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)

ROOF SNOW 115% - 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/240)	116	429										
	TL (L/180)	153	557	780	1080	1121	1451	1505	1591	2234	3139	3925	4956
	Bearing	1.5/3.5	2.1/5.2	3.0/7.3	4.1/10.1	4.2/10.5	5.4/13.5	5.6/14.0	6.0/14.8	8.3/20.8	11.7/29.2	14.6/36.5	18.4/46.0
7	LL (L/240)	74	276	605									
	TL (L/180)	97	366	644	875	907	1145	1182	1240	1620	2121	2942	4247
	Bearing	1.5/3.5	1.6/4.0	2.8/7.0	3.8/9.5	4.0/9.9	5.0/12.5	5.2/12.9	5.4/13.5	7.1/17.6	9.2/23.0	12.8/31.9	18.4/46.0
8	LL (L/240)	50	188	415									
	TL (L/180)	65	248	540	737	762	950	979	1023	1299	1619	2044	3715
	Bearing	1.5/3.5	1.5/3.5	2.7/6.8	3.7/9.2	3.8/9.5	4.8/11.8	4.9/12.2	5.1/12.7	6.5/16.2	8.1/20.1	10.2/25.4	18.4/46.0
9	LL (L/240)		133	297	592	638							
	TL (L/180)		175	393	638	659	813	837	872	1091	1331	1618	3136
	Bearing		1.5/3.5	2.2/5.5	3.6/9.0	3.7/9.3	4.6/11.4	4.7/11.7	4.9/12.2	6.1/15.3	7.5/18.6	9.1/22.6	17.5/43.7
10	LL (L/240)		98	219	440	475							
	TL (L/180)		128	289	528	553	712	731	761	943	1136	1356	2411
	Bearing		1.5/3.5	1.9/4.6	3.3/8.3	3.5/8.7	4.5/11.1	4.6/11.4	4.8/11.9	5.9/14.7	7.1/17.7	8.5/21.1	15.0/37.4
11	LL (L/240)		74	166	336	362	584	621					
	TL (L/180)		96	218	436	457	615	639	676	831	993	1173	1909
	Bearing		1.5/3.5	1.6/3.8	3.0/7.5	3.2/7.9	4.3/10.6	4.4/11.0	4.7/11.6	5.7/14.3	6.8/17.0	8.1/20.1	13.1/32.6
12	LL (L/240)		57	129	261	282	457	487	533				
	TL (L/180)		74	169	345	372	516	536	567	744	883	1035	1615
	Bearing		1.5/3.5	1.5/3.5	2.6/6.5	2.8/7.0	3.9/9.7	4.1/10.1	4.3/10.6	5.6/13.9	6.6/16.5	7.8/19.4	12.1/30.2
13	LL (L/240)			102	207	224	364	388	425				
	TL (L/180)			133	273	295	439	456	482	644	795	927	1410
	Bearing			1.5/3.5	2.3/5.6	2.4/6.0	3.6/8.9	3.7/9.3	4.0/9.8	5.3/13.1	6.5/16.1	7.6/18.8	11.4/28.5
14	LL (L/240)			82	167	181	295	314	344	548			
	TL (L/180)			106	219	237	378	392	415	555	701	841	1254
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.3	3.5/8.6	3.7/9.1	4.9/12.2	6.2/15.4	7.4/18.4	11.0/27.4
15	LL (L/240)			67	137	148	242	257	282	452			
	TL (L/180)			86	178	193	317	338	361	482	610	750	1132
	Bearing			1.5/3.5	1.7/4.3	1.9/4.6	3.0/7.5	3.2/8.0	3.4/8.5	4.6/11.4	5.8/14.3	7.1/17.6	10.6/26.5
16	LL (L/240)			55	113	122	200	214	234	376			
	TL (L/180)			71	147	159	262	280	307	423	535	659	1032
	Bearing			1.5/3.5	1.5/3.8	1.7/4.1	2.7/6.6	2.9/7.1	3.1/7.8	4.3/10.6	5.4/13.4	6.6/16.5	10.3/25.8
17	LL (L/240)				95	103	168	179	197	316	462		
	TL (L/180)				122	133	219	234	257	374	473	582	950
	Bearing				1.5/3.5	1.5/3.6	2.4/5.9	2.6/6.3	2.8/6.9	4.0/10.0	5.1/12.7	6.2/15.5	10.1/25.2
18	LL (L/240)				80	87	142	152	167	268	393		
	TL (L/180)				103	111	185	197	217	333	422	519	861
	Bearing				1.5/3.5	1.5/3.5	2.2/5.3	2.3/5.7	2.5/6.2	3.8/9.5	4.8/12.0	5.9/14.7	9.7/24.2
19	LL (L/240)				68	74	121	130	142	230	337		
	TL (L/180)				87	94	157	168	185	298	378	465	771
	Bearing				1.5/3.5	1.5/3.5	1.9/4.8	2.1/5.1	2.3/5.6	3.6/9.0	4.6/11.3	5.6/13.9	9.2/23.0
20	LL (L/240)				59	64	104	111	122	198	291	407	
	TL (L/180)				74	81	134	144	158	258	340	419	695
	Bearing				1.5/3.5	1.5/3.5	1.8/4.4	1.9/4.6	2.1/5.1	3.3/8.2	4.3/10.8	5.3/13.2	8.8/21.8
21	LL (L/240)					55	91	97	106	172	253	354	
	TL (L/180)					69	116	124	136	223	308	379	630
	Bearing					1.5/3.5	1.6/4.0	1.7/4.2	1.9/4.6	3.0/7.5	4.1/10.3	5.1/12.6	8.3/20.8
22	LL (L/240)						79	84	93	150	221	310	
	TL (L/180)						100	107	118	194	280	345	573
	Bearing						1.5/3.6	1.6/3.9	1.7/4.2	2.8/6.8	3.9/9.8	4.8/12.0	8.0/19.8
23	LL (L/240)						69	74	81	132	194	273	
	TL (L/180)						87	94	103	170	252	315	523
	Bearing						1.5/3.5	1.5/3.5	1.6/3.9	2.5/6.3	3.7/9.2	4.6/11.5	7.6/19.0
24	LL (L/240)						61	65	72	116	172	242	
	TL (L/180)						77	82	90	149	222	288	480
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8	3.4/8.5	4.4/11.0	7.3/18.2
25	LL (L/240)							58	64	103	152	215	
	TL (L/180)							72	80	131	196	265	441
	Bearing							1.5/3.5	1.5/3.5	2.2/5.4	3.2/7.9	4.3/10.6	7.0/17.5
26	LL (L/240)								57	92	136	192	
	TL (L/180)								70	117	174	245	407
	Bearing								1.5/3.5	2.0/5.0	3.0/7.3	4.1/10.2	6.8/16.8
27	LL (L/240)									82	122	172	
	TL (L/180)									104	155	221	377
	Bearing									1.9/4.6	2.8/6.8	3.9/9.6	6.5/16.2
28	LL (L/240)									74	109	154	
	TL (L/180)									92	139	198	350
	Bearing									1.8/4.3	2.6/6.4	3.6/8.9	6.3/15.6
29	LL (L/240)									67	99	139	321
	TL (L/180)									83	125	178	325
	Bearing									1.6/4.0	2.4/5.9	3.4/8.4	6.1/15.1
30	LL (L/240)									60	89	126	291
	TL (L/180)									74	112	161	303
	Bearing									1.5/3.8	2.3/5.6	3.2/7.8	5.9/14.6
31	LL (L/240)										81	115	265
	TL (L/180)										101	145	283
	Bearing										2.1/5.2	3.0/7.4	5.7/14.1
32	LL (L/240)										74	104	242
	TL (L/180)										92	132	265
	Bearing										2.0/4.9	2.8/6.9	5.5/13.7

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)

