

Allowable Beam Loads



**Hobas
BIG BEAM®**
High Performance 2.1E 11C-Glulam

**Floor Beams
Allowable
Loads**
Simple Span
(LDF=1.00)

Width (in.)	Depth (in.)	Load Condition	Span (feet)													
			8	10	12	14	16	18	20	22	24	26	28	30		
3 1/2	9 1/4	Live Load	L/360	1,403	718	416	262	175	123	90	67	52	-	-	-	
			L/480	1,052	539	312	196	132	92	67	51	-	-	-	-	
		Total Load	L/240	1,552	990	615	384	255	177	127	93	70	53	-	-	
	9 1/2	Live Load	L/360	1,520	778	450	284	190	133	97	73	56	-	-	-	
			L/480	1,140	583	338	213	142	100	73	55	-	-	-	-	
		Total Load	L/240	1,637	1,045	667	417	277	192	138	101	76	58	-	-	
	11 1/4	Live Load	L/360	2,297	1,292	748	471	315	222	161	121	93	74	59	-	
			L/480	1,893	969	561	353	237	166	121	91	70	55	-	-	
		Total Load	L/240	2,297	1,467	1,016	696	463	322	232	172	130	100	78	62	
	11 7/8	Live Load	L/360	2,560	1,520	879	554	371	261	190	143	110	86	69	56	
			L/480	2,226	1,140	660	415	278	195	142	107	82	65	52	-	
		Total Load	L/240	2,560	1,635	1,132	820	546	380	275	204	154	119	93	74	
	14	Live Load	L/360	3,447	2,274	1,441	907	608	427	311	234	180	142	113	92	
			L/480	3,447	1,867	1,081	681	456	320	233	175	135	106	85	69	
		Total Load	L/240	3,447	2,274	1,576	1,154	881	628	455	339	258	200	158	126	
	16	Live Load	L/360	4,186	2,973	2,060	1,354	907	637	465	349	269	211	169	138	
			L/480	4,186	2,788	1,613	1,016	681	478	348	262	202	159	127	103	
		Total Load	L/240	4,186	2,973	2,060	1,510	1,153	908	683	510	389	303	240	192	
	18	Live Load	L/360	5,024	3,584	2,609	1,913	1,292	907	662	497	383	301	241	196	
			L/480	5,024	3,584	2,297	1,446	969	681	496	373	287	226	181	147	
		Total Load	L/240	5,024	3,584	2,609	1,913	1,461	1,151	929	730	558	436	346	278	
	Width (in.)	Depth (in.)	Load Condition	8	10	12	14	16	18	20	22	24	26	28	30	
	5 7/16	9 1/4	Live Load	L/360	2,179	1,116	646	407	272	191	139	105	81	63	51	-
				L/480	1,634	837	484	305	204	143	105	79	61	-	-	-
Total Load			L/240	2,411	1,538	956	597	396	274	197	145	108	83	64	-	
9 1/2		Live Load	L/360	2,361	1,209	699	440	295	207	151	114	87	69	55	-	
			L/480	1,770	906	525	330	221	155	113	85	66	52	-	-	
		Total Load	L/240	2,543	1,623	1,036	648	430	298	214	157	118	90	70	54	
11 1/4		Live Load	L/360	3,569	2,007	1,162	731	490	344	251	189	145	114	91	74	
			L/480	2,940	1,505	871	549	368	258	188	141	109	86	69	56	
		Total Load	L/240	3,569	2,279	1,578	1,082	720	501	361	267	203	156	122	96	
11 7/8		Live Load	L/360	3,977	2,361	1,366	860	576	405	295	222	171	134	108	87	
			L/480	3,458	1,770	1,025	645	432	304	221	166	128	101	81	66	
		Total Load	L/240	3,977	2,540	1,759	1,274	848	591	426	316	240	185	145	115	
14		Live Load	L/360	5,354	3,533	2,239	1,410	944	663	484	363	280	220	176	143	
			L/480	5,354	2,901	1,679	1,057	708	497	363	272	210	165	132	107	
		Total Load	L/240	5,354	3,533	2,448	1,793	1,369	976	706	526	401	311	245	196	
16		Live Load	L/360	6,503	4,618	3,200	2,104	1,410	990	722	542	418	329	263	214	
			L/480	6,503	4,331	2,506	1,578	1,057	743	541	407	313	246	197	160	
		Total Load	L/240	6,503	4,618	3,200	2,346	1,777	1,383	1,061	792	605	471	373	299	
18		Live Load	L/360	7,806	5,568	4,054	2,954	2,007	1,410	1,028	772	595	468	375	305	
			L/480	7,806	5,568	3,568	2,247	1,505	1,057	771	579	446	351	281	228	
		Total Load	L/240	7,806	5,568	4,054	2,954	2,226	1,733	1,384	1,128	868	677	537	432	

