

VULCRAFT LOAD TABLE
SUPER LONGSPAN STEEL JOISTS, LRFD SLH-SERIES

JANUARY 1, 2007

Based on a 50 ksi Maximum Yield Strength

The black figures in the following table give the TOTAL safe uniformly-distributed load-carrying capacities, in pounds per linear foot, of LRFD SLH-Series Joists. The weight of DEAD loads, including the joists, must in all cases be deducted to determine the LIVE load-carrying capacities of the joists. The approximate DEAD load of the joists may be determined from the weights per linear foot shown in the tables. All loads shown are for roof construction only.

The red figures in this table are the LIVE loads per linear foot of joist which will produce an approximate deflection of 1/360 of the span. LIVE loads which will produce a deflection of 1/240 of the span may be obtained by multiplying the red figures by 1.5. In no case shall the TOTAL load capacity of the joists be exceeded.

*The safe load for the clear spans shown in the shaded section is equal to (Safe Load) / (Clear Span + 0.67). [The added 0.67 feet (8 inches) is required to obtain the proper length on which the Load Tables were developed.] In no case shall the safe uniform load, for clear spans less than the minimum clear span shown in the shaded area, exceed the uniform load calculated for the minimum clear span listed in the shaded area.

This load table applies to joists with either parallel chords or standard pitched top chords. When top chords are pitched, the design capacities are determined by the nominal depth of the joists at the center of the span. Standard top chord pitch is 1/4 inch per foot. If pitch exceeds this standard, the load table does not apply. This load table may be used for parallel chord joists installed to a maximum slope of 1/2 inch per foot.

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

The top chords are considered as being stayed laterally by the roof deck.

The approximate joist weights per linear foot shown in these table do not include accessories.

When erecting SLH joists, hoisting cables shall not be released until all rows of bridging are completely installed.

To solve for live loads for clear spans shown in the shaded area (or lesser clear spans), multiply the live load of the shortest clear span shown in the Load tables by (the shortest clear span shown in the Load table + 0.67 feet)² and divide by (the actual clear span + .067 feet)². The live load shall not exceed the safe uniform load.

**For spans between those listed use a linear interpolation.

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Joist Designation	Approx. Wt. In Lbs. per Linear Ft. (Joists Only)	Depth In Inches	Safe Load* In Lbs. Between	CLEAR SPAN IN FEET**															
				111	114	117	120	123	126	129	132	135	138	141	144	147	150	155	
80SLH15	40	80	78,000	699	663	632	602	575	549	525	503	482	461	443	425	408	392	366	342
			321	296	275	255	236	220	205	192	179	167	157	147	139	130	118	107	
80SLH16	46	80	93,750	840	802	763	727	691	658	628	600	574	549	525	504	483	463	433	406
			375	347	321	297	276	257	240	224	209	196	184	172	162	162	138	126	
80SLH17	53	80	108,300	971	926	881	839	800	765	731	699	669	641	615	590	567	545	510	479
			451	416	386	358	332	309	288	269	252	235	221	207	195	183	166	151	
80SLH18	60	80	122,400	1097	1044	993	947	903	863	825	789	756	723	695	666	641	615	576	542
			516	477	441	409	380	354	330	308	288	270	253	237	223	210	190	173	
80SLH19	67	80	142,800	1280	1218	1160	1104	1052	1005	960	918	878	840	806	774	743	714	668	627
			578	533	493	458	425	396	369	344	322	301	283	266	250	235	213	193	
80SLH20	75	80	160,500	1446	1382	1323	1268	1211	1157	1104	1056	1011	968	927	891	855	821	770	722
			646	596	552	512	475	443	412	385	360	337	316	297	279	263	238	216	
88-119				120	123	126	129	132	135	138	141	144	147	150	155	160	165	170	175
88SLH16	46	88	93,000	771	735	701	671	642	615	591	567	545	524	503	471	443	417	393	372
			361	336	313	291	272	254	238	223	210	197	186	168	153	140	127	117	
88SLH17	51	88	105,150	871	830	789	753	719	687	659	630	605	579	557	521	489	459	432	407
			404	375	349	325	304	284	266	249	234	220	207	187	170	156	143	130	
88SLH18	58	88	120,600	1001	953	908	866	827	791	756	725	695	666	639	599	561	528	497	468
			460	427	397	370	346	323	303	284	267	250	236	214	195	177	162	149	
88SLH19	65	88	139,500	1157	1101	1049	999	954	912	873	836	801	770	738	692	648	609	573	540
			521	484	450	420	392	367	343	322	302	284	267	243	221	201	184	169	
88SLH20	76	88	160,500	1334	1281	1232	1184	1133	1085	1041	998	959	921	885	830	780	734	692	626
			623	579	539	502	469	438	410	385	361	340	320	290	264	241	220	202	
88SLH21	89	88	198,000	1649	1568	1494	1425	1361	1301	1244	1191	1143	1097	1053	986	924	869	816	770
			724	673	626	584	545	509	477	447	420	395	372	337	307	280	256	235	