ROOF SNOW 115% - 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/240)	136	501										
	TL (L/180)	179	650	911	1259	1308	1693	1756	1856	2606	3663	4579	5782
	Bearing	1.5/3.5	2.1/5.2	3.0/7.3	4.1/10.1	4.2/10.5	5.4/13.5	5.6/14.0	6.0/14.8	8.3/20.8	11.7/29.2	14.6/36.5	18.4/46.0
7	LL (L/240)	86	322	706									
	TL (L/180)	113	427	752	1021	1058	1336	1379	1447	1889	2475	3432	4955
	Bearing	1.5/3.5	1.6/4.0	2.8/7.0	3.8/9.5	4.0/9.9	5.0/12.5	5.2/12.9	5.4/13.5	7.1/17.6	9.2/23.0	12.8/31.9	18.4/46.0
8	LL (L/240)	58	219	485									
	TL (L/180)	76	289	630	860	890	1108	1142	1193	1516	1888	2385	4334
	Bearing	1.5/3.5	1.5/3.5	2.7/6.8	3.7/9.2	3.8/9.5	4.8/11.8	4.9/12.2	5.1/12.7	6.5/16.2	8.1/20.1	10.2/25.4	18.4/46.0
9	LL (L/240)		155	346	691	744							
	TL (L/180)		204	458	744	768	949	976	1018	1273	1552	1887	3659
	Bearing		1.5/3.5	2.2/5.5	3.6/9.0	3.7/9.3	4.6/11.4	4.7/11.7	4.9/12.2	6.1/15.3	7.5/18.6	9.1/22.6	17.5/43.7
10	LL (L/240)		114	256	514	554							
	TL (L/180)		149	337	616	646	830	853	888	1100	1325	1582	2813
	Bearing		1.5/3.5	1.9/4.6	3.3/8.3	3.5/8.7	4.5/11.1	4.6/11.4	4.8/11.9	5.9/14.7	7.1/17.7	8.5/21.1	15.0/37.4
11	LL (L/240)		86	194	392	423	681	725					
	TL (L/180)		112	255	508	533	717	745	788	970	1158	1368	2228
	Bearing		1.5/3.5	1.6/3.8	3.0/7.5	3.2/7.9	4.3/10.6	4.4/11.0	4.7/11.6	5.7/14.3	6.8/17.0	8.1/20.1	13.1/32.6
12	LL (L/240)		67	150	305	329	533	568	621				
	TL (L/180)		86	197	402	434	602	625	661	868	1030	1208	1884
	Bearing		1.5/3.5	1.5/3.5	2.6/6.5	2.8/7.0	3.9/9.7	4.1/10.1	4.3/10.6	5.6/13.9	6.6/16.5	7.8/19.4	12.1/30.2
13	LL (L/240)		53	119	242	261	425	452	496				
	TL (L/180)		67	155	318	344	512	532	563	752	928	1082	1644
	Bearing		1.5/3.5	1.5/3.5	2.3/5.6	2.4/6.0	3.6/8.9	3.7/9.3	4.0/9.8	5.3/13.1	6.5/16.1	7.6/18.8	11.4/28.5
14	LL (L/240)			96	195	211	344	366	401	640			
	TL (L/180)			124	256	276	440	458	484	647	818	981	1464
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.3	3.5/8.6	3.7/9.1	4.9/12.2	6.2/15.4	7.4/18.4	11.0/27.4
15	LL (L/240)			78	160	173	282	300	329	527			
	TL (L/180)			100	208	225	370	395	421	563	712	875	1321
	Bearing			1.5/3.5	1.7/4.3	1.9/4.6	3.0/7.5	3.2/8.0	3.4/8.5	4.6/11.4	5.8/14.3	7.1/17.6	10.6/26.5
16	LL (L/240)			64	132	143	234	249	273	439			
	TL (L/180)			82	171	186	306	326	359	494	625	768	1205
	Bearing			1.5/3.5	1.5/3.8	1.7/4.1	2.7/6.6	2.9/7.1	3.1/7.8	4.3/10.6	5.4/13.4	6.6/16.5	10.3/25.8
17	LL (L/240)			54	111	120	196	209	229	369	539		
	TL (L/180)			68	143	155	256	273	300	437	552	680	1108
	Bearing			1.5/3.5	1.5/3.5	1.5/3.6	2.4/5.9	2.6/6.3	2.8/6.9	4.0/10.0	5.1/12.7	6.2/15.5	10.1/25.2
18	LL (L/240)				93	101	166	177	194	313	459		
	TL (L/180)				120	130	216	230	253	389	492	605	1004
	Bearing				1.5/3.5	1.5/3.5	2.2/5.3	2.3/5.7	2.5/6.2	3.8/9.5	4.8/12.0	5.9/14.7	9.7/24.2
19	LL (L/240)				80	86	142	151	166	268	393		
	TL (L/180)				102	110	183	196	215	348	441	542	900
	Bearing				1.5/3.5	1.5/3.5	1.9/4.8	2.1/5.1	2.3/5.6	3.6/9.0	4.6/11.3	5.6/13.9	9.2/23.0
20	LL (L/240)				68	74	122	130	143	231	339	475	
	TL (L/180)				87	94	157	168	184	301	397	488	811
	Bearing				1.5/3.5	1.5/3.5	1.8/4.4	1.9/4.6	2.1/5.1	3.3/8.2	4.3/10.8	5.3/13.2	8.8/21.8
21	LL (L/240)				59	64	106	113	124	200	295	414	
	TL (L/180)				74	81	135	144	159	260	359	442	735
	Bearing				1.5/3.5	1.5/3.5	1.6/4.0	1.7/4.2	1.9/4.6	3.0/7.5	4.1/10.3	5.1/12.6	8.3/20.8
22	LL (L/240)					56	92	98	108	175	258	362	
	TL (L/180)					70	117	125	138	226	327	402	668
	Bearing					1.5/3.5	1.5/3.6	1.6/3.9	1.7/4.2	2.8/6.8	3.9/9.8	4.8/12.0	8.0/19.8
23	LL (L/240)						81	86	95	154	227	319	
	TL (L/180)						102	109	120	198	294	367	610
	Bearing						1.5/3.5	1.5/3.5	1.6/3.9	2.5/6.3	3.7/9.2	4.6/11.5	7.6/19.0
24	LL (L/240)						71	76	84	136	200	282	
	TL (L/180)						89	96	105	174	259	336	560
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8	3.4/8.5	4.4/11.0	7.3/18.2
25	LL (L/240)						63	67	74	120	178	250	
	TL (L/180)						79	84	93	153	229	309	515
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.2/5.4	3.2/7.9	4.3/10.6	7.0/17.5
26	LL (L/240)							60	66	107	159	224	
	TL (L/180)							74	82	136	203	285	475
	Bearing							1.5/3.5	1.5/3.5	2.0/5.0	3.0/7.3	4.1/10.2	6.8/16.8
27	LL (L/240)								59	96	142	200	
	TL (L/180)								73	121	181	258	440
	Bearing								1.5/3.5	1.9/4.6	2.8/6.8	3.9/9.6	6.5/16.2
28	LL (L/240)									86	128	180	
	TL (L/180)									108	162	231	408
	Bearing									1.8/4.3	2.6/6.4	3.6/8.9	6.3/15.6
29	LL (L/240)									78	115	163	374
	TL (L/180)									97	146	208	379
	Bearing									1.6/4.0	2.4/5.9	3.4/8.4	6.1/15.1
30	LL (L/240)									70	104	147	339
	TL (L/180)									87	131	187	354
	Bearing									1.5/3.8	2.3/5.6	3.2/7.8	5.9/14.6
31	LL (L/240)									64	95	134	309
	TL (L/180)									78	118	169	331
	Bearing									1.5/3.5	2.1/5.2	3.0/7.4	5.7/14.1
32	LL (L/240)									58	86	122	282
	TL (L/180)									70	107	153	309
	Bearing									1.5/3.5	2.0/4.9	2.8/6.9	5.5/13.7

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)

ROOF SNOW 115% - 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/240)	271	1001										
	TL (L/180)	358	1300	1821	2519	2616	3387	3513	3712	5212	7325	9159	11565
	Bearing	1.5/3.5	2.1/5.2	3.0/7.3	4.1/10.1	4.2/10.5	5.4/13.5	5.6/14.0	6.0/14.8	8.3/20.8	11.7/29.2	14.6/36.5	18.4/46.0
7	LL (L/240)	172	645	1412									
	TL (L/180)	226	854	1504	2042	2115	2671	2758	2893	3779	4950	6865	9909
	Bearing	1.5/3.5	1.6/4.0	2.8/7.0	3.8/9.5	4.0/9.9	5.0/12.5	5.2/12.9	5.4/13.5	7.1/17.6	9.2/23.0	12.8/31.9	18.4/46.0
8	LL (L/240)	116	438	969									
	TL (L/180)	151	579	1259	1721	1779	2217	2284	2386	3031	3777	4770	8668
	Bearing	1.5/3.5	1.5/3.5	2.7/6.8	3.7/9.2	3.8/9.5	4.8/11.8	4.9/12.2	5.1/12.7	6.5/16.2	8.1/20.1	10.2/25.4	18.4/46.0
9	LL (L/240)		311	692	1382	1489							
	TL (L/180)		409	916	1488	1537	1898	1952	2036	2546	3105	3775	7317
	Bearing		1.5/3.5	2.2/5.5	3.6/9.0	3.7/9.3	4.6/11.4	4.7/11.7	4.9/12.2	6.1/15.3	7.5/18.6	9.1/22.6	17.5/43.7
10	LL (L/240)		228	511	1027	1108							
	TL (L/180)		299	674	1232	1291	1661	1707	1777	2201	2650	3164	5626
	Bearing		1.5/3.5	1.9/4.6	3.3/8.3	3.5/8.7	4.5/11.1	4.6/11.4	4.8/11.9	5.9/14.7	7.1/17.7	8.5/21.1	15.0/37.4
11	LL (L/240)		172	388	783	845	1363	1449					
	TL (L/180)		224	509	1017	1065	1434	1490	1577	1940	2316	2736	4455
	Bearing		1.5/3.5	1.6/3.8	3.0/7.5	3.2/7.9	4.3/10.6	4.4/11.0	4.7/11.6	5.7/14.3	6.8/17.0	8.1/20.1	13.1/32.6
12	LL (L/240)		133	301	610	659	1067	1135	1243				
	TL (L/180)		172	394	804	869	1203	1250	1323	1735	2060	2415	3769
	Bearing		1.5/3.5	1.5/3.5	2.6/6.5	2.8/7.0	3.9/9.7	4.1/10.1	4.3/10.6	5.6/13.9	6.6/16.5	7.8/19.4	12.1/30.2
13	LL (L/240)		105	238	484	523	850	905	991				
	TL (L/180)		135	310	636	688	1023	1064	1125	1503	1856	2164	3289
	Bearing		1.5/3.5	1.5/3.5	2.3/5.6	2.4/6.0	3.6/8.9	3.7/9.3	4.0/9.8	5.3/13.1	6.5/16.1	7.6/18.8	11.4/28.5
14	LL (L/240)			191	390	422	687	732	803	1280			
	TL (L/180)			248	511	553	881	916	969	1294	1636	1962	2927
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.3	3.5/8.6	3.7/9.1	4.9/12.2	6.2/15.4	7.4/18.4	11.0/27.4
15	LL (L/240)			156	319	345	564	601	659	1054			
	TL (L/180)			201	416	450	740	789	842	1125	1423	1751	2641
	Bearing			1.5/3.5	1.7/4.3	1.9/4.6	3.0/7.5	3.2/8.0	3.4/8.5	4.6/11.4	5.8/14.3	7.1/17.6	10.6/26.5
16	LL (L/240)			129	264	286	468	498	547	877			
	TL (L/180)			165	343	371	612	653	717	987	1249	1537	2409
	Bearing			1.5/3.5	1.5/3.8	1.7/4.1	2.7/6.6	2.9/7.1	3.1/7.8	4.3/10.6	5.4/13.4	6.6/16.5	10.3/25.8
17	LL (L/240)			108	221	239	392	418	459	738	1079		
	TL (L/180)			136	286	309	511	546	600	873	1105	1359	2216
	Bearing			1.5/3.5	1.5/3.5	1.5/3.6	2.4/5.9	2.6/6.3	2.8/6.9	4.0/10.0	5.1/12.7	6.2/15.5	10.1/25.2
18	LL (L/240)				187	202	332	354	389	626	917		
	TL (L/180)				240	260	431	460	506	777	984	1210	2008
	Bearing				1.5/3.5	1.5/3.5	2.2/5.3	2.3/5.7	2.5/6.2	3.8/9.5	4.8/12.0	5.9/14.7	9.7/24.2
19	LL (L/240)				159	172	283	302	332	536	786		
	TL (L/180)				203	220	366	391	431	696	881	1084	1800
	Bearing				1.5/3.5	1.5/3.5	1.9/4.8	2.1/5.1	2.3/5.6	3.6/9.0	4.6/11.3	5.6/13.9	9.2/23.0
20	LL (L/240)				137	148	244	260	286	462	679	950	
	TL (L/180)				173	188	314	335	369	601	794	977	1622
	Bearing				1.5/3.5	1.5/3.5	1.8/4.4	1.9/4.6	2.1/5.1	3.3/8.2	4.3/10.8	5.3/13.2	8.8/21.8
21	LL (L/240)				119	128	211	225	248	401	590	827	
	TL (L/180)				149	161	270	289	318	520	718	884	1469
	Bearing				1.5/3.5	1.5/3.5	1.6/4.0	1.7/4.2	1.9/4.6	3.0/7.5	4.1/10.3	5.1/12.6	8.3/20.8
22	LL (L/240)					112	184	197	216	350	516	724	
	TL (L/180)					139	234	250	276	452	653	804	1336
	Bearing					1.5/3.5	1.5/3.6	1.6/3.9	1.7/4.2	2.8/6.8	3.9/9.8	4.8/12.0	8.0/19.8
23	LL (L/240)						162	172	190	307	453	637	
	TL (L/180)						204	218	241	396	588	734	1221
	Bearing						1.5/3.5	1.5/3.5	1.6/3.9	2.5/6.3	3.7/9.2	4.6/11.5	7.6/19.0
24	LL (L/240)						143	152	167	271	401	564	
	TL (L/180)						179	191	211	348	518	673	1119
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8	3.4/8.5	4.4/11.0	7.3/18.2
25	LL (L/240)						126	135	148	241	356	501	
	TL (L/180)						157	168	186	307	458	619	1029
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.2/5.4	3.2/7.9	4.3/10.6	7.0/17.5
26	LL (L/240)							120	132	214	317	447	
	TL (L/180)							148	164	272	407	571	950
	Bearing							1.5/3.5	1.5/3.5	2.0/5.0	3.0/7.3	4.1/10.2	6.8/16.8
27	LL (L/240)								118	192	284	401	
	TL (L/180)								145	242	363	516	879
	Bearing								1.5/3.5	1.9/4.6	2.8/6.8	3.9/9.6	6.5/16.2
28	LL (L/240)									172	255	360	
	TL (L/180)									216	324	462	816
	Bearing									1.8/4.3	2.6/6.4	3.6/8.9	6.3/15.6
29	LL (L/240)									155	230	325	748
	TL (L/180)									193	291	416	759
	Bearing									1.6/4.0	2.4/5.9	3.4/8.4	6.1/15.1
30	LL (L/240)									141	209	295	679
	TL (L/180)									173	262	375	707
	Bearing									1.5/3.8	2.3/5.6	3.2/7.8	5.9/14.6
31	LL (L/240)									128	189	268	618
	TL (L/180)									156	236	339	661
	Bearing									1.5/3.5	2.1/5.2	3.0/7.4	5.7/14.1
32	LL (L/240)									116	172	244	564
	TL (L/180)									141	214	307	619
	Bearing									1.5/3.5	2.0/4.9	2.8/6.9	5.5/13.7