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Rosboro BIG BEAM [®] <small>High Performance 2.1E IIC-Glulam</small>	Width (in.)	Depth (in.)	Load Condition	Span (feet)												
				8	10	12	14	16	18	20	22	24	26	28	30	
Floor Beams Allowable Loads Cont'd. Simple Span (LDF=1.00)	7	9 1/4	Live Load	L/360	2,805	1,436	831	523	351	246	180	135	104	82	65	53
				L/480	2,104	1,077	623	393	263	185	135	101	78	61	-	-
			Total Load	L/240	3,103	1,980	1,231	769	510	353	253	186	140	106	82	64
		9 1/2	Live Load	L/360	3,039	1,556	900	567	380	267	194	146	113	89	71	58
				L/480	2,279	1,167	675	425	285	200	146	110	84	66	53	-
			Total Load	L/240	3,274	2,089	1,334	834	553	384	275	203	152	116	90	70
	11 1/4	Live Load	L/360	4,595	2,584	1,495	942	631	443	323	243	187	147	118	96	
			L/480	3,785	1,938	1,122	706	473	332	242	182	140	110	88	72	
		Total Load	L/240	4,595	2,933	2,031	1,393	927	645	465	344	261	201	157	124	
	11 7/8	Live Load	L/360	5,120	3,039	1,759	1,108	742	521	380	285	220	173	138	113	
			L/480	4,452	2,279	1,319	831	556	391	285	214	165	130	104	84	
		Total Load	L/240	5,120	3,270	2,264	1,640	1,092	761	549	407	309	239	187	148	
	14	Live Load	L/360	6,893	4,549	2,882	1,815	1,216	854	622	468	360	283	227	184	
			L/480	6,893	3,735	2,161	1,361	912	640	467	351	270	212	170	138	
		Total Load	L/240	6,893	4,549	3,151	2,295	1,728	1,256	909	677	516	400	316	252	
	16	Live Load	L/360	8,372	5,945	4,104	2,709	1,815	1,275	929	698	538	423	339	275	
			L/480	8,372	5,575	3,226	2,032	1,361	956	697	524	403	317	254	206	
		Total Load	L/240	8,372	5,945	4,104	2,961	2,230	1,735	1,366	1,019	779	606	480	385	
	18	Live Load	L/360	10,049	7,169	5,136	3,707	2,584	1,815	1,323	994	766	602	482	392	
			L/480	10,049	7,169	4,594	2,893	1,938	1,361	992	745	574	452	362	294	
		Total Load	L/240	10,049	7,169	5,136	3,707	2,793	2,174	1,736	1,416	1,117	872	692	557	

Notes for BigBeam Floor Beams:

- (1) Service condition = dry.
- (2) Tabulated live load is based on the deflection criterion of either span/360 or span/480.
- (3) Tabulated total load is based on the deflection criterion of span/240.
- (4) Tabulated total load is in addition to the beam weight (assumed 36 pcf).
- (5) Selected beam size shall satisfy both live load and total load.

