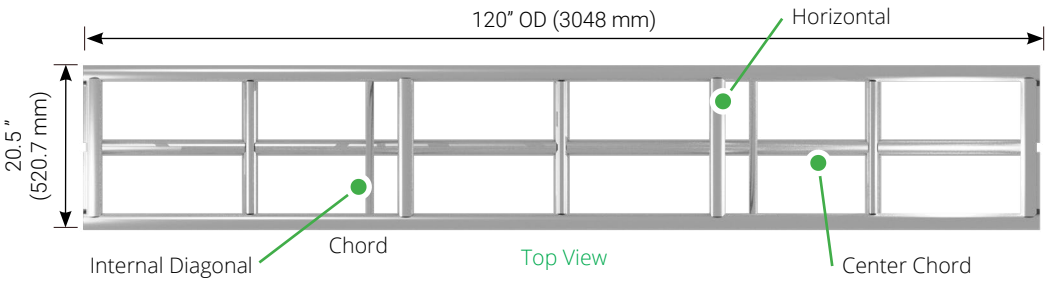
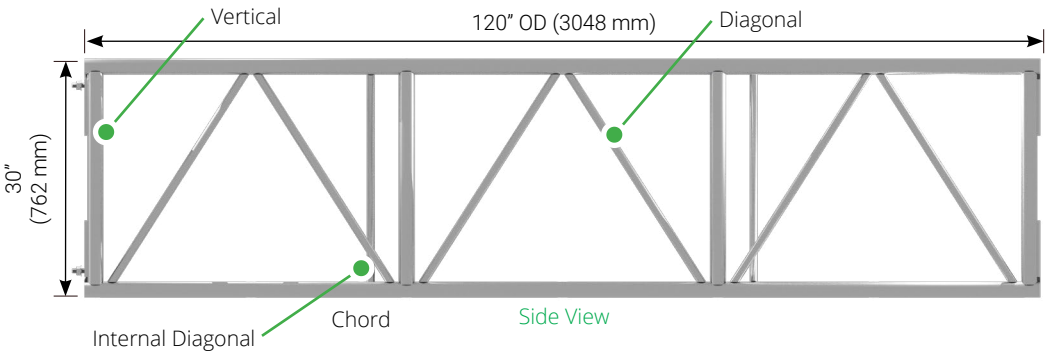
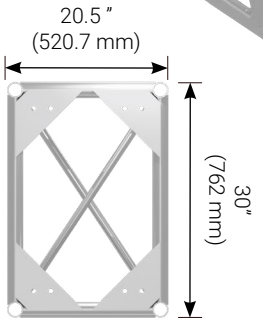


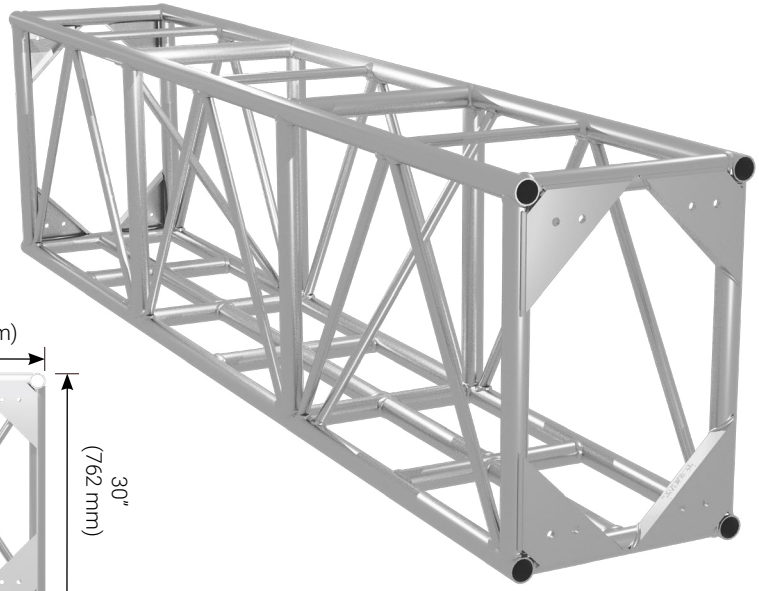
Box Truss

Plated Center Chord Truss 30”x 20.5”









Fabricated by certified welders from 6061-T6 or 6082-T6 Aluminum. Made in the USA and Europe.