Bearing=Minimum End / Intermediate Bearing Length (inches)

ALLOWABLE UNIFORM LOADS (POUNDS PER LINEAL FOOT)

ROOF SNOW 115% - 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/240)		1502										
	TL (L/180)		1951	2732	3778	3924	5080	5269	5567	7818	10988	13738	17347
	Bearing		2.1/5.2	3.0/7.3	4.1/10.1	4.2/10.5	5.4/13.5	5.6/14.0	6.0/14.8	8.3/20.8	11.7/29.2	14.6/36.5	18.4/46.0
7	LL (L/240)		967	2118									
	TL (L/180)		1281	2255	3063	3173	4007	4138	4340	5668	7425	10297	14864
	Bearing		1.6/4.0	2.8/7.0	3.8/9.5	4.0/9.9	5.0/12.5	5.2/12.9	5.4/13.5	7.1/17.6	9.2/23.0	12.8/31.9	18.4/46.0
8	LL (L/240)		657	1454									
	TL (L/180)		868	1889	2581	2669	3325	3425	3579	4547	5665	7155	13002
	Bearing		1.5/3.5	2.7/6.8	3.7/9.2	3.8/9.5	4.8/11.8	4.9/12.2	5.1/12.7	6.5/16.2	8.1/20.1	10.2/25.4	18.4/46.0
9	LL (L/240)		466	1039	2073	2233							
	TL (L/180)		613	1374	2231	2305	2847	2928	3053	3820	4657	5662	10976
	Bearing		1.5/3.5	2.2/5.5	3.6/9.0	3.7/9.3	4.6/11.4	4.7/11.7	4.9/12.2	6.1/15.3	7.5/18.6	9.1/22.6	17.5/43.7
10	LL (L/240)		342	767	1541	1661							
	TL (L/180)		448	1011	1848	1937	2491	2560	2665	3301	3974	4746	8439
	Bearing		1.5/3.5	1.9/4.6	3.3/8.3	3.5/8.7	4.5/11.1	4.6/11.4	4.8/11.9	5.9/14.7	7.1/17.7	8.5/21.1	15.0/37.4
11	LL (L/240)		259	581	1175	1268	2044	2174					
	TL (L/180)		337	764	1525	1598	2151	2235	2365	2910	3474	4104	6683
	Bearing		1.5/3.5	1.6/3.8	3.0/7.5	3.2/7.9	4.3/10.6	4.4/11.0	4.7/11.6	5.7/14.3	6.8/17.0	8.1/20.1	13.1/32.6
12	LL (L/240)		200	451	915	988	1600	1703	1864				
	TL (L/180)		258	590	1206	1303	1805	1876	1984	2603	3090	3623	5653
	Bearing		1.5/3.5	1.5/3.5	2.6/6.5	2.8/7.0	3.9/9.7	4.1/10.1	4.3/10.6	5.6/13.9	6.6/16.5	7.8/19.4	12.1/30.2
13	LL (L/240)		158	357	726	784	1275	1357	1487				
	TL (L/180)		202	465	954	1031	1535	1596	1688	2255	2783	3246	4933
	Bearing		1.5/3.5	1.5/3.5	2.3/5.6	2.4/6.0	3.6/8.9	3.7/9.3	4.0/9.8	5.3/13.1	6.5/16.1	7.6/18.8	11.4/28.5
14	LL (L/240)			287	585	633	1031	1098	1204	1920			
	TL (L/180)			371	767	829	1321	1373	1453	1941	2455	2942	4391
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.3	3.5/8.6	3.7/9.1	4.9/12.2	6.2/15.4	7.4/18.4	11.0/27.4
15	LL (L/240)			234	479	518	845	901	988	1580			
	TL (L/180)			301	624	676	1110	1184	1264	1688	2135	2626	3962
	Bearing			1.5/3.5	1.7/4.3	1.9/4.6	3.0/7.5	3.2/8.0	3.4/8.5	4.6/11.4	5.8/14.3	7.1/17.6	10.6/26.5
16	LL (L/240)			193	396	429	701	748	820	1316			
	TL (L/180)			247	514	557	918	979	1076	1481	1874	2305	3614
	Bearing			1.5/3.5	1.5/3.8	1.7/4.1	2.7/6.6	2.9/7.1	3.1/7.8	4.3/10.6	5.4/13.4	6.6/16.5	10.3/25.8
17	LL (L/240)			162	332	359	588	627	688	1106	1618		
	TL (L/180)			205	428	464	767	819	900	1310	1657	2039	3323
	Bearing			1.5/3.5	1.5/3.5	1.5/3.6	2.4/5.9	2.6/6.3	2.8/6.9	4.0/10.0	5.1/12.7	6.2/15.5	10.1/25.2
18	LL (L/240)				280	303	498	531	583	939	1376		
	TL (L/180)				360	390	647	690	759	1166	1475	1816	3012
	Bearing				1.5/3.5	1.5/3.5	2.2/5.3	2.3/5.7	2.5/6.2	3.8/9.5	4.8/12.0	5.9/14.7	9.7/24.2
19	LL (L/240)				239	259	425	453	498	803	1179		
	TL (L/180)				305	330	550	587	646	1044	1322	1627	2700
	Bearing				1.5/3.5	1.5/3.5	1.9/4.8	2.1/5.1	2.3/5.6	3.6/9.0	4.6/11.3	5.6/13.9	9.2/23.0
20	LL (L/240)				205	222	366	390	429	692	1018	1425	
	TL (L/180)				260	282	471	503	553	902	1190	1465	2433
	Bearing				1.5/3.5	1.5/3.5	1.8/4.4	1.9/4.6	2.1/5.1	3.3/8.2	4.3/10.8	5.3/13.2	8.8/21.8
21	LL (L/240)				178	192	317	338	371	601	885	1241	
	TL (L/180)				223	242	406	433	477	780	1077	1327	2204
	Bearing				1.5/3.5	1.5/3.5	1.6/4.0	1.7/4.2	1.9/4.6	3.0/7.5	4.1/10.3	5.1/12.6	8.3/20.8
22	LL (L/240)					168	276	295	324	525	774	1086	
	TL (L/180)					209	351	376	414	679	980	1206	2005
	Bearing					1.5/3.5	1.5/3.6	1.6/3.9	1.7/4.2	2.8/6.8	3.9/9.8	4.8/12.0	8.0/19.8
23	LL (L/240)						242	259	284	461	680	956	
	TL (L/180)						306	327	361	593	883	1101	1831
	Bearing						1.5/3.5	1.5/3.5	1.6/3.9	2.5/6.3	3.7/9.2	4.6/11.5	7.6/19.0
24	LL (L/240)						214	228	251	407	601	845	
	TL (L/180)						268	287	316	521	777	1009	1679
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8	3.4/8.5	4.4/11.0	7.3/18.2
25	LL (L/240)						189	202	222	361	534	751	
	TL (L/180)						236	252	278	460	687	928	1544
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.2/5.4	3.2/7.9	4.3/10.6	7.0/17.5
26	LL (L/240)							180	198	322	476	671	
	TL (L/180)							223	246	408	610	856	1425
	Bearing							1.5/3.5	1.5/3.5	2.0/5.0	3.0/7.3	4.1/10.2	6.8/16.8
27	LL (L/240)								177	288	426	601	
	TL (L/180)								218	363	544	774	1319
	Bearing								1.5/3.5	1.9/4.6	2.8/6.8	3.9/9.6	6.5/16.2
28	LL (L/240)									259	383	541	
	TL (L/180)									324	486	693	1224
	Bearing									1.8/4.3	2.6/6.4	3.6/8.9	6.3/15.6
29	LL (L/240)									233	346	488	1122
	TL (L/180)									290	437	623	1138
	Bearing									1.6/4.0	2.4/5.9	3.4/8.4	6.1/15.1
30	LL (L/240)									211	313	442	1018
	TL (L/180)									260	393	562	1061
	Bearing									1.5/3.8	2.3/5.6	3.2/7.8	5.9/14.6
31	LL (L/240)									192	284	401	927
	TL (L/180)									234	354	508	992
	Bearing									1.5/3.5	2.1/5.2	3.0/7.4	5.7/14.1
32	LL (L/240)									174	259	366	845
	TL (L/180)									211	321	460	928
	Bearing									1.5/3.5	2.0/4.9	2.8/6.9	5.5/13.7