Allowable Beam Loads

Rohrberg
BIG BEAM®
High Performance 2.1E LJC-Glulam

Roof Beams
Allowable
Loads
Simple Span
Snow
(LDF=1.15)

Width (in.)	Depth (in.)	Load Condition	Span (feet)													
			8	10	12	14	16	18	20	22	24	26	28	30		
3 1/2	9 1/4	Live Load	L/240	1,786	1,077	623	393	263	185	135	101	78	61	-	-	
			L/360	1,403	718	416	262	175	123	90	67	52	-	-	-	
		Total Load	L/180	1,786	1,140	789	515	343	238	171	127	96	74	57	-	
	9 1/2	Live Load	L/240	1,884	1,167	675	425	285	200	146	110	84	66	53	-	
			L/360	1,520	778	450	284	190	133	97	73	56	-	-	-	
		Total Load	L/180	1,884	1,203	833	559	372	258	186	138	104	80	63	-	
	11 1/4	Live Load	L/240	2,643	1,688	1,122	706	473	332	242	182	140	110	88	72	
			L/360	2,523	1,292	748	471	315	222	161	121	93	74	59	-	
		Total Load	L/180	2,643	1,688	1,169	857	621	433	313	233	177	137	108	86	
	11 7/8	Live Load	L/240	2,946	1,882	1,303	831	556	391	285	214	165	130	104	84	
			L/360	2,946	1,520	879	554	371	261	190	143	110	86	69	56	
		Total Load	L/180	2,946	1,882	1,303	955	729	511	369	275	209	163	128	102	
	14	Live Load	L/240	3,965	2,617	1,814	1,329	912	640	467	351	270	212	170	138	
			L/360	3,965	2,490	1,441	907	608	427	311	234	180	142	113	92	
		Total Load	L/180	3,965	2,617	1,814	1,329	1,015	799	610	455	348	271	215	172	
	16	Live Load	L/240	4,816	3,421	2,371	1,738	1,328	956	697	524	403	317	254	206	
			L/360	4,816	3,421	2,151	1,354	907	637	465	349	269	211	169	138	
		Total Load	L/180	4,816	3,421	2,371	1,738	1,328	1,046	845	684	524	409	325	261	
	18	Live Load	L/240	5,780	4,124	3,003	2,202	1,682	1,326	992	745	574	452	362	294	
			L/360	5,780	4,124	3,003	1,929	1,292	907	662	497	383	301	241	196	
		Total Load	L/180	5,780	4,124	3,003	2,202	1,682	1,326	1,071	876	727	586	466	376	
	Width (in.)	Depth (in.)	Load Condition	8	10	12	14	16	18	20	22	24	26	28	30	
	5 7/16	9 1/4	Live Load	L/240	2,774	1,674	969	610	409	287	209	157	121	95	76	62
				L/360	2,179	1,116	646	407	272	191	139	105	81	63	51	-
Total Load			L/180	2,774	1,771	1,226	801	532	370	266	197	149	114	89	70	
9 1/2		Live Load	L/240	2,926	1,813	1,049	661	443	311	227	170	131	103	83	67	
			L/360	2,361	1,209	699	440	295	207	151	114	87	69	55	-	
		Total Load	L/180	2,926	1,868	1,293	868	577	402	289	214	162	125	97	77	
11 1/4		Live Load	L/240	4,107	2,623	1,742	1,097	735	516	376	283	218	171	137	112	
			L/360	3,920	2,007	1,162	731	490	344	251	189	145	114	91	74	
		Total Load	L/180	4,107	2,623	1,817	1,331	965	673	487	362	275	213	168	133	
11 7/8		Live Load	L/240	4,577	2,923	2,025	1,290	865	607	443	333	256	201	161	131	
			L/360	4,577	2,361	1,366	860	576	405	295	222	171	134	108	87	
		Total Load	L/180	4,577	2,923	2,025	1,483	1,132	793	574	427	325	252	199	159	
14		Live Load	L/240	6,161	4,066	2,818	2,065	1,417	995	725	545	420	330	264	215	
			L/360	6,161	3,868	2,239	1,410	944	663	484	363	280	220	176	143	
		Total Load	L/180	6,161	4,066	2,818	2,065	1,577	1,234	948	708	541	421	333	268	
16		Live Load	L/240	7,482	5,314	3,684	2,701	2,047	1,485	1,083	813	627	493	395	321	
			L/360	7,482	5,314	3,342	2,104	1,410	990	722	542	418	329	263	214	
		Total Load	L/180	7,482	5,314	3,684	2,701	2,047	1,594	1,273	1,038	814	635	504	406	
18		Live Load	L/240	8,980	6,407	4,665	3,401	2,563	1,996	1,542	1,158	892	702	562	457	
			L/360	8,980	6,407	4,665	2,996	2,007	1,410	1,028	772	595	468	375	305	
		Total Load	L/180	8,980	6,407	4,665	3,401	2,563	1,996	1,595	1,301	1,080	909	725	585	

