ALLOWABLE STRESS DESIGN VALUES FOR WET USE	
Grade	3200 F_b-2.3E-PTI (UC3B)
Modulus of Elasticity[4], E (X10⁶ psi)	1.6
Bending Stress[1], F_b(psi)	1984
Shear F_v (psi)	195
Compression Stress Perpendicular to Grain, $F_{c\perp}$ (psi)	450

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-PTI (UC3B) EVOLUTION LVL ALLOWABLE DESIGN VALUES FOR WET 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)	689	1520	2464	3774	3955	5316	5525	5844	7795	9847	12101	20020
Allowable Shear (lbs.)	682	1072	1414	1804	1852	2194	2242	2316	2730	3120	3510	4680
Moment of Inertia (in⁴)	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-PTI (UC3B) EVOLUTION LVL ALLOWABLE DESIGN VALUES FOR WET 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)	804	1773	2875	4403	4614	6202	6446	6818	9094	11488	14118	23357
Allowable Shear (lbs.)	796	1251	1649	2104	2161	2559	2616	2702	3185	3640	4095	5460
Moment of Inertia (in⁴)	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-PTI (UC3B) EVOLUTION LVL ALLOWABLE DESIGN VALUES FOR WET 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)	1608	3546	5750	8807	9228	12405	12891	13636	18188	22976	28236	46713
Allowable Shear (lbs.)	1592	2502	3299	4209	4322	5119	5232	5403	6370	7280	8190	10920
Moment of Inertia (in⁴)	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-PTI (UC3B) EVOLUTION LVL ALLOWABLE DESIGN VALUES FOR WET 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)	/	5319	8625	13210	13841	18607	19337	20454	27283	34465	42354	70070
Allowable Shear (lbs.)	/	3754	4948	6313	6484	7678	7849	8105	9555	10920	12285	16380
Moment of Inertia (in⁴)	/	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-PTI (UC3B) EVOLUTION LVL ALLOWABLE DESIGN VALUES FOR WET 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)	/	/	11500	17614	18455	24810	25782	27272	36377	45953	56472	93427
Allowable Shear (lbs.)	/	/	6598	8418	8645	10238	10465	10806	12740	14560	16380	21840
Moment of Inertia (in⁴)	/	/	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-PTI (UC3B)