Bearing=Minimum End / Intermediate Bearing Length (inches)

ALLOWABLE UNIFORM LOADS (POUNDS PER LINEAL FOOT)

ROOF SNOW 115% - 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/240)												
	TL (L/180)			3642	5038	5233	6773	7025	7423	10423	14651	18318	23130
	Bearing			3.0/7.3	4.1/10.1	4.2/10.5	5.4/13.5	5.6/14.0	6.0/14.8	8.3/20.8	11.7/29.2	14.6/36.5	18.4/46.0
7	LL (L/240)			2824									
	TL (L/180)			3007	4085	4231	5343	5517	5786	7558	9900	13729	19819
	Bearing			2.8/7.0	3.8/9.5	4.0/9.9	5.0/12.5	5.2/12.9	5.4/13.5	7.1/17.6	9.2/23.0	12.8/31.9	18.4/46.0
8	LL (L/240)			1938									
	TL (L/180)			2518	3441	3558	4433	4567	4773	6063	7554	9540	17335
	Bearing			2.7/6.8	3.7/9.2	3.8/9.5	4.8/11.8	4.9/12.2	5.1/12.7	6.5/16.2	8.1/20.1	10.2/25.4	18.4/46.0
9	LL (L/240)			1385	2764	2977							
	TL (L/180)			1832	2975	3073	3796	3905	4071	5093	6209	7550	14635
	Bearing			2.2/5.5	3.6/9.0	3.7/9.3	4.6/11.4	4.7/11.7	4.9/12.2	6.1/15.3	7.5/18.6	9.1/22.6	17.5/43.7
10	LL (L/240)			1022	2054	2215							
	TL (L/180)			1348	2464	2582	3321	3413	3554	4401	5299	6328	11252
	Bearing			1.9/4.6	3.3/8.3	3.5/8.7	4.5/11.1	4.6/11.4	4.8/11.9	5.9/14.7	7.1/17.7	8.5/21.1	15.0/37.4
11	LL (L/240)			775	1566	1690	2726	2899					
	TL (L/180)			1019	2033	2131	2868	2981	3153	3880	4632	5472	8910
	Bearing			1.6/3.8	3.0/7.5	3.2/7.9	4.3/10.6	4.4/11.0	4.7/11.6	5.7/14.3	6.8/17.0	8.1/20.1	13.1/32.6
12	LL (L/240)			601	1220	1317	2134	2270	2485				
	TL (L/180)			787	1608	1737	2406	2501	2646	3471	4119	4830	7538
	Bearing			1.5/3.5	2.6/6.5	2.8/7.0	3.9/9.7	4.1/10.1	4.3/10.6	5.6/13.9	6.6/16.5	7.8/19.4	12.1/30.2
13	LL (L/240)			476	968	1046	1700	1810	1982				
	TL (L/180)			619	1272	1375	2047	2127	2251	3006	3711	4328	6578
	Bearing			1.5/3.5	2.3/5.6	2.4/6.0	3.6/8.9	3.7/9.3	4.0/9.8	5.3/13.1	6.5/16.1	7.6/18.8	11.4/28.5
14	LL (L/240)			382	781	844	1375	1464	1605	2559			
	TL (L/180)			495	1022	1106	1762	1831	1937	2588	3273	3923	5854
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.3	3.5/8.6	3.7/9.1	4.9/12.2	6.2/15.4	7.4/18.4	11.0/27.4
15	LL (L/240)			312	638	690	1127	1201	1317	2107			
	TL (L/180)			401	832	901	1480	1578	1685	2251	2847	3502	5283
	Bearing			1.5/3.5	1.7/4.3	1.9/4.6	3.0/7.5	3.2/8.0	3.4/8.5	4.6/11.4	5.8/14.3	7.1/17.6	10.6/26.5
16	LL (L/240)			258	528	571	935	997	1094	1754			
	TL (L/180)			329	686	743	1224	1306	1434	1975	2498	3073	4818
	Bearing			1.5/3.5	1.5/3.8	1.7/4.1	2.7/6.6	2.9/7.1	3.1/7.8	4.3/10.6	5.4/13.4	6.6/16.5	10.3/25.8
17	LL (L/240)			216	442	478	784	836	918	1475	2158		
	TL (L/180)			273	571	619	1023	1091	1200	1746	2209	2718	4431
	Bearing			1.5/3.5	1.5/3.5	1.5/3.6	2.4/5.9	2.6/6.3	2.8/6.9	4.0/10.0	5.1/12.7	6.2/15.5	10.1/25.2
18	LL (L/240)				374	404	664	708	777	1252	1835		
	TL (L/180)				480	520	862	921	1012	1554	1967	2421	4016
	Bearing				1.5/3.5	1.5/3.5	2.2/5.3	2.3/5.7	2.5/6.2	3.8/9.5	4.8/12.0	5.9/14.7	9.7/24.2
19	LL (L/240)				319	345	567	604	664	1071	1572		
	TL (L/180)				406	441	733	783	861	1392	1762	2169	3600
	Bearing				1.5/3.5	1.5/3.5	1.9/4.8	2.1/5.1	2.3/5.6	3.6/9.0	4.6/11.3	5.6/13.9	9.2/23.0
20	LL (L/240)				274	296	488	520	571	923	1358	1901	
	TL (L/180)				347	376	628	670	738	1203	1587	1954	3244
	Bearing				1.5/3.5	1.5/3.5	1.8/4.4	1.9/4.6	2.1/5.1	3.3/8.2	4.3/10.8	5.3/13.2	8.8/21.8
21	LL (L/240)				237	257	423	451	495	801	1180	1654	
	TL (L/180)				298	323	541	578	636	1040	1437	1769	2938
	Bearing				1.5/3.5	1.5/3.5	1.6/4.0	1.7/4.2	1.9/4.6	3.0/7.5	4.1/10.3	5.1/12.6	8.3/20.8
22	LL (L/240)					224	368	393	432	700	1031	1448	
	TL (L/180)					279	469	501	552	905	1306	1608	2673
	Bearing					1.5/3.5	1.5/3.6	1.6/3.9	1.7/4.2	2.8/6.8	3.9/9.8	4.8/12.0	8.0/19.8
23	LL (L/240)						323	345	379	615	907	1274	
	TL (L/180)						408	437	481	791	1177	1469	2441
	Bearing						1.5/3.5	1.5/3.5	1.6/3.9	2.5/6.3	3.7/9.2	4.6/11.5	7.6/19.0
24	LL (L/240)						285	304	334	543	801	1127	
	TL (L/180)						357	382	422	695	1036	1346	2238
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8	3.4/8.5	4.4/11.0	7.3/18.2
25	LL (L/240)						253	270	296	481	711	1002	
	TL (L/180)						314	336	371	614	916	1237	2059
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.2/5.4	3.2/7.9	4.3/10.6	7.0/17.5
26	LL (L/240)							240	264	429	634	894	
	TL (L/180)							297	328	544	814	1141	1900
	Bearing							1.5/3.5	1.5/3.5	2.0/5.0	3.0/7.3	4.1/10.2	6.8/16.8
27	LL (L/240)								236	384	568	801	
	TL (L/180)								291	484	725	1032	1758
	Bearing								1.5/3.5	1.9/4.6	2.8/6.8	3.9/9.6	6.5/16.2
28	LL (L/240)									345	511	721	
	TL (L/180)									432	649	925	1631
	Bearing									1.8/4.3	2.6/6.4	3.6/8.9	6.3/15.6
29	LL (L/240)									311	461	651	1496
	TL (L/180)									386	582	831	1518
	Bearing									1.6/4.0	2.4/5.9	3.4/8.4	6.1/15.1
30	LL (L/240)									281	417	589	1358
	TL (L/180)									347	524	749	1415
	Bearing									1.5/3.8	2.3/5.6	3.2/7.8	5.9/14.6
31	LL (L/240)									255	379	535	1235
	TL (L/180)									312	473	677	1322
	Bearing									1.5/3.5	2.1/5.2	3.0/7.4	5.7/14.1
32	LL (L/240)									232	345	488	1127
	TL (L/180)									282	428	614	1238
	Bearing									1.5/3.5	2.0/4.9	2.8/6.9	5.5/13.7

Bearing=Minimum End / Intermediate Bearing Length (inches)

ALLOWABLE UNIFORM LOADS (POUNDS PER LINEAL FOOT)

