



# Standard Loading Table

## FOR "LONGSPAN" STEEL JOISTS

Adopted by the Steel Joist Institute, April 28, 1953. Effective April 28, 1953.

The following table gives the TOTAL safe uniformly distributed load-carrying capacities of Steel Joist Institute "Longspan" Joists in pounds per linear foot of span.

This load table applies to "Longspan" Joists with either parallel chords or standard pitched top chords.

The carrying capacities of "Longspans" with top chords pitched is determined by the nominal depth of the "Longspan" Joists at the center of the span.

**Standard pitch is 1/8" per foot. If pitch exceeds this standard, the load table does not apply.**

Loads below heavy broken lines are governed by maximum end reaction.

Joist Designation	Approx. Wt. in Lbs. per Lineal Ft.	Depth in Inches	Maximum End Reaction	Clear Opening or Net Span in Feet															
				25	26	27	28	29	30	31	32	33	34	35	36				
18L02	10	18	3,632	283	267	251	237	224	211	200	190	180	171	163	155				
18L03	11	18	4,094	319	300	283	267	253	239	227	215	204	194	185	176				
18L04	12	18	4,941	385	361	339	319	301	284	268	254	241	229	217	207				
18L05	14	18	5,364	418	394	372	351	331	313	298	282	268	254	242	231				
18L06	16	18	6,417	500	469	440	414	391	369	349	330	313	297	282	268				
18L07	18	18	6,880	536	516	486	458	432	408	386	365	346	329	313	296				
18L08	20	18	7,482	583	561	541	522	491	463	437	414	392	371	352	335				
18L09	23	18	7,697	600	577	556	537	519	502	474	449	425	403	383	364				
18L10	25	18	8,265	644	620	597	577	557	539	522	493	466	442	419	398				
18L11	28	18	8,753	682	656	633	611	590	571	553	536	520	493	469	445				
18L12	30	18	9,166	714	687	663	639	618	598	579	561	544	529	514	488				
Joist Designation	Approx. Wt. in Lbs. per Lineal Ft.	Depth in Inches	Maximum End Reaction	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
20L03	11	20	4,235	330	312	296	280	266	252	240	228	217	207	197	188	180	172	164	157
20L04	12	20	5,185	404	381	360	340	320	304	288	273	259	247	235	224	213	204	194	186
20L05	14	20	5,557	433	409	387	367	348	331	314	299	285	271	259	247	236	226	216	207
20L06	16	20	6,763	527	496	467	441	417	395	374	355	337	320	305	290	277	264	252	241
20L07	18	20	7,110	554	533	514	486	459	435	412	391	372	354	337	321	306	292	279	267
20L08	20	20	7,832	610	587	566	546	528	499	472	447	425	403	383	365	348	332	317	303
20L09	23	20	8,107	632	608	586	566	547	529	512	485	460	437	416	396	377	360	344	329
20L10	25	20	8,568	668	643	619	598	578	559	541	525	509	483	459	436	415	396	378	361
20L11	28	20	9,095	709	682	657	634	613	593	574	557	540	525	510	485	462	441	421	403
20L12	30	20	9,605	748	720	694	670	647	626	607	588	571	554	539	524	510	486	463	442
20L13	35	20	10,533	821	790	761	735	710	687	665	645	626	608	591	575	559	545	531	518
Joist Designation	Approx. Wt. in Lbs. per Lineal Ft.	Depth in Inches	Maximum End Reaction	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
24L04	12	24	4,798	285	272	260	249	238	228	219	210	201	193	186	179	172	166	160	154
24L05	14	24	5,117	304	292	279	268	257	247	237	228	219	211	203	196	189	182	175	169
24L06	16	24	6,245	371	354	339	324	310	297	284	273	262	251	242	232	224	215	207	200
24L07	18	24	6,868	408	390	373	357	342	328	314	301	289	278	267	257	248	238	230	222
24L08	20	24	7,996	475	453	432	412	394	377	361	346	332	318	306	294	283	272	262	252
24L09	23	24	8,652	514	490	468	447	427	409	391	375	360	345	331	319	306	295	284	274
24L10	25	24	9,345	555	539	524	500	477	456	436	417	400	383	368	353	339	326	314	302
24L11	28	24	9,686	575	559	543	528	514	501	480	460	441	424	407	391	376	362	349	336
24L12	30	24	10,431	619	601	585	569	554	539	526	513	491	471	452	434	417	401	386	371
24L13	35	24	11,479	682	662	644	626	610	594	579	565	551	538	526	514	494	475	457	440
24L14	38	24	12,087	718	697	678	659	642	625	609	594	580	567	554	541	529	518	496	476
Joist Designation	Approx. Wt. in Lbs. per Lineal Ft.	Depth in Inches	Maximum End Reaction	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
28L06	16	28	5,875	282	272	262	253	244	235	227	220	212	205	199	192	186	180	175	170
28L07	18	28	6,479	311	300	289	279	269	260	251	243	235	227	220	213	206	200	194	188
28L08	20	28	7,542	362	348	335	323	312	300	290	280	270	261	252	244	236	229	221	215
28L09	23	28	8,167	392	377	363	350	337	325	314	303	293	283	274	265	256	248	240	233
28L10	25	28	9,208	442	425	408	393	378	365	351	339	327	316	305	295	285	276	267	259
28L11	28	28	10,000	480	463	445	429	414	399	385	372	359	347	336	325	314	304	295	286
28L12	30	28	10,960	526	514	502	483	465	448	432	417	402	388	375	363	351	339	328	318
28L13	35	28	12,202	586	572	559	546	534	523	512	494	477	460	445	430	415	402	389	377
28L14	38	28	12,793	614	600	586	573	561	549	537	526	515	505	488	471	455	440	426	412
28L15	43	28	13,443	645	630	616	602	589	576	564	552	541	531	520	510	501	482	465	449