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)	54	199										
	TL (L/240)	79	296	427	581	602	761	786	825	1077	1405	2044	2824
	Bearing	1.5/3.5	1.5/3.7	2.2/5.4	2.9/7.3	3.0/7.5	3.8/9.5	4.0/9.8	4.1/10.3	5.4/13.4	7.0/17.5	10.2/25.4	14.0/35.0
7	LL (L/360)		128	281									
	TL (L/240)		190	354	476	492	613	632	660	837	1038	1296	2419
	Bearing		1.5/3.5	2.1/5.2	2.8/7.0	2.9/7.2	3.6/9.0	3.7/9.2	3.9/9.6	4.9/12.2	6.1/15.1	7.6/18.8	14.0/35.0
8	LL (L/360)		87	193	381	410							
	TL (L/240)		128	286	404	417	514	529	552	688	836	1010	2042
	Bearing		1.5/3.5	2.0/4.8	2.7/6.8	2.8/7.0	3.5/8.6	3.6/8.8	3.7/9.2	4.6/11.5	5.6/13.9	6.7/16.8	13.6/33.8
9	LL (L/360)		62	138	275	296							
	TL (L/240)		90	203	350	362	443	456	474	586	703	835	1401
	Bearing		1.5/3.5	1.6/3.9	2.7/6.6	2.8/6.8	3.4/8.3	3.5/8.6	3.6/8.9	4.4/11.0	5.3/13.2	6.3/15.7	10.5/26.2
10	LL (L/360)		45	102	204	220	353	375	410				
	TL (L/240)		66	149	283	296	390	400	416	510	608	715	1129
	Bearing		1.5/3.5	1.5/3.5	2.4/6.0	2.5/6.2	3.3/8.2	3.4/8.4	3.5/8.7	4.3/10.7	5.1/12.7	6.0/14.9	9.4/23.5
11	LL (L/360)			77	156	168	271	288	315				
	TL (L/240)			112	229	244	329	342	362	452	535	625	956
	Bearing			1.5/3.5	2.2/5.3	2.3/5.7	3.1/7.6	3.2/7.9	3.4/8.4	4.2/10.4	5.0/12.3	5.8/14.4	8.8/21.9
12	LL (L/360)			60	121	131	212	226	247	390			
	TL (L/240)			86	178	192	276	287	303	405	479	556	833
	Bearing			1.5/3.5	1.8/4.5	2.0/4.9	2.8/7.0	2.9/7.2	3.1/7.7	4.1/10.2	4.8/12.0	5.6/14.0	8.4/20.9
13	LL (L/360)			47	96	104	169	180	197	313			
	TL (L/240)			68	140	152	234	243	258	344	433	501	739
	Bearing			1.5/3.5	1.6/3.9	1.7/4.2	2.6/6.4	2.7/6.7	2.9/7.1	3.8/9.4	4.8/11.8	5.5/13.7	8.1/20.1
14	LL (L/360)				78	84	137	146	160	254	369		
	TL (L/240)				112	122	200	209	221	296	375	456	664
	Bearing				1.5/3.5	1.5/3.7	2.4/6.0	2.5/6.2	2.7/6.6	3.5/8.8	4.4/11.0	5.4/13.4	7.8/19.5
15	LL (L/360)				63	69	112	119	131	209	305		
	TL (L/240)				91	99	163	174	191	257	326	401	604
	Bearing				1.5/3.5	1.5/3.5	2.1/5.2	2.3/5.6	2.5/6.1	3.3/8.2	4.2/10.3	5.1/12.7	7.6/19.0
16	LL (L/360)				53	57	93	99	109	174	254		
	TL (L/240)				75	81	135	144	158	225	285	351	554
	Bearing				1.5/3.5	1.5/3.5	1.9/4.6	2.0/4.9	2.2/5.4	3.1/7.7	3.9/9.7	4.8/11.9	7.5/18.6
17	LL (L/360)				44	48	78	83	91	147	214	298	
	TL (L/240)				62	67	112	120	132	199	252	310	511
	Bearing				1.5/3.5	1.5/3.5	1.7/4.1	1.8/4.4	2.0/4.8	2.9/7.2	3.7/9.1	4.5/11.2	7.4/18.3
18	LL (L/360)					40	66	70	77	124	182	254	
	TL (L/240)					56	94	101	111	177	224	276	459
	Bearing					1.5/3.5	1.5/3.7	1.6/4.0	1.8/4.3	2.8/6.8	3.5/8.6	4.3/10.6	7.0/17.4
19	LL (L/360)						56	60	66	106	156	218	
	TL (L/240)						80	85	94	154	200	247	411
	Bearing						1.5/3.5	1.5/3.6	1.6/3.9	2.5/6.3	3.3/8.2	4.0/10.0	6.6/16.5
20	LL (L/360)						48	52	57	92	135	189	
	TL (L/240)						68	73	80	132	180	222	370
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.7	3.1/7.7	3.8/9.5	6.3/15.7
21	LL (L/360)						42	45	49	80	117	164	
	TL (L/240)						58	62	69	113	163	201	335
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2	3.0/7.4	3.7/9.1	6.0/15.0
22	LL (L/360)							39	43	70	102	144	
	TL (L/240)							54	59	98	147	182	304
	Bearing							1.5/3.5	1.5/3.5	1.9/4.8	2.8/7.0	3.5/8.7	5.7/14.3
23	LL (L/360)									61	90	127	
	TL (L/240)									86	128	166	277
	Bearing									1.8/4.4	2.6/6.4	3.3/8.3	5.5/13.7
24	LL (L/360)									54	80	112	
	TL (L/240)									75	113	152	254
	Bearing									1.6/4.0	2.4/5.9	3.2/7.9	5.3/13.1
25	LL (L/360)									48	71	100	227
	TL (L/240)									66	99	139	233
	Bearing									1.5/3.7	2.2/5.5	3.1/7.6	5.1/12.6
26	LL (L/360)									43	63	89	203
	TL (L/240)									58	88	126	215
	Bearing									1.5/3.5	2.1/5.1	2.9/7.2	4.9/12.1
27	LL (L/360)									38	56	80	182
	TL (L/240)									51	78	112	198
	Bearing									1.5/3.5	1.9/4.8	2.7/6.7	4.7/11.6
28	LL (L/360)										51	72	164
	TL (L/240)										69	100	184
	Bearing										1.8/4.4	2.5/6.2	4.5/11.2
29	LL (L/360)										46	65	149
	TL (L/240)										62	89	171
	Bearing										1.7/4.1	2.4/5.8	4.4/10.8
30	LL (L/360)										41	59	135
	TL (L/240)										55	80	159
	Bearing										1.6/3.9	2.2/5.5	4.2/10.5
31	LL (L/360)											53	123
	TL (L/240)											72	148
	Bearing											2.1/5.1	4.1/10.1
32	LL (L/360)											48	112
	TL (L/240)											65	138
	Bearing											2.0/4.8	4.0/9.8

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-PTI (UC3B)