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				129	132	135	138	141	144	147	150	155	160	165	170	175	180	185	190	
96SLH17	52	96	105,000	810	776	744	711	684	657	632	608	570	536	503	474	447	422	399	378	
				389	363	339	318	298	280	263	247	224	204	186	170	156	143	132	122	
96SLH18	58	96	118,200	912	875	839	803	770	740	713	686	645	608	572	540	510	483	458	434	
				443	413	386	362	340	319	300	282	256	232	212	194	178	163	150	139	
96SLH19	66	96	141,300	1091	1046	1001	957	917	878	842	809	758	711	668	629	594	560	530	501	
				502	469	438	410	385	361	340	320	290	264	241	220	202	186	171	158	
96SLH20	74	96	159,000	1236	1184	1131	1083	1037	993	952	915	857	804	756	713	672	635	600	567	
				569	531	496	465	436	409	385	362	329	299	272	249	229	210	193	178	
96SLH21	90	96	199,500	1541	1473	1410	1350	1296	1243	1196	1149	1079	1013	953	897	846	800	756	716	
				698	652	610	571	535	503	473	445	404	367	335	306	281	258	238	220	
96SLH22	102	96	223,500	1725	1662	1601	1542	1487	1436	1382	1329	1248	1173	1104	1041	984	930	881	834	
				811	757	708	663	622	584	549	517	469	426	389	355	326	300	276	255	
				104-137	138	141	144	147	150	155	160	165	170	175	180	185	190	195	200	205
104SLH18	59	104	115,200	831	798	768	734	708	666	627	594	561	531	503	477	453	431	410	390	
				426	400	375	353	332	301	274	250	229	209	192	177	164	152	140	130	
104SLH19	67	104	140,100	1011	971	933	897	861	809	761	719	678	641	606	575	546	519	488	468	
				484	453	426	401	377	342	311	284	260	238	218	201	186	172	160	148	
104SLH20	75	104	157,500	1146	1107	1071	1032	992	932	875	822	774	731	690	653	620	587	557	530	
				548	513	483	453	427	387	352	321	293	269	247	228	210	195	181	167	
104SLH21	90	104	198,000	1434	1376	1322	1271	1220	1145	1077	1016	959	906	857	812	771	732	696	662	
				673	632	593	558	525	476	433	395	361	331	301	280	259	240	222	206	
104SLH22	104	104	222,000	1607	1551	1499	1449	1401	1325	1245	1175	1107	1047	990	939	891	846	804	767	
				783	734	689	648	610	553	503	459	420	385	353	326	301	278	258	240	
104SLH23	109	104	244,500	1772	1712	1644	1578	1514	1418	1331	1251	1178	1112	1050	993	942	893	848	806	
				819	768	721	678	638	578	526	480	439	403	370	341	315	291	270	250	
				112-146	147	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220
112LSH19	67	112	137,850	935	900	846	795	750	708	669	636	603	573	543	518	494	471	450	429	
				466	439	398	362	330	302	276	255	234	216	200	186	172	160	149	140	
112SLH20	76	112	156,000	1065	1032	974	915	863	815	771	732	695	660	626	597	569	542	518	495	
				528	497	450	410	374	342	313	288	266	245	227	210	195	181	169	158	
112SLH21	91	112	196,500	1337	1287	1208	1136	1070	1010	956	905	858	815	774	737	702	669	639	611	
				650	612	555	504	460	421	386	355	327	301	279	259	240	224	208	195	
112SLH22	104	112	220,500	1499	1451	1377	1307	1236	1167	1104	1046	992	942	894	852	812	774	738	705	
				755	711	644	586	535	489	449	412	380	350	324	301	279	260	242	226	
112SLH23	110	112	243,000	1653	1601	1518	1439	1352	1272	1200	1134	1074	1019	966	918	873	831	792	756	
				790	744	674	613	560	512	469	431	397	367	340	315	292	272	253	236	
112SLH24	131	112	288,000	1956	1895	1799	1709	1611	1521	1439	1364	1293	1229	1167	1112	1059	1010	963	920	
				957	901	817	743	678	620	569	523	481	444	411	381	354	329	307	287	
				102-164	165	170	175	180	185	190	195	200	205	210	215	220	230	235	240	
120SLH20	77	120	148,350	896	846	798	758	719	684	651	621	593	564	539	516	494	473	453	435	
				430	393	361	332	306	282	261	242	225	209	195	182	170	159	149	140	
120SLH21	92	120	184,500	1122	1059	1001	948	899	855	813	774	738	704	672	642	615	588	564	540	
				530	485	444	409	376	347	321	298	277	258	240	224	209	196	184	173	
120SLH22	104	120	211,500	1283	1223	1155	1094	1038	987	939	894	852	813	776	743	710	680	651	624	
				616	564	516	475	438	404	374	347	322	300	279	261	244	228	214	201	
120SLH23	111	120	234,000	1415	1347	1272	1206	1145	1088	1035	986	939	894	854	815	779	744	713	683	
				644	590	541	497	458	423	391	363	336	313	292	272	255	238	224	210	
120SLH24	132	120	277,500	1676	1593	1505	1425	1353	1287	1224	1166	1112	1059	1013	968	926	887	849	815	
				781	715	655	603	555	512	474	440	408	380	354	330	309	289	271	255	
120SLH25	152	120	318,000	1926	1827	1728	1638	1554	1476	1404	1337	1275	1217	1163	1112	1064	1017	975	935	
				915	837	768	706	650	600	555	515	478	445	415	387	362	339	318	298	