# OPEN WEB STEEL JOISTS — “LONGSPAN” SERIES

## Standard Loading Table (Continued)

Joist Designation	Approx. Wt. in Lbs. per Lineal Ft.	Depth in Inches	Maximum End Reaction	Clear Opening or Net Span in Feet															
				49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
32L07	18	32	6,159	248	240	233	226	220	213	207	201	196	190	185	180	175	171	166	162
32L08	20	32	7,177	289	280	271	263	256	248	241	234	227	220	214	208	202	197	191	186
32L09	23	32	7,798	314	304	295	285	277	269	260	253	246	239	232	225	219	213	207	202
32L10	25	32	8,791	354	343	332	321	311	302	292	283	275	267	259	252	245	238	231	225
32L11	28	32	9,586	386	374	362	351	340	330	321	311	302	294	285	277	270	262	255	249
32L12	30	32	10,827	436	422	409	396	383	371	360	349	339	329	319	310	301	293	285	277
32L13	35	32	12,667	510	500	485	469	453	440	427	414	401	390	378	367	357	347	338	328
32L14	38	32	13,470	543	532	522	512	502	486	471	457	443	429	417	404	393	382	371	360
32L15	43	32	14,445	582	570	559	549	538	528	519	510	501	484	468	452	438	424	411	398
32L16	50	32	15,729	633	621	609	597	586	575	565	555	546	536	527	519	510	502	487	472
				57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
36L08	20	36	6,920	240	234	227	221	216	210	205	199	194	189	185	180	176	172	167	164
36L09	23	36	7,497	260	253	246	240	233	227	221	216	210	205	200	195	191	186	182	177
36L10	25	36	8,506	295	287	279	271	264	257	250	243	237	231	225	219	214	209	204	199
36L11	28	36	9,198	319	310	302	294	286	279	272	265	258	252	246	240	234	228	223	218
36L12	30	36	10,467	363	352	343	333	324	316	307	299	291	284	277	270	263	257	250	244
36L13	35	36	12,398	430	418	406	395	384	374	364	355	346	337	328	320	312	304	297	290
36L14	38	36	13,782	478	464	451	438	426	414	403	392	382	372	362	353	344	336	327	319
36L15	43	36	15,275	530	521	512	497	484	471	458	446	434	423	412	400	389	378	368	357
36L16	50	36	16,482	572	562	552	543	535	526	518	510	502	489	476	464	453	442	431	420
36L17	57	36	17,765	616	606	595	586	576	567	558	549	541	533	525	517	510	497	485	473
				65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
40L09	23	40	7,223	220	215	210	205	200	196	191	187	183	179	175	171	168	164	161	157
40L10	25	40	8,208	250	244	238	233	227	222	217	212	207	202	198	193	189	185	181	177
40L11	28	40	8,865	270	264	258	252	246	241	235	230	225	220	215	211	206	202	198	193
40L12	30	40	10,113	308	301	294	287	280	273	267	261	255	249	243	238	233	228	223	218
40L13	35	40	12,017	366	357	348	340	332	324	316	309	302	295	289	282	276	270	264	259
40L14	38	40	13,396	408	397	387	378	369	360	351	343	335	327	320	312	305	299	292	286
