

WJ28W Truss - Allowable Uniform Load Table (PLF) / Parallel Chord

Web Joist NW Corp.  
Chehalis, WA ESR-2504

Clear Span (Ft.)	Depth																												Clear Span (Ft.)
	14"		16"		18"		20"		22"		24"		26"		28"		30"		32"		34"		36"		38"		40"		
	100% TL #/600 Δ	115% TL 125% TL	100% TL #/600 Δ	115% TL 125% TL	100% TL #/600 Δ	115% TL 125% TL	100% TL #/600 Δ	115% TL 125% TL	100% TL #/600 Δ	115% TL 125% TL	100% TL #/600 Δ	115% TL 125% TL	100% TL #/600 Δ	115% TL 125% TL	100% TL #/600 Δ	115% TL 125% TL	100% TL #/600 Δ	115% TL 125% TL	100% TL #/600 Δ	115% TL 125% TL	100% TL #/600 Δ	115% TL 125% TL	100% TL #/600 Δ	115% TL 125% TL	100% TL #/600 Δ	115% TL 125% TL	100% TL #/600 Δ	115% TL 125% TL	
14	413	413	416	416	455	455	403	403	391	391	377	377	363	363	348	348	334	334	320	320	307	307	295	295	283	283	272	272	14
16	467	413	628	416	812	455	1021	403	1253	391	1509	377	1789	363	2093	348	2420	334	2772	320	3147	307	3546	295	3969	283	4415	272	16
18	383	383	390	390	401	401	384	384	375	375	363	363	351	351	338	338	325	325	313	313	301	301	289	289	278	278	268	268	18
20	314	383	422	390	546	401	686	384	843	375	1015	363	1203	351	1407	338	1628	325	1864	313	2116	301	2385	289	2669	278	2970	268	20
22	333	358	359	359	359	359	359	359	359	359	350	350	340	340	328	328	317	317	306	306	294	294	284	284	273	273	263	263	22
24	270	310	313	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	24
26	223	257	259	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	26
28	121	279	163	296	211	296	266	296	266	296	266	296	266	296	266	296	266	296	266	296	266	296	266	296	266	296	266	296	28
30	188	216	218	250	248	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	30
32	94	235	126	272	163	272	205	272	252	272	203	272	359	272	421	272	486	272	557	272	633	272	713	268	798	260	888	251	32
34	160	184	186	213	211	243	237	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	34
36	74	200	99	232	128	252	161	252	198	252	239	252	283	252	331	252	383	252	439	252	498	252	561	252	628	252	699	248	36
38	138	159	160	184	182	210	204	235	226	235	235	235	235	235	235	235	235	235	235	235	235	235	235	235	235	235	235	235	38
40	59	172	79	200	103	228	129	235	159	235	191	235	227	235	265	235	307	235	352	235	399	235	450	235	504	235	560	235	40
42	120	138	139	160	159	183	178	205	197	219	217	219	219	219	219	219	219	219	219	219	219	219	219	219	219	219	219	219	42
44	48	150	64	174	84	198	105	219	129	219	156	219	184	219	216	219	250	219	286	219	325	219	366	219	410	219	456	219	44
46	106	121	122	141	139	160	156	180	173	199	190	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	46
48	132	132	53	153	69	174	87	196	106	206	128	206	152	206	178	206	206	206	236	206	268	206	302	206	338	206	376	206	48
50	93	108	108	125	124	142	139	159	154	177	169	194	184	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194	50
52	110	44	136	57	155	72	173	89	192	107	194	127	194	148	194	172	194	194	194	194	194	194	194	194	194	194	194	194	52
54	83	93	97	111	110	127	124	142	137	158	150	173	164	184	177	184	184	184	184	184	184	184	184	184	184	184	184	184	54
56	93	93	121	48	138	61	155	75	171	90	184	107	184	125	184	145	184	166	184	188	184	212	184	237	184	264	184	56	
58	75	79	87	100	99	114	111	128	123	141	135	155	147	169	159	174	171	174	174	174	174	174	174	174	174	174	174	174	58
60	58	58	71	79	81	93	91	104	101	116	110	127	120	138	130	150	140	158	150	158	158	158	158	158	158	158	158	158	60
62	58	58	79	79	101	101	114	47	126	57	138	67	151	79	158	91	158	104	158	119	158	134	158	150	158	167	158	62	
64	51	65	68	74	85	83	95	92	105	101	116	110	126	119	136	128	147	137	151	146	151	151	151	151	151	151	151	64	
66	51	68	68	89	89	103	41	115	49	126	58	137	68	148	79	151	91	151	103	151	116	151	130	151	145	151	66		
68	44	59	60	67	78	76	87	84	96	92	106	100	115	109	125	117	134	125	144	133	144	141	144	144	144	144	144	68	
70	44	60	60	78	95	105	43	115	51	125	60	136	69	144	79	144	90	144	102	144	114	144	144	144	144	144	70		
72	53	62	68	68	69	80	77	89	85	97	92	106	100	115	107	123	115	132	122	139	130	139	137	139	139	139	139	72	
74	39	53	53	68	68	86	86	96	106	45	115	53	125	61	134	70	139	79	139	89	139	100	139	112	139	139	74		
76	47	57	60	64	74	71	82	78	90	85	98	92	106	99	114	106	122	113	130	120	133	127	133	133	133	133	76		
78	47	60	60	76	89	89	97	40	106	47	115	54	124	62	132	70	133	79	133	89	133	99	133	99	133	133	78		
80	41	54	54	67	66	75	72	83	78	90	85	98	91	105	98	112	104	120	111	127	117	128	123	128	128	128	80		
82	41	54	54	67	82	82	90	81	106	48	114	55	122	62	128	70	128	79	128	79	128	88	128	88	128	128	82		
84	48	55	60	61	70	67	77	73	84	79	91	85	97	91	104	97	111	103	118	109	123	114	123	114	123	123	84		
86	48	60	60	74	84	84	91	84	97	84	97	98	106	49	113	56	121	63	123	70	123	78	123	78	123	123	86		
88	43	54	54	66	65	62	71	68	78	73	84	79	91	84	97	90	103	95	110	101	116	106	119	106	119	119	88		
90	43	54	54	66	66	78	85	92	98	84	105	50	112	56	119	63	119	63	119	63	119	63	119	63	119	119	90		
92	49	60	60	68	67	63	72	68	78	73	84	78	90	84	96	89	102	94	108	99	114	99	114	99	114	114	92		
94	39	49	49	60	60	72	79	85	92	85	92	98	105	51	111	57	115	57	115	63	115	63	115	63	115	115	94		
96	35	44	44	54	54	62	68	64	73	68	79	73	84	78	90	83	96	88	101	93	107	93	107	93	107	107	96		
98	35	44	44	54	54	65	74	80	86	80	86	92	98	86	92	98	104	98	110	51	110	51	110	51	110	110	98		