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)	63	232										
	TL (L/240)	93	345	498	678	702	888	917	962	1257	1639	2385	3294
	Bearing	1.5/3.5	1.5/3.7	2.2/5.4	2.9/7.3	3.0/7.5	3.8/9.5	4.0/9.8	4.1/10.3	5.4/13.4	7.0/17.5	10.2/25.4	14.0/35.0
7	LL (L/360)	40	149	327									
	TL (L/240)	58	221	414	555	574	715	737	770	976	1211	1512	2822
	Bearing	1.5/3.5	1.5/3.5	2.1/5.2	2.8/7.0	2.9/7.2	3.6/9.0	3.7/9.2	3.9/9.6	4.9/12.2	6.1/15.1	7.6/18.8	14.0/35.0
8	LL (L/360)		102	225	444	478							
	TL (L/240)		150	333	471	486	600	617	643	803	975	1178	2382
	Bearing		1.5/3.5	2.0/4.8	2.7/6.8	2.8/7.0	3.5/8.6	3.6/8.8	3.7/9.2	4.6/11.5	5.6/13.9	6.7/16.8	13.6/33.8
9	LL (L/360)		72	161	320	345							
	TL (L/240)		105	237	408	422	517	531	553	683	820	974	1635
	Bearing		1.5/3.5	1.6/3.9	2.7/6.6	2.8/6.8	3.4/8.3	3.5/8.6	3.6/8.9	4.4/11.0	5.3/13.2	6.3/15.7	10.5/26.2
10	LL (L/360)		53	119	238	257	412	438	478				
	TL (L/240)		77	174	330	346	455	467	485	595	709	834	1318
	Bearing		1.5/3.5	1.5/3.5	2.4/6.0	2.5/6.2	3.3/8.2	3.4/8.4	3.5/8.7	4.3/10.7	5.1/12.7	6.0/14.9	9.4/23.5
11	LL (L/360)		40	90	182	196	316	336	367				
	TL (L/240)		57	131	268	285	384	399	422	528	625	730	1116
	Bearing		1.5/3.5	1.5/3.5	2.2/5.3	2.3/5.7	3.1/7.6	3.2/7.9	3.4/8.4	4.2/10.4	5.0/12.3	5.8/14.4	8.8/21.9
12	LL (L/360)			70	141	153	247	263	288	455			
	TL (L/240)			101	208	224	322	334	354	473	558	649	971
	Bearing			1.5/3.5	1.8/4.5	2.0/4.9	2.8/7.0	2.9/7.2	3.1/7.7	4.1/10.2	4.8/12.0	5.6/14.0	8.4/20.9
13	LL (L/360)			55	112	121	197	210	230	365			
	TL (L/240)			79	164	177	273	284	301	402	505	585	862
	Bearing			1.5/3.5	1.6/3.9	1.7/4.2	2.6/6.4	2.7/6.7	2.9/7.1	3.8/9.4	4.8/11.8	5.5/13.7	8.1/20.1
14	LL (L/360)			44	91	98	159	170	186	297	430		
	TL (L/240)			63	131	142	233	244	258	346	437	532	775
	Bearing			1.5/3.5	1.5/3.5	1.5/3.7	2.4/6.0	2.5/6.2	2.7/6.6	3.5/8.8	4.4/11.0	5.4/13.4	7.8/19.5
15	LL (L/360)				74	80	131	139	153	244	355		
	TL (L/240)				106	115	190	203	223	300	380	468	705
	Bearing				1.5/3.5	1.5/3.5	2.1/5.2	2.3/5.6	2.5/6.1	3.3/8.2	4.2/10.3	5.1/12.7	7.6/19.0
16	LL (L/360)				61	66	108	116	127	203	297		
	TL (L/240)				87	95	157	168	184	263	333	410	646
	Bearing				1.5/3.5	1.5/3.5	1.9/4.6	2.0/4.9	2.2/5.4	3.1/7.7	3.9/9.7	4.8/11.9	7.5/18.6
17	LL (L/360)				51	55	91	97	106	171	250	348	
	TL (L/240)				72	78	131	140	154	232	294	362	597
	Bearing				1.5/3.5	1.5/3.5	1.7/4.1	1.8/4.4	2.0/4.8	2.9/7.2	3.7/9.1	4.5/11.2	7.4/18.3
18	LL (L/360)				43	47	77	82	90	145	213	297	
	TL (L/240)				60	66	110	117	129	206	261	322	536
	Bearing				1.5/3.5	1.5/3.5	1.5/3.7	1.6/4.0	1.8/4.3	2.8/6.8	3.5/8.6	4.3/10.6	7.0/17.4
19	LL (L/360)					40	66	70	77	124	182	255	
	TL (L/240)					55	93	99	109	179	234	288	480
	Bearing					1.5/3.5	1.5/3.5	1.5/3.6	1.6/3.9	2.5/6.3	3.3/8.2	4.0/10.0	6.6/16.5
20	LL (L/360)						57	60	66	107	157	220	
	TL (L/240)						79	85	93	154	210	259	432
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.7	3.1/7.7	3.8/9.5	6.3/15.7
21	LL (L/360)						49	52	57	93	137	192	
	TL (L/240)						68	73	80	132	190	234	390
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2	3.0/7.4	3.7/9.1	6.0/15.0
22	LL (L/360)						43	46	50	81	120	168	
	TL (L/240)						58	63	69	115	171	213	355
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	1.9/4.8	2.8/7.0	3.5/8.7	5.7/14.3
23	LL (L/360)							40	44	71	105	148	
	TL (L/240)							54	60	100	150	194	323
	Bearing							1.5/3.5	1.5/3.5	1.8/4.4	2.6/6.4	3.3/8.3	5.5/13.7
24	LL (L/360)								39	63	93	131	
	TL (L/240)								52	87	131	177	296
	Bearing								1.5/3.5	1.6/4.0	2.4/5.9	3.2/7.9	5.3/13.1
25	LL (L/360)									56	82	116	265
	TL (L/240)									77	116	163	272
	Bearing									1.5/3.7	2.2/5.5	3.1/7.6	5.1/12.6
26	LL (L/360)									50	74	104	237
	TL (L/240)									68	102	146	250
	Bearing									1.5/3.5	2.1/5.1	2.9/7.2	4.9/12.1
27	LL (L/360)									45	66	93	213
	TL (L/240)									60	91	130	231
	Bearing									1.5/3.5	1.9/4.8	2.7/6.7	4.7/11.6
28	LL (L/360)									40	59	84	192
	TL (L/240)									53	81	116	214
	Bearing									1.5/3.5	1.8/4.4	2.5/6.2	4.5/11.2
29	LL (L/360)										53	75	173
	TL (L/240)										72	104	199
	Bearing										1.7/4.1	2.4/5.8	4.4/10.8
30	LL (L/360)										48	68	157
	TL (L/240)										64	93	185
	Bearing										1.6/3.9	2.2/5.5	4.2/10.5
31	LL (L/360)										44	62	143
	TL (L/240)										58	84	173
	Bearing										1.5/3.7	2.1/5.1	4.1/10.1
32	LL (L/360)										40	57	131
	TL (L/240)										52	76	161
	Bearing										1.5/3.5	2.0/4.8	4.0/9.8