ROOF NON-SNOW 125% - 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/240)	116	429										
	TL (L/180)	153	570	858	1195	1243	1627	1692	1795	2687	3413	4267	5496
	Bearing	1.5/3.5	2.2/5.3	3.2/8.0	4.5/11.2	4.7/11.6	6.1/15.2	6.3/15.8	6.7/16.7	10.0/25.0	12.7/31.7	15.9/39.6	20.4/51.0
7	LL (L/240)	74	276	605									
	TL (L/180)	97	366	707	964	1000	1270	1313	1379	1830	2504	3198	4710
	Bearing	1.5/3.5	1.6/4.0	3.1/7.7	4.2/10.5	4.4/10.9	5.6/13.8	5.7/14.3	6.0/15.0	8.0/19.9	10.9/27.2	13.9/34.7	20.4/51.0
8	LL (L/240)	50	188	415									
	TL (L/180)	65	248	551	810	838	1049	1081	1131	1448	1829	2389	4120
	Bearing	1.5/3.5	1.5/3.5	2.8/6.9	4.1/10.1	4.2/10.4	5.3/13.1	5.4/13.5	5.7/14.1	7.2/18.0	9.1/22.7	11.9/29.6	20.4/51.0
9	LL (L/240)		133	297	592	638							
	TL (L/180)		175	393	699	723	895	921	961	1209	1485	1829	3410
	Bearing		1.5/3.5	2.2/5.5	4.0/9.8	4.1/10.1	5.0/12.5	5.2/12.9	5.4/13.5	6.8/16.9	8.3/20.8	10.3/25.6	19.0/47.5
10	LL (L/240)		98	219	440	475	761						
	TL (L/180)		128	289	574	602	782	804	837	1041	1260	1515	2840
	Bearing		1.5/3.5	1.9/4.6	3.6/9.0	3.8/9.4	4.9/12.2	5.0/12.5	5.2/13.0	6.5/16.2	7.9/19.6	9.5/23.6	17.6/44.0
11	LL (L/240)		74	166	336	362	584	621	679				
	TL (L/180)		96	218	443	479	668	695	735	915	1097	1302	2202
	Bearing		1.5/3.5	1.6/3.8	3.1/7.6	3.3/8.2	4.6/11.5	4.8/11.9	5.1/12.6	6.3/15.7	7.5/18.8	8.9/22.3	15.1/37.6
12	LL (L/240)		57	129	261	282	457	487	533				
	TL (L/180)		74	169	345	372	561	583	617	818	973	1145	1826
	Bearing		1.5/3.5	1.5/3.5	2.6/6.5	2.8/7.0	4.2/10.5	4.4/10.9	4.7/11.6	6.2/15.3	7.3/18.2	8.6/21.4	13.7/34.1
13	LL (L/240)			102	207	224	364	388	425	675			
	TL (L/180)			133	273	295	477	496	525	701	875	1024	1579
	Bearing			1.5/3.5	2.3/5.6	2.4/6.0	3.9/9.7	4.1/10.1	4.3/10.7	5.7/14.2	7.1/17.7	8.3/20.7	12.8/31.9
14	LL (L/240)			82	167	181	295	314	344	548			
	TL (L/180)			106	219	237	388	413	452	603	763	926	1397
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.5	3.7/9.1	4.0/9.9	5.3/13.2	6.7/16.7	8.1/20.2	12.2/30.5
15	LL (L/240)			67	137	148	242	257	282	452	657		
	TL (L/180)			86	178	193	317	338	371	525	664	816	1256
	Bearing			1.5/3.5	1.7/4.3	1.9/4.6	3.0/7.5	3.2/8.0	3.5/8.8	5.0/12.3	6.3/15.6	7.7/19.1	11.8/29.4
16	LL (L/240)			55	113	122	200	214	234	376	548		
	TL (L/180)			71	147	159	262	280	307	461	582	717	1143
	Bearing			1.5/3.5	1.5/3.8	1.7/4.1	2.7/6.6	2.9/7.1	3.1/7.8	4.7/11.6	5.9/14.6	7.2/17.9	11.4/28.5
17	LL (L/240)				95	103	168	179	197	316	462		
	TL (L/180)				122	133	219	234	257	407	515	634	1049
	Bearing				1.5/3.5	1.5/3.6	2.4/5.9	2.6/6.3	2.8/6.9	4.4/10.9	5.5/13.7	6.8/16.9	11.2/27.8
18	LL (L/240)				80	87	142	152	167	268	393	548	
	TL (L/180)				103	111	185	197	217	352	459	565	936
	Bearing				1.5/3.5	1.5/3.5	2.2/5.3	2.3/5.7	2.5/6.2	4.0/10.0	5.2/13.0	6.4/15.9	10.6/26.3
19	LL (L/240)				68	74	121	130	142	230	337	471	
	TL (L/180)				87	94	157	168	185	300	411	506	839
	Bearing				1.5/3.5	1.5/3.5	1.9/4.8	2.1/5.1	2.3/5.6	3.6/9.0	5.0/12.3	6.1/15.1	10.0/25.0
20	LL (L/240)				59	64	104	111	122	198	291	407	
	TL (L/180)				74	81	134	144	158	258	370	456	757
	Bearing				1.5/3.5	1.5/3.5	1.8/4.4	1.9/4.6	2.1/5.1	3.3/8.2	4.7/11.7	5.8/14.4	9.5/23.7
21	LL (L/240)					55	91	97	106	172	253	354	
	TL (L/180)					69	116	124	136	223	330	413	685
	Bearing					1.5/3.5	1.6/4.0	1.7/4.2	1.9/4.6	3.0/7.5	4.4/11.0	5.5/13.7	9.1/22.6
22	LL (L/240)						79	84	93	150	221	310	
	TL (L/180)						100	107	118	194	288	375	623
	Bearing						1.5/3.6	1.6/3.9	1.7/4.2	2.8/6.8	4.1/10.1	5.3/13.1	8.7/21.6
23	LL (L/240)						69	74	81	132	194	273	
	TL (L/180)						87	94	103	170	252	343	570
	Bearing						1.5/3.5	1.5/3.5	1.6/3.9	2.5/6.3	3.7/9.2	5.0/12.5	8.3/20.6
24	LL (L/240)						61	65	72	116	172	242	
	TL (L/180)						77	82	90	149	222	314	522
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8	3.4/8.5	4.8/12.0	7.9/19.8
25	LL (L/240)							58	64	103	152	215	
	TL (L/180)							72	80	131	196	278	480
	Bearing							1.5/3.5	1.5/3.5	2.2/5.4	3.2/7.9	4.5/11.1	7.6/19.0
26	LL (L/240)								57	92	136	192	438
	TL (L/180)								70	117	174	248	443
	Bearing								1.5/3.5	2.0/5.0	3.0/7.3	4.2/10.3	7.3/18.3
27	LL (L/240)									82	122	172	393
	TL (L/180)									104	155	221	410
	Bearing									1.9/4.6	2.8/6.8	3.9/9.6	7.1/17.6
28	LL (L/240)									74	109	154	354
	TL (L/180)									92	139	198	381
	Bearing									1.8/4.3	2.6/6.4	3.6/8.9	6.8/17.0
29	LL (L/240)									67	99	139	321
	TL (L/180)									83	125	178	354
	Bearing									1.6/4.0	2.4/5.9	3.4/8.4	6.6/16.4
30	LL (L/240)									60	89	126	291
	TL (L/180)									74	112	161	330
	Bearing									1.5/3.8	2.3/5.6	3.2/7.8	6.4/15.8
31	LL (L/240)										81	115	265
	TL (L/180)										101	145	309
	Bearing										2.1/5.2	3.0/7.4	6.2/15.3
32	LL (L/240)										74	104	242
	TL (L/180)										92	132	289
	Bearing										2.0/4.9	2.8/6.9	6.0/14.8

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)