STANDARD LENGTHS

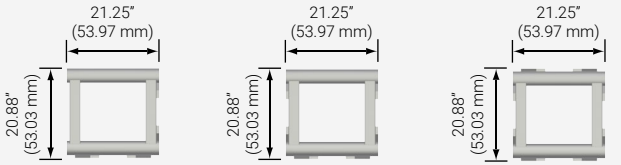
		WEIGHT	
LENGTH	ITEM CODE	LBS	KGS
5’	TC 3020-060BCC	66	30
8’	TC 3020-096BCC	92	41.7
10’	TC 3020-120BCC	102	46.3

- *Four (4) connection sets are included.*
- *Custom truss lengths are available.*
- *Truss is supplied in brushed natural aluminum finish as standard with powder coated options upon request.*

CORNERS

		WEIGHT	
PRODUCT	ITEM CODE	LBS	KGS
Heavy-Duty 2-Way Corner	TC 3020-C2B	35	16
Heavy-Duty 3-Way Corner	TC 3020-C3B	42	19
Heavy-Duty 4-Way Corner	TC 3020-C4B	47	21

- *Please specify connection orientation on 2 Way – 4 Way Corners.*





For a copy of the TOMCAT truss user manual or for help in performing your truss inspections please e-mail sales@tomcatusa.com.

STRENGTH UNDER PRESSURE



Box Truss

Plated Center Chord Truss 30"x 20.5"

TOMCAT

Maximum Allowable Loading (Deflection Limited to L/100)

SIMPLE SPAN (DISTANCE BETWEEN SUPPORTS)		UNIFORMLY DISTRIBUTED LOAD			MAXIMUM ALLOWABLE LOAD PER POINT									
					CENTER POINT LOAD		THIRD POINT LOAD		QUARTER POINT LOAD		FIFTH POINT LOAD		CENTER CHORD LOAD	No. Point Load
		LOAD	TOTAL LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	
FEET	METERS	LBS/FT	LBS	INCHES	LBS	INCHES	LBS	INCHES	LBS	INCHES	LBS	INCHES	LBS	
5	1.5	1029	5145	0.000	5147	0.000	2573	0.000	1715	0.000	1286	0.000	625	3
10	3.0	510	5100	0.020	5107	0.030	2553	0.030	1702	0.030	1276	0.020	625	6
15	4.6	337	5055	0.070	5067	0.110	2533	0.090	1689	0.090	1266	0.080	560	9
20	6.1	251	5020	0.160	3809	0.190	2514	0.220	1676	0.200	1257	0.190	415	12
25	7.6	199	4975	0.310	3011	0.300	2258	0.380	1505	0.360	1247	0.380	330	15
30	9.1	164	4920	0.540	2473	0.440	1855	0.550	1236	0.520	1030	0.550	270	18
35	10.7	119	4165	0.740	2083	0.600	1562	0.760	1041	0.710	868	0.750	195	21
40	12.2	89	3560	0.970	1785	0.800	1339	0.990	892	0.930	744	0.980	145	24
45	13.7	68	3060	1.230	1550	1.200	1162	1.260	775	1.180	645	1.240	110	27
50	15.2	54	2700	1.530	1357	1.270	1018	1.560	678	1.470	565	1.540	90	30
55	16.8	43	2365	1.860	1196	1.550	897	1.900	598	1.870	498	1.870	70	33
60	18.3	35	2100	2.230	1058	1.870	793	2.270	529	2.140	441	2.240	55	36
65	19.8	28	1820	2.630	939	2.230	704	2.670	469	2.530	391	2.640	45	39
70	21.3	23	1610	3.060	833	2.620	625	3.110	416	2.950	347	3.080	38	42
75	22.9	19	1425	3.540	739	3.060	554	3.590	369	3.420	308	3.560	31	45
80	24.4	16	1280	4.050	655	3.540	491	4.110	327	3.920	273	4.070	26	48