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-PTI (UC3B)

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)	126	464										
	TL (L/240)	185	691	996	1355	1404	1776	1834	1924	2514	3278	4770	6589
	Bearing	1.5/3.5	1.5/3.7	2.2/5.4	2.9/7.3	3.0/7.5	3.8/9.5	4.0/9.8	4.1/10.3	5.4/13.4	7.0/17.5	10.2/25.4	14.0/35.0
7	LL (L/360)	80	299	655									
	TL (L/240)	116	443	827	1111	1149	1431	1474	1540	1953	2422	3025	5644
	Bearing	1.5/3.5	1.5/3.5	2.1/5.2	2.8/7.0	2.9/7.2	3.6/9.0	3.7/9.2	3.9/9.6	4.9/12.2	6.1/15.1	7.6/18.8	14.0/35.0
8	LL (L/360)		203	449	889	956							
	TL (L/240)		299	667	942	973	1200	1235	1287	1606	1951	2356	4764
	Bearing		1.5/3.5	2.0/4.8	2.7/6.8	2.8/7.0	3.5/8.6	3.6/8.8	3.7/9.2	4.6/11.5	5.6/13.9	6.7/16.8	13.6/33.8
9	LL (L/360)		144	321	641	690							
	TL (L/240)		211	474	817	844	1034	1063	1106	1367	1640	1949	3269
	Bearing		1.5/3.5	1.6/3.9	2.7/6.6	2.8/6.8	3.4/8.3	3.5/8.6	3.6/8.9	4.4/11.0	5.3/13.2	6.3/15.7	10.5/26.2
10	LL (L/360)		106	237	476	514	824	875	956				
	TL (L/240)		153	348	660	692	909	933	970	1191	1418	1667	2635
	Bearing		1.5/3.5	1.5/3.5	2.4/6.0	2.5/6.2	3.3/8.2	3.4/8.4	3.5/8.7	4.3/10.7	5.1/12.7	6.0/14.9	9.4/23.5
11	LL (L/360)		80	180	363	392	632	672	735				
	TL (L/240)		114	262	535	570	768	798	844	1055	1249	1459	2231
	Bearing		1.5/3.5	1.5/3.5	2.2/5.3	2.3/5.7	3.1/7.6	3.2/7.9	3.4/8.4	4.2/10.4	5.0/12.3	5.8/14.4	8.8/21.9
12	LL (L/360)			139	283	305	495	526	576	911			
	TL (L/240)			202	415	449	643	669	708	946	1117	1298	1943
	Bearing			1.5/3.5	1.8/4.5	2.0/4.9	2.8/7.0	2.9/7.2	3.1/7.7	4.1/10.2	4.8/12.0	5.6/14.0	8.4/20.9
13	LL (L/360)			110	224	242	394	420	460	730			
	TL (L/240)			158	327	354	547	568	601	804	1010	1170	1723
	Bearing			1.5/3.5	1.6/3.9	1.7/4.2	2.6/6.4	2.7/6.7	2.9/7.1	3.8/9.4	4.8/11.8	5.5/13.7	8.1/20.1
14	LL (L/360)			89	181	196	319	340	372	593	861		
	TL (L/240)			126	262	284	467	488	517	691	875	1065	1550
	Bearing			1.5/3.5	1.5/3.5	1.5/3.7	2.4/6.0	2.5/6.2	2.7/6.6	3.5/8.8	4.4/11.0	5.4/13.4	7.8/19.5
15	LL (L/360)				148	160	261	279	305	489	711		
	TL (L/240)				213	230	381	406	446	600	760	936	1409
	Bearing				1.5/3.5	1.5/3.5	2.1/5.2	2.3/5.6	2.5/6.1	3.3/8.2	4.2/10.3	5.1/12.7	7.6/19.0
16	LL (L/360)				123	132	217	231	254	407	593		
	TL (L/240)				174	189	314	335	368	526	666	820	1292
	Bearing				1.5/3.5	1.5/3.5	1.9/4.6	2.0/4.9	2.2/5.4	3.1/7.7	3.9/9.7	4.8/11.9	7.5/18.6
17	LL (L/360)				103	111	182	194	213	342	500	696	
