WJ-L6 Truss - Allowable Uniform Load Table (PLF) / Parallel Chord

Clear Span (Ft.)	Depth 22"		24"		26"		28"		30"		32"		34"		36"		38"		40"		42"		44"		46"		48"		Clear Span (Ft.)
	100% TL L/600 Δ	115% TL 125% TL	100% TL L/600 Δ	115% TL 125% TL	100% TL L/600 Δ	115% TL 125% TL	100% TL L/600 Δ	115% TL 125% TL	100% TL L/600 Δ	115% TL 125% TL	100% TL L/600 Δ	115% TL 125% TL	100% TL L/600 Δ	115% TL 125% TL	100% TL L/600 Δ	115% TL 125% TL	100% TL L/600 Δ	115% TL 125% TL	100% TL L/600 Δ	115% TL 125% TL	100% TL L/600 Δ	115% TL 125% TL	100% TL L/600 Δ	115% TL 125% TL	100% TL L/600 Δ	115% TL 125% TL	100% TL L/600 Δ	115% TL 125% TL	
14	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	556	556	537	537	519	519	502	502	485	485	14
	1089	573	1323	573	1579	573	1858	573	2161	573	2485	573	2833	573	3204	573	3597	573	4013	556	4452	537	4913	519	5398	502	5905	485	
16	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	493	493	477	477	16
	733	506	891	506	1064	506	1252	506	1455	506	1674	506	1908	506	2158	506	2422	506	2703	506	2998	506	3309	506	3636	493	3977	477	
18	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	18
	517	452	628	452	750	452	883	452	1026	452	1180	452	1346	452	1522	452	1708	452	1906	452	2115	452	2334	452	2564	452	2805	452	
20	389	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	20
	378	409	459	409	548	409	645	409	750	409	863	409	984	409	1113	409	1249	409	1394	409	1547	409	1707	409	1875	409	2052	409	
22	321	370	354	373	373	373	373	373	373	373	373	373	373	373	373	373	373	373	373	373	373	373	373	373	373	373	373	373	22
	285	373	346	373	413	373	486	373	565	373	650	373	741	373	838	373	941	373	1050	373	1165	373	1286	373	1413	373	1546	373	
24	270	311	298	343	326	343	343	343	343	343	343	343	343	343	343	343	343	343	343	343	343	343	343	343	343	343	343	343	24
	220	338	267	343	319	343	375	343	436	343	502	343	572	343	647	343	727	343	811	343	899	343	993	343	1091	343	1193	343	
26	231	265	254	292	278	318	302	318	318	318	318	318	318	318	318	318	318	318	318	318	318	318	318	318	318	318	318	318	26
	173	288	210	318	251	318	296	318	344	318	395	318	451	318	510	318	572	318	639	318	709	318	782	318	859	318	940	318	
28	199	229	219	252	240	276	260	296	281	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	28
	139	249	169	274	201	296	237	296	276	296	317	296	361	296	409	296	459	296	512	296	568	296	627	296	689	296	754	296	
30	173	199	191	220	209	240	227	261	245	276	262	276	276	276	276	276	276	276	276	276	276	276	276	276	276	276	276	276	30
	113	217	137	239	164	261	193	276	224	276	258	276	294	276	333	276	374	276	417	276	463	276	511	276	561	276	614	276	
32	152	175	168	193	184	211	199	229	215	247	231	260	246	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	32
	93	191	113	210	135	230	159	249	185	260	213	260	243	260	274	260	308	260	344	260	382	260	421	260	463	260	506	260	
34	135	155	149	171	163	187	177	203	191	219	204	235	218	245	232	245	245	245	245	245	245	245	245	245	245	245	245	245	34
	78	169	94	186	113	204	133	221	154	238	178	245	202	245	229	245	257	245	287	245	318	245	351	245	386	245	422	245	
36	120	139	133	153	145	167	158	181	170	196	182	210	195	224	207	231	220	231	231	231	231	231	231	231	231	231	231	231	36
	65	151	79	166	95	182	112	197	130	213	150	228	171	231	193	231	217	231	242	231	268	231	296	231	326	231	356	231	
38	108	124	119	137	130	150	141	163	153	176	164	188	175	201	186	214	197	219	208	219	219	219	219	219	219	219	219	219	38
	55	135	68	149	81	163	95	177	111	191	127	205	145	219	164	219	184	219	206	219	228	219	252	219	277	219	303	219	
40	98	112	108	124	118	135	128	147	138	158	148	170	158	182	168	193	178	205	188	209	198	209	208	209	209	209	209	209	40
	48	122	58	135	69	147	81	160	95	172	109	185	124	197	141	209	158	209	176	209	196	209	216	209	238	209	260	209	
42	88	102	98	112	107	123	116	133	125	144	134	154	143	165	152	175	161	186	171	196	180	199	189	199	198	199	199	199	42
	41	111	50	122	60	133	70	145	82	156	94	168	108	179	122	190	137	199	153	199	169	199	187	199	205	199	225	199	
44	81	93	89	102	97	112	105	121	114	131	122	141	130	150	139	160	147	169	155	179	164	188	172	190	180	190	189	190	44
		101	43	111	52	122	61	132	71	142	82	153	94	163	106	174	119	184	133	190	147	190	163	190	179	190	195	190	
46	74	85	81	94	89	102	97	111	104	120	112	129	119	137	127	146	135	155	142	164	150	172	157	181	165	182	173	182	46
		92		102	45	111	54	121	62	130	72	140	82	149	93	159	104	168	116	178	129	182	142	182	156	182	171	182	
48	68	78	75	86	82	94	89	102	96	110	103	118	110	126	117	134	124	142	131	150	138	158	145	166	152	174	158	174	48
		85		93	40	102	47	111	55	120	63	128	72	137	81	146	92	155	102	163	113	172	125	174	138	174	151	174	
50	62	72	69	79	75	87	82	94	88	101	95	109	101	116	107	124	114	131	120	138	127	146	133	153	140	161	146	168	50
		78		86		94	42	102	48	110	56	118	64	126	72	134	81	142	90	151	100	159	111	167	122	168	133	168	
52	58	66	64	73	70	80	75	87	81	94	87	101	93	107	99	114	105	121	111	128	117	135	123	142	129	149	135	155	52
		72		80		87		94	43	102	50	109	57	117	64	124	72	132	80	139	89	147	98	154	108	161	118	161	
54		61	59	68	64	74	70	81	75	87	81	93	87	100	92	106	98	112	103	119	109	125	114	131	120	138	125	144	54
		65		74		81		88		94	44	101	50	108	57	115	64	122	72	129	80	136	88	143	97	150	106	155	
56		57	55	63	60	69	65	75	70	81	75	87	80	93	86	98	91	104	96	110	101	116	106	122	111	128	116	134	56
		58		69		75		81		88	40	94	45	101	51	107	58	114	64	120	71	126	79	133	87	139	95	146	
58		52		59	56	64	61	70	65	75	70	81	75	86	80	92	85	97	89	103	94	108	99	114	104	119	109	125	58
		52		64		70		76		82		88	41	94	46	100	52	106	58	112	64	118	71	124	78	130	85	136	
60		47		55		60	57	65	61	70	66	75	70	81	75	86	79	91	83	96	88	101	92	106	97	112	101	117	60
		47		57		65		71		76		82		88	42	93	47	99	52	104	58	110	64	116	70	121	77	127	