**TERMS:**  
**Clear Span** is horizontal distance from inside face of bearing surface to inside face of bearing surface.  
**Depth** is out to out depth.  
**#/600 Δ** column is PLF Load that will cause #/600 Deflection.  
**For other deflection limits.**  
 #/180 Δ Load = #/600 Δ value x 3.3333  
 #/240 Δ Load = #/600 Δ value x 2.5000  
 #/360 Δ Load = #/600 Δ value x 1.6667  
 #/480 Δ Load = #/600 Δ value x 1.2500

**Stress Level**

D = Dead Load	100%
L = Live Load Floor	115%
S = Snow Load	125%
LR = Live Load Roof (≤20 PSF)	

P = Partition Load (Include with L)  
 \* or Roof Live Load > 20 PSF  
 Total Load (TL) = D + (L or S or LR)  
 TL (PLF) = TL (PSF) x o/c" / 12  
 o/c" = On center spacing (In.)

**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).  
 2. Deflection limits may control maximum load. Web Joist recommends the following deflection limits:  
 ℓ = Span in inches  
 ΔL = Deflection Load (L or S or LR) (exclude P in deflection limits)

**Residential Floor:**  
 #/240 @ TL and/or #/360 @ ΔL (min.) or #/360 @ TL and/or #/480 @ ΔL (preferred)

**Non-Residential Floor:**  
 #/360 @ TL and/or #/480 @ ΔL (min.) or #/480 @ TL and/or #/600 @ ΔL (preferred)

**Roof:**  
 #/180 @ TL and/or #/240 @ ΔL  
 With plaster or gyp ceiling use #/360 @ ΔL

3. Allowable Total Load (TL) may be reduced at top chord bearings if bearing pin to end of chord is less than 3.50". 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 representative.  
 5. Straight line interpretation may be made between depths and spans indicated.

Allowable Properties @ 100% per ESR-2504

Prop.	Depth (D) (In.)														Prop.
	14	16	18	20	22	24	26	28	30	32	34	36	38	40	
R	3,400.0	3,400.0	3,400.0	3,400.0	3,400.0	3,400.0	3,400.0	3,400.0	3,400.0	3,400.0	3,400.0	3,400.0	3,400.0	3,400.0	R
T	13,665.2	13,665.2	13,665.2	13,665.2	13,665.2	13,665.2	13,665.2	13,665.2	13,665.2	13,665.2	13,665.2	13,665.2	13,665.2	13,665.2	T
EI	1.4895E+09	2.0019E+09	2.5901E+09	3.2542E+09	3.9942E+09	4.8102E+09	5.7020E+09	6.6697E+09	7.7133E+09	8.8329E+09	1.0028E+10	1.1300E+10	1.264		