	TL (L/240)				145	157	261	279	307	464	588	724	1193
	Bearing				1.5/3.5	1.5/3.5	1.7/4.1	1.8/4.4	2.0/4.8	2.9/7.2	3.7/9.1	4.5/11.2	7.4/18.3
18	LL (L/360)				87	94	154	164	180	290	425	593	
	TL (L/240)				121	131	220	235	258	413	523	644	1072
	Bearing				1.5/3.5	1.5/3.5	1.5/3.7	1.6/4.0	1.8/4.3	2.8/6.8	3.5/8.6	4.3/10.6	7.0/17.4
19	LL (L/360)					80	131	140	154	248	365	510	
	TL (L/240)					110	186	199	219	358	468	576	959
	Bearing					1.5/3.5	1.5/3.5	1.5/3.6	1.6/3.9	2.5/6.3	3.3/8.2	4.0/10.0	6.6/16.5
20	LL (L/360)						113	121	132	214	315	441	
	TL (L/240)						158	169	187	307	420	518	863
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.7	3.1/7.7	3.8/9.5	6.3/15.7
21	LL (L/360)						98	105	115	186	274	384	
	TL (L/240)						136	145	160	265	380	468	781
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2	3.0/7.4	3.7/9.1	6.0/15.0
22	LL (L/360)						85	91	100	162	239	336	
	TL (L/240)						117	125	138	229	343	425	709
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	1.9/4.8	2.8/7.0	3.5/8.7	5.7/14.3
23	LL (L/360)							80	88	142	210	296	
	TL (L/240)							108	120	200	299	387	647
	Bearing							1.5/3.5	1.5/3.5	1.8/4.4	2.6/6.4	3.3/8.3	5.5/13.7
24	LL (L/360)								78	126	186	261	
	TL (L/240)								104	175	263	354	592
	Bearing								1.5/3.5	1.6/4.0	2.4/5.9	3.2/7.9	5.3/13.1
25	LL (L/360)									112	165	232	529
	TL (L/240)									153	231	325	544
	Bearing									1.5/3.7	2.2/5.5	3.1/7.6	5.1/12.6
26	LL (L/360)									99	147	207	474
	TL (L/240)									135	205	293	501
	Bearing									1.5/3.5	2.1/5.1	2.9/7.2	4.9/12.1
27	LL (L/360)									89	132	186	425
	TL (L/240)									119	181	261	463
	Bearing									1.5/3.5	1.9/4.8	2.7/6.7	4.7/11.6
28	LL (L/360)									80	118	167	384
	TL (L/240)									106	161	233	429
	Bearing									1.5/3.5	1.8/4.4	2.5/6.2	4.5/11.2
29	LL (L/360)										107	151	347
	TL (L/240)										144	208	398
	Bearing										1.7/4.1	2.4/5.8	4.4/10.8
30	LL (L/360)										97	137	315
	TL (L/240)										129	187	370
	Bearing										1.6/3.9	2.2/5.5	4.2/10.5
31	LL (L/360)										88	124	286
	TL (L/240)										116	168	345
	Bearing										1.5/3.7	2.1/5.1	4.1/10.1
32	LL (L/360)										80	113	261
	TL (L/240)										104	151	322
	Bearing										1.5/3.5	2.0/4.8	4.0/9.8

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

ALLOWABLE UNIFORM LOADS (POUNDS PER LINEAL FOOT)

FLOOR 100% - 3200F$_b$-2.3E-PTI (UC3B)