Allowable Properties @ 100%

Prop.	Depth (D) (In.) 22	24	26	28	30	32	34	36	38	40	42	44	46	48	Prop.
R	4,280.0	4,280.0	4,280.0	4,280.0	4,280.0	4,280.0	4,280.0	4,280.0	4,280.0	4,280.0	4,280.0	4,280.0	4,280.0	4,280.0	R
T	13,068.8	13,068.8	13,068.8	13,068.8	13,068.8	13,068.8	13,068.8	13,068.8	13,068.8	13,068.8	13,068.8	13,068.8	13,068.8	13,068.8	T
EI	3.5127E+09	4.2661E+09	5.0929E+09	5.9933E+09	6.9672E+09	8.0146E+09	9.1354E+09	1.0330E+10	1.1598E+10	1.2939E+10	1.4354E+10	1.5842E+10	1.7404E+10	1.9040E+10	EI
d	19.5000	21.5000	23.5000	25.5000	27.5000	29.5000	31.5000	33.5000	35.5000	37.5000	39.5000	41.5000	43.5000	45.5000	d
W	5.7	5.7	5.8	5.9	5.9	6.0	6.0	6.1	6.2	6.2	6.3	6.3	6.4	6.4	W

E (psi) = 2.10E+06 $I\ (In.^4)=I_1 d^2+I_2$ I_1 = 4.375 I_2 = 9.115 d = Pin to Pin Depth (In.) = D - 2.500

R = Reaction (Lbs.) T = Tension (Lbs.) EI = MOE x I (Lbs.-In.^{2}) W = Approx. Truss Weight (plf) xx 7% Repetive use increase allowed for Trusses at 24" or less o/c

TERMS:

Clear Span is horizontal distance from indide face of bearing surface to inside face of bearing surface.
Depth is out to out depth.

L/600 Δ column is Load that will cause L/600 Deflection.
For other deflection limits.
L/180 Δ Load = L/600 Δ value x 3.3333
L/240 Δ Load = L/600 Δ value x 2.5000
L/360 Δ Load = L/600 Δ value x 1.6667
L/480 Δ Load = L/600 Δ value x 1.2500

NOTES:

1. Total loads shown in table are maximum possible. Trusses will be custom designed to loads specified for project (not maximum shown in this table).
TL = Live (LL) + Dead (DL) + Part. (PL)

2. Deflection limits may control maximum load. Web Joist recommends the following deflection limits:
Residential:
L/240 @ TL and/or L/360 @ LL (min.) or
L/360 @ TL and/or L/480 @ LL (preferred)
Non-Residential:
L/360 @ TL and/or L/480 @ LL (min.) or
L/480 @ TL and/or L/600 @ LL (preferred)
With plaster or gyp ceiling use L/360 @ LL.
TL = Live (LL) + Dead (DL)
(exclude Part. (PL))

3. Allowable Total Load (TL) may be reduced at top chord bearings if bearing pin to end of chord is less than 5.00". See Table 6 of ESR-2504 for allowable reaction with reduced pin to end length.

4. The load table is limited to simple-span and uniform load. The table may also be used for bottom chord bearing and/or for cantilevers at both or either ends which do not exceed 1/3 of the main span length. For other conditions, inquire through your Web Joist representive.

5. Straight line interpretation may be made between depths and spans indicated.