

The Only Cold Formed Steel Truss Designed Specifically for Flat Roof and Floor Applications

ADVANT Bar Joist Replacement





Why ADVANT instead of Bar Joist?

Cold-formed steel trusses provide enormous design flexibility that does not exist with hot-rolled heavy steel joists. Unlimited depth and spacing combinations allow a customized and engineered solution that is built around project loading and deflection criteria. In addition, end bearing conditions (top-chord, mid-chord, ledger supported, etc.) can be tailored around project-specific requirements.

Conversion LOAD TABLES

Tables are to be used for basic load carrying comparison for replacement of K-Series and LH Series joists. All Advant cold-formed steel trusses will be designed for actual spans, depth & loads specified by building designer and/or project Engineer-Of-Record. Individual truss designs, signed & sealed by a registered Professional Engineer, will be provided.

The **BLACK** figures in the Load Tables represent the TOTAL uniform load carrying capacity (PLF). The **RED** figures represent the TOTAL uniform load to meet L/360 deflection criteria (PLF).

Floor applications require 600S162-33 strongbacks at approximately 10'-0" on-center. Roof applications will require a bottom chord lateral and diagonal restraint system.

All top chords are assumed to be continuously sheathed. No allowance for mechanical units, snow drift, etc. has been included in the load tables. Floor applications with stack loads from above may require additional reinforcement at bearing supports.

For additional span/depth/spacing/loading combinations and quotations, including increased capacity and/or span, contact Advant Steel (<u>www.advantsteel.com</u>).





		K Series	to ADVAN	I - Conver	sion LOAL	TABLE		
STANDAR	D LOAD TABI	LE FOR ADVA	NT PARALLEL	CHORD TRU	ISSES. Loads	shown in Pou	nds Per Linear	Foot (plf)
ADVANT Designation	12T-43	12T-68	14T-43	14T-68	16T-43	16T-68	18T-43	18T-68
Depth (in.)	12	12	14	14	16	16	18	18
Approx. Wt (lbs./ft.)	4.2	5.9	4.2	5.9	4.3	6.1	4.4	6.1
Span (ft.)								
10	576	810						
	576 469	810 716						
11	469	716						
12	379	590						
	379 329	590 515						
13	329	515						
14	300	470	356	555				
	300	470	356	555				
15	247 247	391 391	298 298	469 469				
16	237	380	288	466	340	550		
16	237	380	288	466	340	550		
17	206 198	329 327	250 250	400 400	292 292	470 470		
10	178	284	214	341	248	398	282	450
18	168	275	214	341	248	398	282	450
19	163	260	195	312	227	363	257	412
	145 150	246 240	195 180	308 289	227 210	363 338	257 240	412 385
20	122	206	177	245	210	338	240	385
21	134	216	161	261	190	307	217	351
	108 128	177 206	151 155	211 254	190 184	307 299	217 210	351 340
22	94	151	132	204 184	178.5	299 290	210	340
23		186	140	228	165	269	189	310
23		132	117	161	156	253	189	310
24		166 <mark>116</mark>	125 102	202 142	147 131	237 223	168 <mark>168</mark>	271 271
25		110	116	188	136	221	156	252
25			91	125	122	197	156	252
26			109	176	128	207	146	237
			81	<u>112</u> 164	108 118	175 194	148 136	228 223
27				100	97	157	126	203
28				157	114	185	131	213
				89	87 105	141 173	<u>112</u> 121	183 200
29					78	173	102	164
30					96	157	111	181
					70	114	<u>91</u>	148
31					90 64	147 104	104 79	170 135
32					51	140	99	162
32						94	72	122
33							93 69	153 112
							09	146
34								102
35								139
								94 128
36								86

- This Span Table is intended for reference only; ADVANT parallel chord trusses are available in virtually any span/depth; Consult ADVANT or your local ADVANT fabricator

- Loads given are the TOTAL safe uniformly distributed load carrying capacity in pounds per lin-ft of ASD T-Series ADVANT Parallel Chord Trusses - The **BLACK** figures in the Load Table Represent the TOTAL uniform load carrying capacity (PLF).

- The **RED** figures represent the TOTAL uniform load to meet <u>U/360</u> deflection criteria (PLF).

- 600S162-43 Strongbacks should be used at max 10' oc along Truss span for reduced vibration