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)		696										
	TL (L/240)		1036	1494	2033	2106	2664	2751	2886	3771	4916	7155	9883
	Bearing		1.5/3.7	2.2/5.4	2.9/7.3	3.0/7.5	3.8/9.5	4.0/9.8	4.1/10.3	5.4/13.4	7.0/17.5	10.2/25.4	14.0/35.0
7	LL (L/360)		448	982									
	TL (L/240)		664	1241	1666	1723	2146	2211	2310	2929	3634	4537	8466
	Bearing		1.5/3.5	2.1/5.2	2.8/7.0	2.9/7.2	3.6/9.0	3.7/9.2	3.9/9.6	4.9/12.2	6.1/15.1	7.6/18.8	14.0/35.0
8	LL (L/360)		305	674	1333	1434							
	TL (L/240)		449	1000	1413	1459	1800	1852	1930	2409	2926	3534	7146
	Bearing		1.5/3.5	2.0/4.8	2.7/6.8	2.8/7.0	3.5/8.6	3.6/8.8	3.7/9.2	4.6/11.5	5.6/13.9	6.7/16.8	13.6/33.8
9	LL (L/360)		216	482	961	1036							
	TL (L/240)		316	712	1225	1265	1552	1594	1659	2050	2460	2923	4904
	Bearing		1.5/3.5	1.6/3.9	2.7/6.6	2.8/6.8	3.4/8.3	3.5/8.6	3.6/8.9	4.4/11.0	5.3/13.2	6.3/15.7	10.5/26.2
10	LL (L/360)		159	356	715	770	1236	1313	1434				
	TL (L/240)		230	522	990	1038	1364	1400	1455	1786	2126	2501	3953
	Bearing		1.5/3.5	1.5/3.5	2.4/6.0	2.5/6.2	3.3/8.2	3.4/8.4	3.5/8.7	4.3/10.7	5.1/12.7	6.0/14.9	9.4/23.5
11	LL (L/360)		120	270	545	588	948	1008	1102				
	TL (L/240)		172	393	803	855	1152	1197	1267	1583	1874	2189	3347
	Bearing		1.5/3.5	1.5/3.5	2.2/5.3	2.3/5.7	3.1/7.6	3.2/7.9	3.4/8.4	4.2/10.4	5.0/12.3	5.8/14.4	8.8/21.9
12	LL (L/360)			209	424	458	742	790	864	1366			
	TL (L/240)			303	623	673	965	1003	1062	1419	1675	1948	2914
	Bearing			1.5/3.5	1.8/4.5	2.0/4.9	2.8/7.0	2.9/7.2	3.1/7.7	4.1/10.2	4.8/12.0	5.6/14.0	8.4/20.9
13	LL (L/360)			165	337	364	591	629	690	1095			
	TL (L/240)			237	491	531	820	852	902	1206	1515	1755	2585
	Bearing			1.5/3.5	1.6/3.9	1.7/4.2	2.6/6.4	2.7/6.7	2.9/7.1	3.8/9.4	4.8/11.8	5.5/13.7	8.1/20.1
14	LL (L/360)			133	272	293	478	509	558	890	1291		
	TL (L/240)			189	393	426	700	732	775	1037	1312	1597	2325
	Bearing			1.5/3.5	1.5/3.5	1.5/3.7	2.4/6.0	2.5/6.2	2.7/6.6	3.5/8.8	4.4/11.0	5.4/13.4	7.8/19.5
15	LL (L/360)				222	240	392	418	458	733	1066		
	TL (L/240)				319	346	571	609	669	900	1140	1403	2114
	Bearing				1.5/3.5	1.5/3.5	2.1/5.2	2.3/5.6	2.5/6.1	3.3/8.2	4.2/10.3	5.1/12.7	7.6/19.0
16	LL (L/360)				184	199	325	347	380	610	890		
	TL (L/240)				262	284	471	503	553	789	999	1230	1939
	Bearing				1.5/3.5	1.5/3.5	1.9/4.6	2.0/4.9	2.2/5.4	3.1/7.7	3.9/9.7	4.8/11.9	7.5/18.6
17	LL (L/360)				154	166	273	291	319	513	750	1045	
	TL (L/240)				217	235	392	419	461	696	882	1087	1790
	Bearing				1.5/3.5	1.5/3.5	1.7/4.1	1.8/4.4	2.0/4.8	2.9/7.2	3.7/9.1	4.5/11.2	7.4/18.3
18	LL (L/360)				130	141	231	246	270	435	638	890	
	TL (L/240)				181	197	329	352	388	619	784	966	1607
	Bearing				1.5/3.5	1.5/3.5	1.5/3.7	1.6/4.0	1.8/4.3	2.8/6.8	3.5/8.6	4.3/10.6	7.0/17.4
19	LL (L/360)					120	197	210	231	373	547	764	
	TL (L/240)					166	279	298	328	538	701	864	1439
	Bearing					1.5/3.5	1.5/3.5	1.5/3.6	1.6/3.9	2.5/6.3	3.3/8.2	4.0/10.0	6.6/16.5
20	LL (L/360)						170	181	199	321	472	661	
	TL (L/240)						237	254	280	461	631	777	1295
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.7	3.1/7.7	3.8/9.5	6.3/15.7
21	LL (L/360)						147	157	172	279	410	575	
	TL (L/240)						203	218	240	397	570	703	1171
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2	3.0/7.4	3.7/9.1	6.0/15.0
22	LL (L/360)						128	137	150	243	359	504	
	TL (L/240)						175	188	207	344	514	638	1064
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	1.9/4.8	2.8/7.0	3.5/8.7	5.7/14.3
23	LL (L/360)							120	132	214	315	443	
	TL (L/240)							163	180	299	449	581	970
	Bearing							1.5/3.5	1.5/3.5	1.8/4.4	2.6/6.4	3.3/8.3	5.5/13.7
24	LL (L/360)								116	189	279	392	
	TL (L/240)								156	262	394	532	888
	Bearing								1.5/3.5	1.6/4.0	2.4/5.9	3.2/7.9	5.3/13.1
25	LL (L/360)									167	247	348	794
	TL (L/240)									230	347	488	816
	Bearing									1.5/3.7	2.2/5.5	3.1/7.6	5.1/12.6
26	LL (L/360)									149	221	311	710
	TL (L/240)									203	307	439	751
	Bearing									1.5/3.5	2.1/5.1	2.9/7.2	4.9/12.1
27	LL (L/360)									134	198	279	638
	TL (L/240)									179	272	391	694
	Bearing									1.5/3.5	1.9/4.8	2.7/6.7	4.7/11.6
28	LL (L/360)									120	178	251	575
	TL (L/240)									159	242	349	643
	Bearing									1.5/3.5	1.8/4.4	2.5/6.2	4.5/11.2
29	LL (L/360)										160	226	520
	TL (L/240)										216	312	597
	Bearing										1.7/4.1	2.4/5.8	4.4/10.8
30	LL (L/360)										145	205	472
	TL (L/240)										193	280	555
	Bearing										1.6/3.9	2.2/5.5	4.2/10.5
31	LL (L/360)										132	186	430
	TL (L/240)										173	252	518
	Bearing										1.5/3.7	2.1/5.1	4.1/10.1
32	LL (L/360)										120	170	392
	TL (L/240)										156	227	484
	Bearing										1.5/3.5	2.0/4.8	4.0/9.8

