/240)									267	402	574	1142
	Bearing									1.5/3.5	2.1/5.1	2.9/7.2	5.7/14.1
28	LL (L/360)									172	255	360	827
	TL (L/240)									237	359	513	1059
	Bearing									1.5/3.5	1.9/4.8	2.7/6.7	5.5/13.6
29	LL (L/360)										230	325	748
	TL (L/240)										321	461	985
	Bearing										1.8/4.5	2.5/6.3	5.3/13.1
30	LL (L/360)										209	295	679
	TL (L/240)										289	415	918
	Bearing										1.7/4.2	2.4/5.9	5.1/12.7
31	LL (L/360)										189	268	618
	TL (L/240)										260	374	857
	Bearing										1.6/3.9	2.2/5.5	4.9/12.3
32	LL (L/360)										172	244	564
	TL (L/240)										234	339	802
	Bearing										1.5/3.7	2.1/5.2	4.8/11.9

Bearing=Minimum End / Intermediate Bearing Length (inches).

ALLOWABLE UNIFORM LOADS (POUNDS PER LINEAL FOOT)

FLOOR 100% - 3200F_b-2.3E

7" WIDTH													
Span (ft)	**Condition**	**3.5"**	**5.5"**	**7.25"**	**9.25"**	**9.5"**	**11.25"**	**11.5"**	**11.875"**	**14"**	**16"**	**18"**	**24"**
6	LL (L/360)			2882									
	TL (L/240)			3115	4269	4427	5653	5848	6153	8241	11517	15924	20560
	Bearing			2.5/6.3	3.5/8.6	3.6/8.9	4.6/11.3	4.7/11.7	5.0/12.3	6.6/16.5	9.2/23.0	12.7/31.7	16.4/40.9
7	LL (L/360)			1882									
	TL (L/240)			2580	3483	3604	4516	4657	4873	6253	7908	10301	17616
	Bearing			2.5/6.1	3.3/8.2	3.4/8.4	4.3/10.6	4.4/10.9	4.6/11.4	5.9/14.6	7.4/18.4	9.6/24.0	16.4/40.9
8	LL (L/360)			1292	2555	2749							
	TL (L/240)			1924	2945	3044	3771	3882	4051	5093	6249	7669	15408
	Bearing			2.1/5.2	3.2/7.9	3.3/8.2	4.1/10.1	4.2/10.4	4.4/10.8	5.5/13.6	6.7/16.7	8.2/20.4	16.4/40.9
9	LL (L/360)			923	1842	1985	3161						
	TL (L/240)			1370	2553	2635	3242	3333	3471	4312	5208	6245	11501
	Bearing			1.7/4.2	3.1/7.7	3.2/8.0	3.9/9.8	4.0/10.0	4.2/10.5	5.2/13.0	6.3/15.6	7.5/18.7	13.8/34.4
10	LL (L/360)			681	1369	1477	2369	2517	2749				
	TL (L/240)			1007	2036	2196	2844	2921	3039	3744	4479	5301	8718
	Bearing			1.5/3.5	2.8/6.8	3.0/7.4	3.8/9.5	3.9/9.8	4.1/10.2	5.0/12.5	6.0/15.0	7.1/17.7	11.6/29.0
11	LL (L/360)			517	1044	1127	1817	1932	2113				
	TL (L/240)			760	1547	1671	2491	2589	2703	3311	3934	4618	7234
	Bearing			1.5/3.5	2.3/5.7	2.5/6.2	3.7/9.2	3.9/9.6	4.0/10.0	4.9/12.2	5.8/14.5	6.8/17.0	10.6/26.5
12	LL (L/360)			401	813	878	1423	1514	1657	2618			
	TL (L/240)			587	1201	1298	2089	2172	2298	2969	3510	4096	6233
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.4	3.5/8.8	3.7/9.3	4.8/11.9	5.7/14.1	6.6/16.4	10.0/25.0
13	LL (L/360)			317	645	697	1133	1206	1322	2099	3031		
	TL (L/240)			461	949	1027	1677	1786	1954	2610	3169	3682	5495
	Bearing			1.5/3.5	1.7/4.2	1.8/4.5	3.0/7.4	3.2/7.8	3.5/8.6	4.6/11.4	5.6/13.8	6.4/16.0	9.6/23.9
14	LL (L/360)			255	520	562	917	976	1070	1706	2474		
	TL (L/240)			368	762	824	1352	1441	1581	2247	2842	3346	4923
	Bearing			1.5/3.5	1.5/3.7	1.6/4.0	2.6/6.4	2.8/6.8	3.0/7.5	4.3/10.6	5.4/13.4	6.3/15.7	9.3/23.1
15	LL (L/360)				426	460	752	801	878	1405	2044	2828	
	TL (L/240)				620	671	1105	1178	1293	1954	2471	3040	4463
	Bearing				1.5/3.5	1.5/3.5	2.3/5.6	2.4/6.0	2.7/6.6	4.0/9.9	5.0/12.5	6.2/15.3	9.0/22.4
16	LL (L/360)				352	381	624	665	729	1169	1706	2369	
	TL (L/240)				510	552	913	974	1070	1714	2168	2668	4084
	Bearing				1.5/3.5	1.5/3.5	2.0/5.0	2.2/5.3	2.4/5.8	3.7/9.3	4.7/11.7	5.8/14.4	8.8/21.9
17	LL (L/360)				295	319	523	557	612	983	1438	2002	
	TL (L/240)				424	459	762	813	894	1447	1917	2359	3765
	Bearing				1.5/3.5	1.5/3.5	1.8/4.5	1.9/4.7	2.1/5.2	3.4/8.3	4.4/11.0	5.4/13.5	8.6/21.5
18	LL (L/360)				249	270	443	472	518	835	1223	1706	
	TL (L/240)				355	385	641	685	753	1224	1706	2100	3486
	Bearing				1.5/3.5	1.5/3.5	1.6/4.0	1.7/4.3	1.9/4.7	3.0/7.5	4.2/10.4	5.1/12.8	8.5/21.1
19	LL (L/360)					230	378	403	443	714	1048	1465	
	TL (L/240)					326	544	581	640	1043	1528	1881	3124
	Bearing					1.5/3.5	1.5/3.6	1.6/3.8	1.7/4.2	2.7/6.8	4.0/9.9	4.9/12.1	8.0/20.0
20	LL (L/360)						325	347	381	616	905	1267	
	TL (L/240)						465	497	547	895	1325	1694	2815
	Bearing						1.5/3.5	1.5/3.5	1.6/3.8	2.5/6.2	3.6/9.0	4.6/11.5	7.6/19.0
21	LL (L/360)						282	300	330	534	786	1103	2474
	TL (L/240)						400	428	471	773	1147	1533	2548
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.3/5.6	3.3/8.2	4.4/11.0	7.3/18.1
22	LL (L/360)						246	262	288	466	688	965	2175
	TL (L/240)						346	370	408	671	999	1394	2318
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.1	3.1/7.6	4.2/10.5	6.9/17.3
23	LL (L/360)							230	253	410	604	850	1922
	TL (L/240)							322	355	586	874	1238	2116
	Bearing							1.5/3.5	1.5/3.5	1.9/4.7	2.8/6.9	3.9/9.7	6.6/16.5
24	LL (L/360)								223	362	534	752	1706
	TL (L/240)								310	514	769	1091	1940
	Bearing								1.5/3.5	1.8/4.4	2.6/6.4	3.6/9.0	6.4/15.8
25	LL (L/360)									321	474	668	1521
	TL (L/240)									453	679	965	1784
	Bearing									1.6/4.0	2.4/5.9	3.4/8.3	6.1/15.2
26	LL (L/360)									286	423	596	1361
	TL (L/240)									401	602	858	1646
	Bearing									1.5/3.7	2.2/5.5	3.1/7.7	5.9/14.6
27	LL (L/360)									256	379	534	1223
	TL (L/240)									356	536	765	1523
	Bearing									1.5/3.5	2.1/5.1	2.9/7.2	5.7/14.1
28	LL (L/360)									230	340	480	1103
	TL (L/240)									317	478	684	1412
	Bearing									1.5/3.5	1.9/4.8	2.7/6.7	5.5/13.6
29	LL (L/360)										307	434	997
	TL (L/240)										428	614	1313
	Bearing										1.8/4.5	2.5/6.3	5.3/13.1
30	LL (L/360)										278	393	905
	TL (L/240)										385	553	1224
	Bearing										1.7/4.2	2.4/5.9	5.1/12.7
31	LL (L/360)										252	357	824
	TL (L/240)										346	499	1143
	Bearing										1.6/3.9	2.2/5.5	4.9/12.3
32	LL (L/360)										230	325	752
	TL (L/240)										313	451	1070
	Bearing										1.5/3.7	2.1/5.2	4.8/11.9