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Rosboro BIG BEAM®
 High Performance 2.1E 11C-Glulam
Roof Beams Allowable Loads Cont'd.
 Simple Span Snow (LDF=1.15)

Width (in.)	Depth (in.)	Load Condition	Span (feet)												
			8	10	12	14	16	18	20	22	24	26	28	30	
7	9 1/4	Live Load	L/240	3,571	2,155	1,247	785	526	369	269	202	156	123	98	80
			L/360	2,805	1,436	831	523	351	246	180	135	104	82	65	53
		Total Load	L/180	3,571	2,280	1,578	1,031	685	476	343	254	192	147	115	90
	9 1/2	Live Load	L/240	3,767	2,334	1,351	851	570	400	292	219	169	133	106	86
			L/360	3,039	1,556	900	567	380	267	194	146	113	89	71	58
		Total Load	L/180	3,767	2,405	1,665	1,117	743	517	372	276	208	160	125	99
	11 1/4	Live Load	L/240	5,287	3,376	2,243	1,413	946	665	484	364	280	221	177	144
			L/360	5,047	2,584	1,495	942	631	443	323	243	187	147	118	96
		Total Load	L/180	5,287	3,376	2,339	1,713	1,242	866	626	466	354	274	216	172
	11 7/8	Live Load	L/240	5,892	3,763	2,607	1,661	1,113	782	570	428	330	259	208	169
			L/360	5,892	3,039	1,759	1,108	742	521	380	285	220	173	138	113
		Total Load	L/180	5,892	3,763	2,607	1,910	1,453	1,021	739	550	419	325	256	204
	14	Live Load	L/240	7,931	5,235	3,628	2,643	1,824	1,281	934	702	540	425	340	277
			L/360	7,931	4,980	2,882	1,815	1,216	854	622	468	360	283	227	184
		Total Load	L/180	7,931	5,235	3,628	2,643	1,990	1,549	1,220	911	696	542	429	344
	16	Live Load	L/240	9,632	6,841	4,723	3,409	2,569	1,912	1,394	1,047	807	634	508	413
			L/360	9,632	6,841	4,302	2,709	1,815	1,275	929	698	538	423	339	275
		Total Load	L/180	9,632	6,841	4,723	3,409	2,569	2,000	1,597	1,302	1,047	818	649	523
	18	Live Load	L/240	11,561	8,249	5,912	4,268	3,217	2,505	1,985	1,491	1,148	903	723	588
			L/360	11,561	8,249	5,912	3,857	2,584	1,815	1,323	994	766	602	482	392
		Total Load	L/180	11,561	8,249	5,912	4,268	3,217	2,505	2,001	1,633	1,355	1,140	933	753

Notes for BigBeam Roof Beams:

- (1) Service condition = dry.
- (2) Tabulated live load is based on the deflection criterion of either span/240 or span/360.
- (3) Tabulated total load is based on the deflection criterion of span/180.
- (4) Tabulated total load is in addition to the beam weight (assumed 36 pcf).
- (5) Selected beam size shall satisfy both live load and total load.