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

ALLOWABLE UNIFORM LOADS (POUNDS PER LINEAL FOOT)

FLOOR 100% - 3200F$_b$-2.3E-PTI (UC3B)

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)												
	TL (L/240)			1992	2711	2808	3552	3668	3848	5028	6555	9540	13177
	Bearing			2.2/5.4	2.9/7.3	3.0/7.5	3.8/9.5	4.0/9.8	4.1/10.3	5.4/13.4	7.0/17.5	10.2/25.4	14.0/35.0
7	LL (L/360)			1310									
	TL (L/240)			1654	2222	2298	2862	2948	3080	3905	4845	6049	11288
	Bearing			2.1/5.2	2.8/7.0	2.9/7.2	3.6/9.0	3.7/9.2	3.9/9.6	4.9/12.2	6.1/15.1	7.6/18.8	14.0/35.0
8	LL (L/360)			899	1777	1912							
	TL (L/240)			1334	1884	1945	2401	2469	2574	3212	3901	4712	9528
	Bearing			2.0/4.8	2.7/6.8	2.8/7.0	3.5/8.6	3.6/8.8	3.7/9.2	4.6/11.5	5.6/13.9	6.7/16.8	13.6/33.8
9	LL (L/360)			642	1282	1381							
	TL (L/240)			949	1634	1687	2069	2126	2212	2734	3280	3897	6539
	Bearing			1.6/3.9	2.7/6.6	2.8/6.8	3.4/8.3	3.5/8.6	3.6/8.9	4.4/11.0	5.3/13.2	6.3/15.7	10.5/26.2
10	LL (L/360)			474	953	1027	1648	1751	1912				
	TL (L/240)			696	1320	1383	1818	1867	1941	2381	2835	3335	5271
	Bearing			1.5/3.5	2.4/6.0	2.5/6.2	3.3/8.2	3.4/8.4	3.5/8.7	4.3/10.7	5.1/12.7	6.0/14.9	9.4/23.5
11	LL (L/360)			359	726	784	1264	1344	1470				
	TL (L/240)			525	1071	1140	1536	1596	1689	2110	2498	2919	4463
	Bearing			1.5/3.5	2.2/5.3	2.3/5.7	3.1/7.6	3.2/7.9	3.4/8.4	4.2/10.4	5.0/12.3	5.8/14.4	8.8/21.9
12	LL (L/360)			279	566	611	990	1053	1153	1821			
	TL (L/240)			404	830	897	1287	1338	1415	1892	2234	2597	3885
	Bearing			1.5/3.5	1.8/4.5	2.0/4.9	2.8/7.0	2.9/7.2	3.1/7.7	4.1/10.2	4.8/12.0	5.6/14.0	8.4/20.9
13	LL (L/360)			221	449	485	788	839	919	1460			
	TL (L/240)			316	655	708	1093	1136	1202	1608	2020	2340	3447
	Bearing			1.5/3.5	1.6/3.9	1.7/4.2	2.6/6.4	2.7/6.7	2.9/7.1	3.8/9.4	4.8/11.8	5.5/13.7	8.1/20.1
14	LL (L/360)			177	362	391	638	679	744	1187	1721		
	TL (L/240)			251	524	568	934	977	1034	1382	1750	2129	3101
	Bearing			1.5/3.5	1.5/3.5	1.5/3.7	2.4/6.0	2.5/6.2	2.7/6.6	3.5/8.8	4.4/11.0	5.4/13.4	7.8/19.5
15	LL (L/360)				296	320	523	557	611	977	1422		
	TL (L/240)				425	461	762	812	892	1200	1520	1871	2819
	Bearing				1.5/3.5	1.5/3.5	2.1/5.2	2.3/5.6	2.5/6.1	3.3/8.2	4.2/10.3	5.1/12.7	7.6/19.0
16	LL (L/360)				245	265	434	462	507	814	1187		
	TL (L/240)				349	378	628	670	737	1052	1332	1640	2585
	Bearing				1.5/3.5	1.5/3.5	1.9/4.6	2.0/4.9	2.2/5.4	3.1/7.7	3.9/9.7	4.8/11.9	7.5/18.6
17	LL (L/360)				205	222	364	388	426	684	1001	1393	
	TL (L/240)				289	314	523	558	614	928	1176	1449	2387