40L15	43	40	15,136	461	450	439	428	418	408	399	389	380	372	363	355	347	341	332	324
40L16	50	40	17,187	523	516	508	495	483	472	461	450	440	430	420	410	401	392	384	376
40L17	57	40	18,421	561	553	545	537	529	521	514	507	495	484	473	463	452	442	433	423
40L18	64	40	19,981	609	599	591	582	574	566	558	550	542	535	528	521	515	508	496	485
				73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88
44L10	25	44	7,993	217	212	208	203	199	195	191	187	183	179	176	172	169	165	162	159
44L11	28	44	8,582	233	228	224	219	215	210	206	202	198	194	191	187	183	180	177	173
44L12	30	44	9,835	267	261	256	250	245	240	235	230	225	221	216	212	208	204	200	196
44L13	35	44	11,639	316	310	303	297	290	284	278	273	267	262	257	251	246	242	237	232
44L14	38	44	13,039	354	346	338	331	324	317	310	304	297	291	285	279	274	268	263	258
44L15	43	44	14,733	400	392	383	375	367	359	352	344	337	330	324	317	311	305	299	293
44L16	50	44	17,054	463	453	443	434	424	415	407	398	390	382	374	367	360	352	345	339
44L17	57	44	19,040	517	510	499	489	478	468	458	449	439	430	422	413	405	397	389	382
44L18	64	44	20,743	563	556	548	541	534	527	521	514	508	497	487	477	467	457	448	439
44L19	73	44	22,311	606	598	590	582	575	567	560	553	546	540	533	527	521	515	509	498
				81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
48L11	28	48	8,330	204	200	197	193	189	186	183	179	176	173	170	167	164	162	159	156
48L12	30	48	9,596	235	230	226	221	217	213	209	205	201	198	194	191	187	184	181	178
48L13	35	48	11,352	278	273	268	262	257	253	248	243	239	234	230	226	222	218	214	211
48L14	38	48	12,740	312	305	299	294	288	282	277	272	266	261	257	252	247	243	238	234
48L15	43	48	14,373	352	345	338	332	326	319	313	308	302	296	291	285	280	275	270	266
48L16	50	48	16,660	408	400	392	384	377	370	363	356	349	343	337	331	325	319	313	308
48L17	57	48	18,743	459	450	441	433	425	416	409	401	394	386	379	372	366	359	353	346
48L18	64	48	21,336	523	516	510	504	494	485	475	466	457	448	440	432	424	416	408	401
48L19	73	48	23,029	564	557	550	544	538	531	525	519	514	508	498	489	480	471	462	454

The weight of dead loads, including the weight of "Longspans", must in all cases be deducted to determine the live load-carrying capacities which must be reduced for concentrated loads.

Figures printed in color to be used for roof construction only.

When holes are required in top or bottom chords the above carrying capacities must be reduced in proportion to reduction of chord areas.

The top chords are considered as being stayed laterally by floor slab or roof deck.