ROOF NON-SNOW 125% - 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/240)	136	501										
	TL (L/180)	179	665	1001	1395	1450	1898	1974	2094	3135	3982	4978	6412
	Bearing	1.5/3.5	2.2/5.3	3.2/8.0	4.5/11.2	4.7/11.6	6.1/15.2	6.3/15.8	6.7/16.7	10.0/25.0	12.7/31.7	15.9/39.6	20.4/51.0
7	LL (L/240)	86	322	706									
	TL (L/180)	113	427	825	1125	1166	1482	1532	1609	2135	2921	3732	5495
	Bearing	1.5/3.5	1.6/4.0	3.1/7.7	4.2/10.5	4.4/10.9	5.6/13.8	5.7/14.3	6.0/15.0	8.0/19.9	10.9/27.2	13.9/34.7	20.4/51.0
8	LL (L/240)	58	219	485									
	TL (L/180)	76	289	642	945	978	1223	1261	1319	1690	2134	2787	4806
	Bearing	1.5/3.5	1.5/3.5	2.8/6.9	4.1/10.1	4.2/10.4	5.3/13.1	5.4/13.5	5.7/14.1	7.2/18.0	9.1/22.7	11.9/29.6	20.4/51.0
9	LL (L/240)		155	346	691	744							
	TL (L/180)		204	458	816	843	1044	1075	1122	1410	1733	2133	3978
	Bearing		1.5/3.5	2.2/5.5	4.0/9.8	4.1/10.1	5.0/12.5	5.2/12.9	5.4/13.5	6.8/16.9	8.3/20.8	10.3/25.6	19.0/47.5
10	LL (L/240)		114	256	514	554	888						
	TL (L/180)		149	337	670	702	912	938	977	1214	1470	1768	3313
	Bearing		1.5/3.5	1.9/4.6	3.6/9.0	3.8/9.4	4.9/12.2	5.0/12.5	5.2/13.0	6.5/16.2	7.9/19.6	9.5/23.6	17.6/44.0
11	LL (L/240)		86	194	392	423	681	725	792				
	TL (L/180)		112	255	517	559	780	810	857	1068	1280	1519	2569
	Bearing		1.5/3.5	1.6/3.8	3.1/7.6	3.3/8.2	4.6/11.5	4.8/11.9	5.1/12.6	6.3/15.7	7.5/18.8	8.9/22.3	15.1/37.6
12	LL (L/240)		67	150	305	329	533	568	621				
	TL (L/180)		86	197	402	434	654	680	719	954	1135	1336	2130
	Bearing		1.5/3.5	1.5/3.5	2.6/6.5	2.8/7.0	4.2/10.5	4.4/10.9	4.7/11.6	6.2/15.3	7.3/18.2	8.6/21.4	13.7/34.1
13	LL (L/240)		53	119	242	261	425	452	496	787			
	TL (L/180)		67	155	318	344	557	579	612	817	1021	1194	1842
	Bearing		1.5/3.5	1.5/3.5	2.3/5.6	2.4/6.0	3.9/9.7	4.1/10.1	4.3/10.7	5.7/14.2	7.1/17.7	8.3/20.7	12.8/31.9
14	LL (L/240)			96	195	211	344	366	401	640			
	TL (L/180)			124	256	276	453	482	527	704	890	1080	1630
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.5	3.7/9.1	4.0/9.9	5.3/13.2	6.7/16.7	8.1/20.2	12.2/30.5
15	LL (L/240)			78	160	173	282	300	329	527	766		
	TL (L/180)			100	208	225	370	395	433	612	774	952	1466
	Bearing			1.5/3.5	1.7/4.3	1.9/4.6	3.0/7.5	3.2/8.0	3.5/8.8	5.0/12.3	6.3/15.6	7.7/19.1	11.8/29.4
16	LL (L/240)			64	132	143	234	249	273	439	640		
	TL (L/180)			82	171	186	306	326	359	537	680	836	1333
	Bearing			1.5/3.5	1.5/3.8	1.7/4.1	2.7/6.6	2.9/7.1	3.1/7.8	4.7/11.6	5.9/14.6	7.2/17.9	11.4/28.5
17	LL (L/240)			54	111	120	196	209	229	369	539		
	TL (L/180)			68	143	155	256	273	300	475	601	739	1224
	Bearing			1.5/3.5	1.5/3.5	1.5/3.6	2.4/5.9	2.6/6.3	2.8/6.9	4.4/10.9	5.5/13.7	6.8/16.9	11.2/27.8
18	LL (L/240)				93	101	166	177	194	313	459	640	
	TL (L/180)				120	130	216	230	253	410	535	659	1092
	Bearing				1.5/3.5	1.5/3.5	2.2/5.3	2.3/5.7	2.5/6.2	4.0/10.0	5.2/13.0	6.4/15.9	10.6/26.3
19	LL (L/240)				80	86	142	151	166	268	393	549	
	TL (L/180)				102	110	183	196	215	350	480	590	979
	Bearing				1.5/3.5	1.5/3.5	1.9/4.8	2.1/5.1	2.3/5.6	3.6/9.0	5.0/12.3	6.1/15.1	10.0/25.0
20	LL (L/240)				68	74	122	130	143	231	339	475	
	TL (L/180)				87	94	157	168	184	301	432	532	883
	Bearing				1.5/3.5	1.5/3.5	1.8/4.4	1.9/4.6	2.1/5.1	3.3/8.2	4.7/11.7	5.8/14.4	9.5/23.7
21	LL (L/240)				59	64	106	113	124	200	295	414	
	TL (L/180)				74	81	135	144	159	260	385	481	799
	Bearing				1.5/3.5	1.5/3.5	1.6/4.0	1.7/4.2	1.9/4.6	3.0/7.5	4.4/11.0	5.5/13.7	9.1/22.6
22	LL (L/240)					56	92	98	108	175	258	362	
	TL (L/180)					70	117	125	138	226	336	438	727
	Bearing					1.5/3.5	1.5/3.6	1.6/3.9	1.7/4.2	2.8/6.8	4.1/10.1	5.3/13.1	8.7/21.6
23	LL (L/240)						81	86	95	154	227	319	
	TL (L/180)						102	109	120	198	294	400	664
	Bearing						1.5/3.5	1.5/3.5	1.6/3.9	2.5/6.3	3.7/9.2	5.0/12.5	8.3/20.6
24	LL (L/240)						71	76	84	136	200	282	
	TL (L/180)						89	96	105	174	259	366	609
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8	3.4/8.5	4.8/12.0	7.9/19.8
25	LL (L/240)						63	67	74	120	178	250	
	TL (L/180)						79	84	93	153	229	325	561
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.2/5.4	3.2/7.9	4.5/11.1	7.6/19.0
26	LL (L/240)							60	66	107	159	224	511
	TL (L/180)							74	82	136	203	289	517
	Bearing							1.5/3.5	1.5/3.5	2.0/5.0	3.0/7.3	4.2/10.3	7.3/18.3
27	LL (L/240)								59	96	142	200	459
	TL (L/180)								73	121	181	258	479
	Bearing								1.5/3.5	1.9/4.6	2.8/6.8	3.9/9.6	7.1/17.6
28	LL (L/240)									86	128	180	414
	TL (L/180)									108	162	231	444
	Bearing									1.8/4.3	2.6/6.4	3.6/8.9	6.8/17.0
29	LL (L/240)									78	115	163	374
	TL (L/180)									97	146	208	413
	Bearing									1.6/4.0	2.4/5.9	3.4/8.4	6.6/16.4
30	LL (L/240)									70	104	147	339
	TL (L/180)									87	131	187	386
	Bearing									1.5/3.8	2.3/5.6	3.2/7.8	6.4/15.8
31	LL (L/240)									64	95	134	309
	TL (L/180)									78	118	169	360
	Bearing									1.5/3.5	2.1/5.2	3.0/7.4	6.2/15.3
32	LL (L/240)									58	86	122	282
	TL (L/180)									70	107	153	337
	Bearing									1.5/3.5	2.0/4.9	2.8/6.9	6.0/14.8

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)

ROOF NON-SNOW 125% - 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/240)	271	1001										
	TL (L/180)	358	1329	2003	2789	2900	3797	3947	4188	6270	7964	9957	12825
	Bearing	1.5/3.5	2.2/5.3	3.2/8.0	4.5/11.2	4.7/11.6	6.1/15.2	6.3/15.8	6.7/16.7	10.0/25.0	12.7/31.7	15.9/39.6	20.4/51.0
7	LL (L/240)	172	645	1412									
	TL (L/180)	226	854	1649	2250	2332	2964	3063	3219	4271	5842	7463	10989
	Bearing	1.5/3.5	1.6/4.0	3.1/7.7	4.2/10.5	4.4/10.9	5.6/13.8	5.7/14.3	6.0/15.0	8.0/19.9	10.9/27.2	13.9/34.7	20.4/51.0
8	LL (L/240)	116	438	969									
	TL (L/180)	151	579	1285	1891	1956	2447	2522	2639	3380	4269	5574	9613
	Bearing	1.5/3.5	1.5/3.5	2.8/6.9	4.1/10.1	4.2/10.4	5.3/13.1	5.4/13.5	5.7/14.1	7.2/18.0	9.1/22.7	11.9/29.6	20.4/51.0
9	LL (L/240)		311	692	1382	1489							
	TL (L/180)		409	916	1632	1686	2089	2150	2243	2821	3465	4267	7956
	Bearing		1.5/3.5	2.2/5.5	4.0/9.8	4.1/10.1	5.0/12.5	5.2/12.9	5.4/13.5	6.8/16.9	8.3/20.8	10.3/25.6	19.0/47.5
10	LL (L/240)		228	511	1027	1108	1777						
	TL (L/180)		299	674	1340	1404	1824	1875	1954	2429	2939	3535	6626
	Bearing		1.5/3.5	1.9/4.6	3.6/9.0	3.8/9.4	4.9/12.2	5.0/12.5	5.2/13.0	6.5/16.2	7.9/19.6	9.5/23.6	17.6/44.0
11	LL (L/240)		172	388	783	845	1363	1449	1585				
	TL (L/180)		224	509	1035	1117	1560	1621	1715	2136	2560	3038	5138
	Bearing		1.5/3.5	1.6/3.8	3.1/7.6	3.3/8.2	4.6/11.5	4.8/11.9	5.1/12.6	6.3/15.7	7.5/18.8	8.9/22.3	15.1/37.6
12	LL (L/240)		133	301	610	659	1067	1135	1243				
	TL (L/180)		172	394	804	869	1309	1360	1439	1908	2271	2672	4261
	Bearing		1.5/3.5	1.5/3.5	2.6/6.5	2.8/7.0	4.2/10.5	4.4/10.9	4.7/11.6	6.2/15.3	7.3/18.2	8.6/21.4	13.7/34.1
13	LL (L/240)		105	238	484	523	850	905	991	1574			
	TL (L/180)		135	310	636	688	1113	1157	1224	1635	2042	2388	3683
	Bearing		1.5/3.5	1.5/3.5	2.3/5.6	2.4/6.0	3.9/9.7	4.1/10.1	4.3/10.7	5.7/14.2	7.1/17.7	8.3/20.7	12.8/31.9
14	LL (L/240)			191	390	422	687	732	803	1280			
	TL (L/180)			248	511	553	905	965	1054	1408	1780	2161	3260
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.5	3.7/9.1	4.0/9.9	5.3/13.2	6.7/16.7	8.1/20.2	12.2/30.5
15	LL (L/240)			156	319	345	564	601	659	1054	1533		
	TL (L/180)			201	416	450	740	789	866	1225	1549	1905	2931
	Bearing			1.5/3.5	1.7/4.3	1.9/4.6	3.0/7.5	3.2/8.0	3.5/8.8	5.0/12.3	6.3/15.6	7.7/19.1	11.8/29.4
16	LL (L/240)			129	264	286	468	498	547	877	1280		
	TL (L/180)			165	343	371	612	653	717	1075	1359	1672	2666
	Bearing			1.5/3.5	1.5/3.8	1.7/4.1	2.7/6.6	2.9/7.1	3.1/7.8	4.7/11.6	5.9/14.6	7.2/17.9	11.4/28.5
17	LL (L/240)			108	221	239	392	418	459	738	1079		
	TL (L/180)			136	286	309	511	546	600	950	1202	1479	2447
	Bearing			1.5/3.5	1.5/3.5	1.5/3.6	2.4/5.9	2.6/6.3	2.8/6.9	4.4/10.9	5.5/13.7	6.8/16.9	11.2/27.8
18	LL (L/240)				187	202	332	354	389	626	917	1280	
	TL (L/180)				240	260	431	460	506	820	1070	1317	2185
	Bearing				1.5/3.5	1.5/3.5	2.2/5.3	2.3/5.7	2.5/6.2	4.0/10.0	5.2/13.0	6.4/15.9	10.6/26.3
19	LL (L/240)				159	172	283	302	332	536	786	1099	
	TL (L/180)				203	220	366	391	431	700	959	1180	1959
	Bearing				1.5/3.5	1.5/3.5	1.9/4.8	2.1/5.1	2.3/5.6	3.6/9.0	5.0/12.3	6.1/15.1	10.0/25.0
20	LL (L/240)				137	148	244	260	286	462	679	950	
	TL (L/180)				173	188	314	335	369	601	864	1063	1765
	Bearing				1.5/3.5	1.5/3.5	1.8/4.4	1.9/4.6	2.1/5.1	3.3/8.2	4.7/11.7	5.8/14.4	9.5/23.7
21	LL (L/240)				119	128	211	225	248	401	590	827	
	TL (L/180)				149	161	270	289	318	520	770	963	1599
	Bearing				1.5/3.5	1.5/3.5	1.6/4.0	1.7/4.2	1.9/4.6	3.0/7.5	4.4/11.0	5.5/13.7	9.1/22.6
22	LL (L/240)					112	184	197	216	350	516	724	
	TL (L/180)					139	234	250	276	452	671	876	1455
	Bearing					1.5/3.5	1.5/3.6	1.6/3.9	1.7/4.2	2.8/6.8	4.1/10.1	5.3/13.1	8.7/21.6
23	LL (L/240)						162	172	190	307	453	637	
	TL (L/180)						204	218	241	396	588	800	1329
	Bearing						1.5/3.5	1.5/3.5	1.6/3.9	2.5/6.3	3.7/9.2	5.0/12.5	8.3/20.6
24	LL (L/240)						143	152	167	271	401	564	
	TL (L/180)						179	191	211	348	518	733	1218
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8	3.4/8.5	4.8/12.0	7.9/19.8
25	LL (L/240)						126	135	148	241	356	501	
	TL (L/180)						157	168	186	307	458	650	1121
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.2/5.4	3.2/7.9	4.5/11.1	7.6/19.0
26	LL (L/240)							120	132	214	317	447	1021
	TL (L/180)							148	164	272	407	578	1035
	Bearing							1.5/3.5	1.5/3.5	2.0/5.0	3.0/7.3	4.2/10.3	7.3/18.3
27	LL (L/240)								118	192	284	401	917
	TL (L/180)								145	242	363	516	958
	Bearing								1.5/3.5	1.9/4.6	2.8/6.8	3.9/9.6	7.1/17.6
28	LL (L/240)									172	255	360	827
	TL (L/180)									216	324	462	889
	Bearing									1.8/4.3	2.6/6.4	3.6/8.9	6.8/17.0
29	LL (L/240)									155	230	325	748
	TL (L/180)									193	291	416	827
	Bearing									1.6/4.0	2.4/5.9	3.4/8.4	6.6/16.4
30	LL (L/240)									141	209	295	679
	TL (L/180)									173	262	375	771
	Bearing									1.5/3.8	2.3/5.6	3.2/7.8	6.4/15.8
31	LL (L/240)									128	189	268	618
	TL (L/180)									156	236	339	721
	Bearing									1.5/3.5	2.1/5.2	3.0/7.4	6.2/15.3
32	LL (L/240)									116	172	244	564
	TL (L/180)									141	214	307	675
	Bearing									1.5/3.5	2.0/4.9	2.8/6.9	6.0/14.8