Allowable Beam Loads



High Performance 2.1E IJC-Glulam

**Roof Beams
Allowable
Loads**
Simple Span
Non-Snow
(LDF=1.25)

Width (in.)	Depth (in.)	Load Condition	Span (feet)													
			8	10	12	14	16	18	20	22	24	26	28	30		
3 1/2	9 1/4	Live Load	L/240	1,942	1,077	623	393	263	185	135	101	78	61	-	-	
			L/360	1,403	718	416	262	175	123	90	67	52	-	-	-	
		Total Load	L/180	1,942	1,240	823	515	343	238	171	127	96	74	57	-	
	9 1/2	Live Load	L/240	2,048	1,167	675	425	285	200	146	110	84	66	53	-	
			L/360	1,520	778	450	284	190	133	97	73	56	-	-	-	
		Total Load	L/180	2,048	1,308	892	559	372	258	186	138	104	80	63	-	
	11 1/4	Live Load	L/240	2,874	1,836	1,122	706	473	332	242	182	140	110	88	72	
			L/360	2,523	1,292	748	471	315	222	161	121	93	74	59	-	
		Total Load	L/180	2,874	1,836	1,272	932	621	433	313	233	177	137	108	86	
	11 7/8	Live Load	L/240	3,203	2,046	1,319	831	556	391	285	214	165	130	104	84	
			L/360	2,968	1,520	879	554	371	261	190	143	110	86	69	56	
		Total Load	L/180	3,203	2,046	1,418	1,039	732	511	369	275	209	163	128	102	
	14	Live Load	L/240	4,311	2,846	1,973	1,361	912	640	467	351	270	212	170	138	
			L/360	4,311	2,490	1,441	907	608	427	311	234	180	142	113	92	
		Total Load	L/180	4,311	2,846	1,973	1,446	1,104	842	610	455	348	271	215	172	
	16	Live Load	L/240	5,236	3,719	2,579	1,891	1,361	956	697	524	403	317	254	206	
			L/360	5,236	3,717	2,151	1,354	907	637	465	349	269	211	169	138	
		Total Load	L/180	5,236	3,719	2,579	1,891	1,444	1,138	915	684	524	409	325	261	
	18	Live Load	L/240	6,284	4,484	3,266	2,395	1,830	1,361	992	745	574	452	362	294	
			L/360	6,284	4,484	3,063	1,929	1,292	907	662	497	383	301	241	196	
		Total Load	L/180	6,284	4,484	3,266	2,395	1,830	1,443	1,166	954	750	586	466	376	
	Width (in.)	Depth (in.)	Load Condition	8	10	12	14	16	18	20	22	24	26	28	30	
	5 7/16	9 1/4	Live Load	L/240	3,016	1,674	969	610	409	287	209	157	121	95	76	62
				L/360	2,179	1,116	646	407	272	191	139	105	81	63	51	-
Total Load			L/180	3,016	1,926	1,279	801	532	370	266	197	149	114	89	70	
9 1/2		Live Load	L/240	3,182	1,813	1,049	661	443	311	227	170	131	103	83	67	
			L/360	2,361	1,209	699	440	295	207	151	114	87	69	55	-	
		Total Load	L/180	3,182	2,032	1,386	868	577	402	289	214	162	125	97	77	
11 1/4		Live Load	L/240	4,465	2,852	1,742	1,097	735	516	376	283	218	171	137	112	
			L/360	3,920	2,007	1,162	731	490	344	251	189	145	114	91	74	
		Total Load	L/180	4,465	2,852	1,976	1,448	965	673	487	362	275	213	168	133	
11 7/8		Live Load	L/240	4,976	3,179	2,049	1,290	865	607	443	333	256	201	161	131	
			L/360	4,611	2,361	1,366	860	576	405	295	222	171	134	108	87	
		Total Load	L/180	4,976	3,179	2,203	1,614	1,137	793	574	427	325	252	199	159	
14		Live Load	L/240	6,698	4,422	3,065	2,115	1,417	995	725	545	420	330	264	215	
			L/360	6,698	3,868	2,239	1,410	944	663	484	363	280	220	176	143	
		Total Load	L/180	6,698	4,422	3,065	2,247	1,716	1,308	948	708	541	421	333	268	
16		Live Load	L/240	8,135	5,778	4,006	2,937	2,115	1,485	1,083	813	627	493	395	321	
			L/360	8,135	5,774	3,342	2,104	1,410	990	722	542	418	329	263	214	
		Total Load	L/180	8,135	5,778	4,006	2,937	2,227	1,734	1,386	1,063	814	635	504	406	
18		Live Load	L/240	9,763	6,967	5,073	3,699	2,788	2,115	1,542	1,158	892	702	562	457	
			L/360	9,763	6,967	4,758	2,996	2,007	1,410	1,028	772	595	468	375	305	
		Total Load	L/180	9,763	6,967	5,073	3,699	2,788	2,172	1,736	1,417	1,165	911	725	585	