		LH Serie	es to AD	VANT -	Convers	ion LOA	AD TABL	.E			
STANDA	RD LOAD TA		ANT PAR	ALLEL CHO	ORD TRUS	SES. Load	s shown in	Pounds Pe	er Linear Fo	ot (plf)	
Truss ID	Weight	Depth in				SPAN I	IN FEET				
(lb/ft)	(lb/ft)	Inches	30	32	34	36	38	40	42	44	
18T-43	4.2	18	111 <mark>91</mark>	99 72	89 60	78 50					
18T-54	4.9	18	153 115	136 <mark>95</mark>	123 79	107 <mark>67</mark>					
18T-68	5.9	18	181 148	162 122	146 102	128 <mark>86</mark>					
20T-43	4.2	20	126 <mark>110</mark>	112 <mark>90</mark>	101 76	88 <mark>64</mark>	80 54	73 46			
20T-54	5.0	20	172 145	154 120	139 100	122 <mark>84</mark>	110 72	101 <mark>61</mark>			
20T-68	5.9	20	204 187	183 154	165 129	144 108	131 <mark>92</mark>	120 79			
24T-43	4.3	24	153 153	135 135	123 112	108 94	98 80	90 69	81 60	74 52	
24T-54	5.1	24	210 210	186 177	170 148	149 125	135 106	124 91	112 79	102 68	
24T-68	6.1	24	250 250	221 221	201 191	178 161	161 137	148 118	133 102	122 88	
Truss ID	Weight	Depth in	SPAN IN FEET								
	(lb/ft)	Inches	46	48	50	52	54	56	58	60	
28T-54	5.5	28	113 83	103 73	95 65	86					
28T-68				13							
	6.5	28	134	123	113	58 103 75					
32T-54	6.5 5.5	28 32	<mark>108</mark> 130	123 <mark>95</mark> 119	113 <mark>84</mark> 110	103 75 100	94				
32T-54 32T-68			108 130 110 155	123 95 119 97 142	113 84 110 86 131	103 75 100 76 118	<mark>68</mark> 111				
	5.5	32	108 130 110 155 143 147	123 95 119 97 142 126 135	113 84 110 86 131 111 124	103 75 100 76 118 99 113	68 111 89 106	94			
32T-68	5.5 6.5	32 32	108 130 155 143 147 141 175	123 95 119 97 142 126 135 124 160	113 84 110 86 131 111 124 110 148	103 75 100 76 118 99 113 98 134	68 111 89 106 87 126	78 111			
32T-68 36T-54	5.5 6.5 5.5	32 32 36	108 130 110 155 143 147 141 175 175 151	123 95 119 97 142 126 135 124 160 160 142	113 84 110 86 131 111 124 110 148 143 138	103 75 100 76 118 99 113 98 134 127 126	68 111 89 106 87 126 113 118	78 111 102 105	97	93	
32T-68 36T-54 36T-68	5.5 6.5 5.5 6.5	32 32 36 36	108 130 110 155 143 147 141 175 151 151 194	123 95 119 97 142 126 135 124 160 160 142 142 142 168	113 84 110 86 131 111 124 110 148 143 138 137 166	103 75 100 76 118 99 113 98 134 127 126 122 149	68 111 89 106 87 126 113 118 109 140	78 111 102 105 98 125	<mark>88</mark> 116	<mark>80</mark> 110	
32T-68 36T-54 36T-68 40T-54	5.5 6.5 5.5 6.5 5.5	32 32 36 36 40	108 130 110 155 143 147 147 175 175 151 151 194 180	123 95 119 97 142 126 135 124 160 160 142 142 142 168 168 168 156	113 84 110 86 131 111 124 110 148 143 138 137 166 166 152	103 75 100 76 118 99 113 98 134 127 126 122 149 149 138	68 111 89 106 87 126 113 118 109 140 140 140 130	78 111 102 105 98 125 125 125 116	88 116 114 107	80 110 103 103	
32T-68 36T-54 36T-68 40T-54 40T-68	5.5 6.5 5.5 6.5 5.5 6.5 6.5	32 32 36 36 40 40	108 130 110 155 143 147 147 151 151 151 194 180 186	123 95 119 97 142 126 135 124 160 160 142 142 142 168 168 168 156 156 156 184	113 84 110 86 131 111 124 110 148 143 138 137 166 152 152 173	103 75 100 76 118 99 113 98 134 127 126 122 149 138 138 138 160	68 111 89 106 87 126 113 118 109 140 130 130 154	78 111 102 105 98 125 125 116 116 137	88 116 114 107 107 127	80 110 103 103 97 122	
32T-68 36T-54 36T-68 40T-54 40T-68 44T-54	5.5 6.5 5.5 6.5 5.5 6.5 6.5 5.5	32 32 36 36 40 40 40 44	108 130 110 155 143 147 141 175 151 151 194 194 180 186 186 169	123 95 119 97 142 126 135 124 160 160 160 142 142 142 168 168 156 156 156 156 184 184 184	113 84 110 86 131 111 124 110 148 143 138 137 166 152 152 173 173 160	103 75 100 76 118 99 113 98 134 127 126 122 149 138 138 138 138 149 138 138 138 149 138 138 138 138 138 145	68 111 89 106 87 126 113 118 109 140 130 130 154 154 137	78 111 102 105 98 125 125 116 137 137 126	88 116 114 107 107 127 127 127 117	80 110 103 97 122 122 112	
32T-68 36T-54 36T-68 40T-54 40T-68 44T-54 44T-68	5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 6.5	32 32 36 36 40 40 40 44 44	108 130 110 155 143 147 141 175 151 151 194 194 180 186 186	123 95 119 97 142 126 135 124 160 160 142 142 142 168 168 156 156 156 156 184 184	113 84 110 86 131 111 124 110 148 143 138 137 166 152 152 173 173	103 75 100 76 118 99 113 98 134 127 126 122 149 149 138 138 138 138 160 160	68 111 89 106 87 126 113 118 109 140 130 130 154 154	78 111 102 105 98 125 125 125 116 116 116 137 137	88 116 114 107 107 127 127	80 110 103 97 122 122	

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