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

ALLOWABLE UNIFORM LOADS (POUNDS PER LINEAL FOOT)

ROOF NON-SNOW 125% - 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/240)		1502										
	TL (L/180)		1994	3004	4184	4350	5695	5921	6282	9405	11946	14935	19237
	Bearing		2.2/5.3	3.2/8.0	4.5/11.2	4.7/11.6	6.1/15.2	6.3/15.8	6.7/16.7	10.0/25.0	12.7/31.7	15.9/39.6	20.4/51.0
7	LL (L/240)		967	2118									
	TL (L/180)		1281	2474	3375	3498	4445	4595	4828	6406	8763	11195	16484
	Bearing		1.6/4.0	3.1/7.7	4.2/10.5	4.4/10.9	5.6/13.8	5.7/14.3	6.0/15.0	8.0/19.9	10.9/27.2	13.9/34.7	20.4/51.0
8	LL (L/240)		657	1454									
	TL (L/180)		868	1927	2836	2934	3670	3783	3958	5069	6403	8361	14419
	Bearing		1.5/3.5	2.8/6.9	4.1/10.1	4.2/10.4	5.3/13.1	5.4/13.5	5.7/14.1	7.2/18.0	9.1/22.7	11.9/29.6	20.4/51.0
9	LL (L/240)		466	1039	2073	2233							
	TL (L/180)		613	1374	2448	2529	3133	3225	3365	4231	5198	6400	11934
	Bearing		1.5/3.5	2.2/5.5	4.0/9.8	4.1/10.1	5.0/12.5	5.2/12.9	5.4/13.5	6.8/16.9	8.3/20.8	10.3/25.6	19.0/47.5
10	LL (L/240)		342	767	1541	1661	2665						
	TL (L/180)		448	1011	2010	2106	2736	2813	2930	3643	4409	5303	9939
	Bearing		1.5/3.5	1.9/4.6	3.6/9.0	3.8/9.4	4.9/12.2	5.0/12.5	5.2/13.0	6.5/16.2	7.9/19.6	9.5/23.6	17.6/44.0
11	LL (L/240)		259	581	1175	1268	2044	2174	2377				
	TL (L/180)		337	764	1552	1676	2339	2431	2572	3204	3840	4558	7707
	Bearing		1.5/3.5	1.6/3.8	3.1/7.6	3.3/8.2	4.6/11.5	4.8/11.9	5.1/12.6	6.3/15.7	7.5/18.8	8.9/22.3	15.1/37.6
12	LL (L/240)		200	451	915	988	1600	1703	1864				
	TL (L/180)		258	590	1206	1303	1963	2040	2158	2861	3406	4008	6391
	Bearing		1.5/3.5	1.5/3.5	2.6/6.5	2.8/7.0	4.2/10.5	4.4/10.9	4.7/11.6	6.2/15.3	7.3/18.2	8.6/21.4	13.7/34.1
13	LL (L/240)		158	357	726	784	1275	1357	1487	2361			
	TL (L/180)		202	465	954	1031	1670	1736	1836	2452	3063	3582	5525
	Bearing		1.5/3.5	1.5/3.5	2.3/5.6	2.4/6.0	3.9/9.7	4.1/10.1	4.3/10.7	5.7/14.2	7.1/17.7	8.3/20.7	12.8/31.9
14	LL (L/240)			287	585	633	1031	1098	1204	1920			
	TL (L/180)			371	767	829	1358	1447	1581	2112	2670	3241	4890
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.5	3.7/9.1	4.0/9.9	5.3/13.2	6.7/16.7	8.1/20.2	12.2/30.5
15	LL (L/240)			234	479	518	845	901	988	1580	2299		
	TL (L/180)			301	624	676	1110	1184	1299	1837	2323	2857	4397
	Bearing			1.5/3.5	1.7/4.3	1.9/4.6	3.0/7.5	3.2/8.0	3.5/8.8	5.0/12.3	6.3/15.6	7.7/19.1	11.8/29.4
16	LL (L/240)			193	396	429	701	748	820	1316	1920		
	TL (L/180)			247	514	557	918	979	1076	1612	2039	2508	3999
	Bearing			1.5/3.5	1.5/3.8	1.7/4.1	2.7/6.6	2.9/7.1	3.1/7.8	4.7/11.6	5.9/14.6	7.2/17.9	11.4/28.5
17	LL (L/240)			162	332	359	588	627	688	1106	1618		
	TL (L/180)			205	428	464	767	819	900	1425	1803	2218	3671
	Bearing			1.5/3.5	1.5/3.5	1.5/3.6	2.4/5.9	2.6/6.3	2.8/6.9	4.4/10.9	5.5/13.7	6.8/16.9	11.2/27.8
18	LL (L/240)				280	303	498	531	583	939	1376	1920	
	TL (L/180)				360	390	647	690	759	1231	1606	1976	3277
	Bearing				1.5/3.5	1.5/3.5	2.2/5.3	2.3/5.7	2.5/6.2	4.0/10.0	5.2/13.0	6.4/15.9	10.6/26.3
19	LL (L/240)				239	259	425	453	498	803	1179	1648	
	TL (L/180)				305	330	550	587	646	1050	1439	1770	2938
	Bearing				1.5/3.5	1.5/3.5	1.9/4.8	2.1/5.1	2.3/5.6	3.6/9.0	5.0/12.3	6.1/15.1	10.0/25.0
20	LL (L/240)				205	222	366	390	429	692	1018	1425	
	TL (L/180)				260	282	471	503	553	902	1296	1595	2648
	Bearing				1.5/3.5	1.5/3.5	1.8/4.4	1.9/4.6	2.1/5.1	3.3/8.2	4.7/11.7	5.8/14.4	9.5/23.7
21	LL (L/240)				178	192	317	338	371	601	885	1241	
	TL (L/180)				223	242	406	433	477	780	1155	1444	2398
	Bearing				1.5/3.5	1.5/3.5	1.6/4.0	1.7/4.2	1.9/4.6	3.0/7.5	4.4/11.0	5.5/13.7	9.1/22.6
22	LL (L/240)					168	276	295	324	525	774	1086	
	TL (L/180)					209	351	376	414	679	1007	1314	2182
	Bearing					1.5/3.5	1.5/3.6	1.6/3.9	1.7/4.2	2.8/6.8	4.1/10.1	5.3/13.1	8.7/21.6
23	LL (L/240)						242	259	284	461	680	956	
	TL (L/180)						306	327	361	593	883	1200	1993
	Bearing						1.5/3.5	1.5/3.5	1.6/3.9	2.5/6.3	3.7/9.2	5.0/12.5	8.3/20.6
24	LL (L/240)						214	228	251	407	601	845	
	TL (L/180)						268	287	316	521	777	1099	1828
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8	3.4/8.5	4.8/12.0	7.9/19.8
25	LL (L/240)						189	202	222	361	534	751	
	TL (L/180)						236	252	278	460	687	975	1682
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.2/5.4	3.2/7.9	4.5/11.1	7.6/19.0
26	LL (L/240)							180	198	322	476	671	1532
	TL (L/180)							223	246	408	610	867	1552
	Bearing							1.5/3.5	1.5/3.5	2.0/5.0	3.0/7.3	4.2/10.3	7.3/18.3
27	LL (L/240)								177	288	426	601	1376
	TL (L/180)								218	363	544	774	1436
	Bearing								1.5/3.5	1.9/4.6	2.8/6.8	3.9/9.6	7.1/17.6
28	LL (L/240)									259	383	541	1241
	TL (L/180)									324	486	693	1333
	Bearing									1.8/4.3	2.6/6.4	3.6/8.9	6.8/17.0
29	LL (L/240)									233	346	488	1122
	TL (L/180)									290	437	623	1240
	Bearing									1.6/4.0	2.4/5.9	3.4/8.4	6.6/16.4
30	LL (L/240)									211	313	442	1018
	TL (L/180)									260	393	562	1157
	Bearing									1.5/3.8	2.3/5.6	3.2/7.8	6.4/15.8
31	LL (L/240)									192	284	401	927
	TL (L/180)									234	354	508	1081
	Bearing									1.5/3.5	2.1/5.2	3.0/7.4	6.2/15.3
32	LL (L/240)									174	259	366	845
	TL (L/180)									211	321	460	1012
	Bearing									1.5/3.5	2.0/4.9	2.8/6.9	6.0/14.8