	Bearing				1.5/3.5	1.5/3.5	1.7/4.1	1.8/4.4	2.0/4.8	2.9/7.2	3.7/9.1	4.5/11.2	7.4/18.3
18	LL (L/360)				173	188	308	328	360	581	851	1187	
	TL (L/240)				241	262	439	469	517	825	1046	1288	2143
	Bearing				1.5/3.5	1.5/3.5	1.5/3.7	1.6/4.0	1.8/4.3	2.8/6.8	3.5/8.6	4.3/10.6	7.0/17.4
19	LL (L/360)					160	263	280	308	497	729	1019	
	TL (L/240)					221	372	397	438	717	935	1153	1918
	Bearing					1.5/3.5	1.5/3.5	1.5/3.6	1.6/3.9	2.5/6.3	3.3/8.2	4.0/10.0	6.6/16.5
20	LL (L/360)						226	241	265	428	630	881	
	TL (L/240)						317	339	374	614	841	1037	1727
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.7	3.1/7.7	3.8/9.5	6.3/15.7
21	LL (L/360)						196	209	230	372	547	767	
	TL (L/240)						271	290	321	529	760	937	1562
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2	3.0/7.4	3.7/9.1	6.0/15.0
22	LL (L/360)						171	182	200	324	478	672	
	TL (L/240)						234	250	277	458	685	850	1419
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	1.9/4.8	2.8/7.0	3.5/8.7	5.7/14.3
23	LL (L/360)							160	176	285	421	591	
	TL (L/240)							217	240	399	598	775	1294
	Bearing							1.5/3.5	1.5/3.5	1.8/4.4	2.6/6.4	3.3/8.3	5.5/13.7
24	LL (L/360)								155	252	372	523	
	TL (L/240)								209	349	525	709	1184
	Bearing								1.5/3.5	1.6/4.0	2.4/5.9	3.2/7.9	5.3/13.1
25	LL (L/360)									223	330	465	1058
	TL (L/240)									307	463	650	1088
	Bearing									1.5/3.7	2.2/5.5	3.1/7.6	5.1/12.6
26	LL (L/360)									199	294	415	947
	TL (L/240)									270	409	586	1002
	Bearing									1.5/3.5	2.1/5.1	2.9/7.2	4.9/12.1
27	LL (L/360)									178	263	372	851
	TL (L/240)									239	363	521	926
	Bearing									1.5/3.5	1.9/4.8	2.7/6.7	4.7/11.6
28	LL (L/360)									160	237	334	767
	TL (L/240)									212	323	465	857
	Bearing									1.5/3.5	1.8/4.4	2.5/6.2	4.5/11.2
29	LL (L/360)										214	302	694
	TL (L/240)										288	416	796
	Bearing										1.7/4.1	2.4/5.8	4.4/10.8
30	LL (L/360)										193	273	630
	TL (L/240)										258	374	741
	Bearing										1.6/3.9	2.2/5.5	4.2/10.5
31	LL (L/360)										176	248	573
	TL (L/240)										231	336	690
	Bearing										1.5/3.7	2.1/5.1	4.1/10.1
32	LL (L/360)										160	226	523
	TL (L/240)										208	303	645
	Bearing										1.5/3.5	2.0/4.8	4.0/9.8

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

LVL SPAN TABLES 2.3E UC3B

EVOLUTION®

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 wet-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 450 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 450 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.