Continued on page 35



High Performance 2.1E IIC-Glulam

**Roof Beams
Allowable
Loads
Cont'd.
Simple Span
Non-Snow
(LDF=1.25)**

Width (in.)	Depth (in.)	Load Condition	Span (feet)												
			8	10	12	14	16	18	20	22	24	26	28	30	
7	9 1/4	Live Load	L/240	3,883	2,155	1,247	785	526	369	269	202	156	123	98	80
			L/360	2,805	1,436	831	523	351	246	180	135	104	82	65	53
		Total Load	L/180	3,883	2,479	1,646	1,031	685	476	343	254	192	147	115	90
	9 1/2	Live Load	L/240	4,096	2,334	1,351	851	570	400	292	219	169	133	106	86
			L/360	3,039	1,556	900	567	380	267	194	146	113	89	71	58
		Total Load	L/180	4,096	2,616	1,784	1,117	743	517	372	276	208	160	125	99
	11 1/4	Live Load	L/240	5,748	3,672	2,243	1,413	946	665	484	364	280	221	177	144
			L/360	5,047	2,584	1,495	942	631	443	323	243	187	147	118	96
		Total Load	L/180	5,748	3,672	2,544	1,864	1,242	866	626	466	354	274	216	172
	11 7/8	Live Load	L/240	6,406	4,092	2,638	1,661	1,113	782	570	428	330	259	208	169
			L/360	5,936	3,039	1,759	1,108	742	521	380	285	220	173	138	113
		Total Load	L/180	6,406	4,092	2,835	2,078	1,463	1,021	739	550	419	325	256	204
	14	Live Load	L/240	8,623	5,692	3,945	2,722	1,824	1,281	934	702	540	425	340	277
			L/360	8,623	4,980	2,882	1,815	1,216	854	622	468	360	283	227	184
		Total Load	L/180	8,623	5,692	3,945	2,875	2,166	1,683	1,220	911	696	542	429	344
	16	Live Load	L/240	10,472	7,439	5,137	3,708	2,722	1,912	1,394	1,047	807	634	508	413
			L/360	10,472	7,433	4,302	2,709	1,815	1,275	929	698	538	423	339	275
		Total Load	L/180	10,472	7,439	5,137	3,708	2,795	2,176	1,739	1,368	1,047	818	649	523
	18	Live Load	L/240	12,569	8,969	6,428	4,642	3,499	2,722	1,985	1,491	1,148	903	723	588
			L/360	12,569	8,969	6,125	3,857	2,584	1,815	1,323	994	766	602	482	392
		Total Load	L/180	12,569	8,969	6,428	4,642	3,499	2,725	2,178	1,777	1,475	1,173	933	753

Notes for BigBeam Roof Beams:

- (1) Service condition = dry.
- (2) Tabulated live load is based on the deflection criterion of either span/240 or span/360.
- (3) Tabulated total load is based on the deflection criterion of span/180.
- (4) Tabulated total load is in addition to the beam weight (assumed 36 pcf).
- (5) Selected beam size shall satisfy both live load and total load.