Bearing=Minimum End / Intermediate Bearing Length (inches).

GENERAL NOTES

1. Tables are formulated for all standard Evolution LVL beam widths including 1.5", 1.75", 3.5", 5.25", and 7". When multiple plies are joined properly side-by-side to achieve a larger assembly width, double the tabulated values for two-ply assemblies and triple for three-ply beam assemblies. Minimum bearing lengths shown for single-ply members apply equally to two-ply and three-ply built-up members. Refer to the Evolution LVL Connection Manual for specific fastening details.
2. Values shown are the maximum uniform loads, in pounds per lineal foot (plf), that can be applied to the beam in addition to its own self-weight.
3. Tables are based on uniform loads and the most restrictive conditions for simple or continuous spans under dry-use service conditions. For alternative load types, non-uniform loads, or special span configurations, design shall be performed in accordance with applicable engineering design standards.
4. Lateral support of beam compression edges is required at intervals of 24 inches (on center) or closer. For continuous spans, lateral support shall also be provided at the bottom compression edge at the same spacing.
5. Lateral support (blocking or headers) is mandatory at all beam bearing locations to prevent rotation and ensure load transfer.
6. Evolution LVL beams are manufactured without camber. Therefore, in addition to complying with the deflection limits of the applicable building code, long-term deflection due to creep under sustained loads must be evaluated during the design phase.
7. All 1.5" and 1.75" wide LVL members with nominal depths of 16", 18", and 24" are designed for use in multiple-member assemblies only. They are not intended for single-piece use.
8. To size a member for a span not explicitly listed in the tables, use the capacities designated for the next larger span shown.
9. For continuous beam systems with multiple spans, the shortest span must be at least 40% of the length of the adjacent longer span.
10. Bearing lengths are calculated based on a maximum allowable bearing stress of 600 psi for 2.3E Grade Evolution LVL. Bearing stresses cannot be increased for short-duration load cases. Bearing length must be increased if the supporting member's actual allowable bearing stress is less than 600 psi.

FLOOR BEAM SIZING

1. To size a beam for use in a floor, it is necessary to check both live load and total load. Make sure the selected beam will work in both rows. When no live load is shown, total load will control. Spans shown are measured center-to-center of bearing.
2. Check local code for other deflection criteria.
3. For deflection limits of L/480, multiply loads shown in live load row by 0.75. The resulting live load shall not exceed the total load shown.