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

ALLOWABLE UNIFORM LOADS (POUNDS PER LINEAL FOOT)

ROOF NON-SNOW 125% - 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/240)												
	TL (L/180)			4005	5578	5800	7593	7895	8376	12540	15928	19914	25650
	Bearing			3.2/8.0	4.5/11.2	4.7/11.6	6.1/15.2	6.3/15.8	6.7/16.7	10.0/25.0	12.7/31.7	15.9/39.6	20.4/51.0
7	LL (L/240)			2824									
	TL (L/180)			3299	4501	4665	5927	6127	6437	8541	11684	14926	21979
	Bearing			3.1/7.7	4.2/10.5	4.4/10.9	5.6/13.8	5.7/14.3	6.0/15.0	8.0/19.9	10.9/27.2	13.9/34.7	20.4/51.0
8	LL (L/240)			1938									
	TL (L/180)			2570	3781	3912	4893	5045	5277	6759	8537	11149	19225
	Bearing			2.8/6.9	4.1/10.1	4.2/10.4	5.3/13.1	5.4/13.5	5.7/14.1	7.2/18.0	9.1/22.7	11.9/29.6	20.4/51.0
9	LL (L/240)			1385	2764	2977							
	TL (L/180)			1832	3264	3372	4177	4299	4486	5642	6931	8533	15912
	Bearing			2.2/5.5	4.0/9.8	4.1/10.1	5.0/12.5	5.2/12.9	5.4/13.5	6.8/16.9	8.3/20.8	10.3/25.6	19.0/47.5
10	LL (L/240)			1022	2054	2215	3553						
	TL (L/180)			1348	2680	2809	3648	3751	3907	4858	5878	7070	13252
	Bearing			1.9/4.6	3.6/9.0	3.8/9.4	4.9/12.2	5.0/12.5	5.2/13.0	6.5/16.2	7.9/19.6	9.5/23.6	17.6/44.0
11	LL (L/240)			775	1566	1690	2726	2899	3170				
	TL (L/180)			1019	2069	2234	3119	3242	3430	4272	5120	6077	10276
	Bearing			1.6/3.8	3.1/7.6	3.3/8.2	4.6/11.5	4.8/11.9	5.1/12.6	6.3/15.7	7.5/18.8	8.9/22.3	15.1/37.6
12	LL (L/240)			601	1220	1317	2134	2270	2485				
	TL (L/180)			787	1608	1737	2617	2720	2878	3815	4541	5344	8521
	Bearing			1.5/3.5	2.6/6.5	2.8/7.0	4.2/10.5	4.4/10.9	4.7/11.6	6.2/15.3	7.3/18.2	8.6/21.4	13.7/34.1
13	LL (L/240)			476	968	1046	1700	1810	1982	3148			
	TL (L/180)			619	1272	1375	2227	2314	2449	3270	4084	4777	7367
	Bearing			1.5/3.5	2.3/5.6	2.4/6.0	3.9/9.7	4.1/10.1	4.3/10.7	5.7/14.2	7.1/17.7	8.3/20.7	12.8/31.9
14	LL (L/240)			382	781	844	1375	1464	1605	2559			
	TL (L/180)			495	1022	1106	1811	1929	2108	2816	3560	4322	6520
	Bearing			1.5/3.5	2.0/4.9	2.1/5.3	3.4/8.5	3.7/9.1	4.0/9.9	5.3/13.2	6.7/16.7	8.1/20.2	12.2/30.5
15	LL (L/240)			312	638	690	1127	1201	1317	2107	3065		
	TL (L/180)			401	832	901	1480	1578	1732	2449	3097	3809	5862
	Bearing			1.5/3.5	1.7/4.3	1.9/4.6	3.0/7.5	3.2/8.0	3.5/8.8	5.0/12.3	6.3/15.6	7.7/19.1	11.8/29.4
16	LL (L/240)			258	528	571	935	997	1094	1754	2559		
	TL (L/180)			329	686	743	1224	1306	1434	2149	2718	3344	5332
	Bearing			1.5/3.5	1.5/3.8	1.7/4.1	2.7/6.6	2.9/7.1	3.1/7.8	4.7/11.6	5.9/14.6	7.2/17.9	11.4/28.5
17	LL (L/240)			216	442	478	784	836	918	1475	2158		
	TL (L/180)			273	571	619	1023	1091	1200	1900	2404	2958	4894
	Bearing			1.5/3.5	1.5/3.5	1.5/3.6	2.4/5.9	2.6/6.3	2.8/6.9	4.4/10.9	5.5/13.7	6.8/16.9	11.2/27.8
18	LL (L/240)				374	404	664	708	777	1252	1835	2559	
	TL (L/180)				480	520	862	921	1012	1641	2141	2634	4370
	Bearing				1.5/3.5	1.5/3.5	2.2/5.3	2.3/5.7	2.5/6.2	4.0/10.0	5.2/13.0	6.4/15.9	10.6/26.3
19	LL (L/240)				319	345	567	604	664	1071	1572	2198	
	TL (L/180)				406	441	733	783	861	1400	1918	2361	3917
	Bearing				1.5/3.5	1.5/3.5	1.9/4.8	2.1/5.1	2.3/5.6	3.6/9.0	5.0/12.3	6.1/15.1	10.0/25.0
20	LL (L/240)				274	296	488	520	571	923	1358	1901	
	TL (L/180)				347	376	628	670	738	1203	1728	2127	3530
	Bearing				1.5/3.5	1.5/3.5	1.8/4.4	1.9/4.6	2.1/5.1	3.3/8.2	4.7/11.7	5.8/14.4	9.5/23.7
21	LL (L/240)				237	257	423	451	495	801	1180	1654	
	TL (L/180)				298	323	541	578	636	1040	1541	1926	3198
	Bearing				1.5/3.5	1.5/3.5	1.6/4.0	1.7/4.2	1.9/4.6	3.0/7.5	4.4/11.0	5.5/13.7	9.1/22.6
22	LL (L/240)					224	368	393	432	700	1031	1448	
	TL (L/180)					279	469	501	552	905	1343	1751	2909
	Bearing					1.5/3.5	1.5/3.6	1.6/3.9	1.7/4.2	2.8/6.8	4.1/10.1	5.3/13.1	8.7/21.6
23	LL (L/240)						323	345	379	615	907	1274	
	TL (L/180)						408	437	481	791	1177	1599	2658
	Bearing						1.5/3.5	1.5/3.5	1.6/3.9	2.5/6.3	3.7/9.2	5.0/12.5	8.3/20.6
24	LL (L/240)						285	304	334	543	801	1127	
	TL (L/180)						357	382	422	695	1036	1466	2437
	Bearing						1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8	3.4/8.5	4.8/12.0	7.9/19.8
25	LL (L/240)						253	270	296	481	711	1002	
	TL (L/180)						314	336	371	614	916	1299	2242
	Bearing						1.5/3.5	1.5/3.5	1.5/3.5	2.2/5.4	3.2/7.9	4.5/11.1	7.6/19.0
26	LL (L/240)							240	264	429	634	894	2042
	TL (L/180)							297	328	544	814	1156	2069
	Bearing							1.5/3.5	1.5/3.5	2.0/5.0	3.0/7.3	4.2/10.3	7.3/18.3
27	LL (L/240)								236	384	568	801	1835
	TL (L/180)								291	484	725	1032	1915
	Bearing								1.5/3.5	1.9/4.6	2.8/6.8	3.9/9.6	7.1/17.6
28	LL (L/240)									345	511	721	1654
	TL (L/180)									432	649	925	1778
	Bearing									1.8/4.3	2.6/6.4	3.6/8.9	6.8/17.0
29	LL (L/240)									311	461	651	1496
	TL (L/180)									386	582	831	1654
	Bearing									1.6/4.0	2.4/5.9	3.4/8.4	6.6/16.4
30	LL (L/240)									281	417	589	1358
	TL (L/180)									347	524	749	1542
	Bearing									1.5/3.8	2.3/5.6	3.2/7.8	6.4/15.8
31	LL (L/240)									255	379	535	1235
	TL (L/180)									312	473	677	1441
	Bearing									1.5/3.5	2.1/5.2	3.0/7.4	6.2/15.3
32	LL (L/240)									232	345	488	1127
	TL (L/180)									282	428	614	1350
	Bearing									1.5/3.5	2.0/4.9	2.8/6.9	6.0/14.8

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.

ROOF BEAM SIZING

1. To size a beam for use in a roof, it is necessary to check both live load and total load. 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. Roof must have positive slope to prevent ponding.
4. Tables will accommodate beam slopes to a maximum of 2:12.