Uniformly Distributed Load Deflection Calculator (Deflection Limited to L/100)

SIMPLE SPAN (DISTANCE BETWEEN SUPPORTS)		TOTAL LOAD	% OF MAXIMUM UNIFORMLY DISTRIBUTED LOAD CAPACITY USED									
			0%		25%		50%		75%		100%	
			LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION
FEET	METERS	LBS	LBS	INCHES	LBS	INCHES	LBS	INCHES	LBS	INCHES	LBS	INCHES
5	1.5	5145	0	0.000	1286	0.000	2573	0.000	3859	0.000	5145	0.000
10	3.0	5100	0	0.000	1275	0.005	2550	0.010	3825	0.015	5100	0.020
15	4.6	5055	0	0.002	1264	0.019	2528	0.036	3791	0.053	5055	0.070
20	6.1	5020	0	0.006	1255	0.045	2510	0.083	3765	0.122	5020	0.160
25	7.6	4975	0	0.015	1244	0.089	2488	0.162	3731	0.236	4975	0.310
30	9.1	4920	0	0.031	1230	0.158	2460	0.286	3690	0.413	4920	0.540
35	10.7	4165	0	0.058	1041	0.228	2083	0.399	3124	0.569	4165	0.740
40	12.2	3560	0	0.099	890	0.317	1780	0.534	2670	0.752	3560	0.970
45	13.7	3060	0	0.159	765	0.427	1530	0.695	2295	0.962	3060	1.230
50	15.2	2700	0	0.241	675	0.563	1350	0.886	2025	1.208	2700	1.530
55	16.8	2365	0	0.354	591	0.730	1183	1.107	1774	1.483	2365	1.860
60	18.3	2100	0	0.499	525	0.932	1050	1.365	1575	1.797	2100	2.230
65	19.8	1820	0	0.697	455	1.180	910	1.664	1365	2.147	1820	2.630
70	21.3	1610	0	0 934	403	1.465	805	1.997	1208	2.528	1610	3.060
75	22.9	1425	0	1.229	356	1.806	713	2.384	1069	2.962	1425	3.540
80	24.4	1280	0	1.567	320	2.188	640	2.809	960	3.429	1280	4.050

Allowable Loading Guidelines

- The truss is designed with two faces of diagonal bracing. The truss was reviewed for load in one direction only, assumed to be parallel in orientation to the diagonal braces located on the opposite two faces of the module or span. If loads are applied in multiple axes, then the loading shall be approved by a qualified person.
- The truss was analyzed as a static simple span beam. The span lengths shown in the table should be the distance between supports, assumed to be at each end of the span. Any usage outside of this scope, cantilevers, dynamic loads, indeterminate structures, etc. shall be approved by a qualified person.
- The maximum span length shown in the table should not be exceeded without approval by a qualified person.
- All loads and supports shall be located at a panel point within the truss. Loads and forces on the bottom center chord shall be limited as indicated in the load table.
- The truss was analyzed assuming that the loads were applied at the centroid of the truss so as to not induce twisting or torsion. Unbalanced or off-center loading scenarios shall be approved by a qualified person.
- The self-weight of the truss has already been removed from the allowable loading data.
- Allowable loads based on the 2020 Aluminum Design Manual.
- The deflection shown in the table is theoretical, actual deflection measurements can vary.
- The allowable loading has been reduced to limit deflection to L/100, where L equals the simple span length. Please contact TOMCAT for L/180 and non-deflection-limited loading data.
- Simple span lengths are assumed to be constructed from the minimum number of truss modules 10ft long or less. For example, a 35ft simple span is assumed to be made from 3 x 10ft sections & 1 x 5ft section of truss.
- The allowable loading has been reduced for repetitive use as per ANSI E1.2-2021. Non-repetitive use conditions would allow adding the 15% capacity back into the load tables.
- Please consult the appropriate TOMCAT truss user manual before use. Please contact TOMCAT should you require a copy.
- The load tables are reprinted from engineering reports developed by Clark Reder Engineering, Inc. dated June 20, 2024.

Data valid as of October 28, 2026