

# CT TOWER

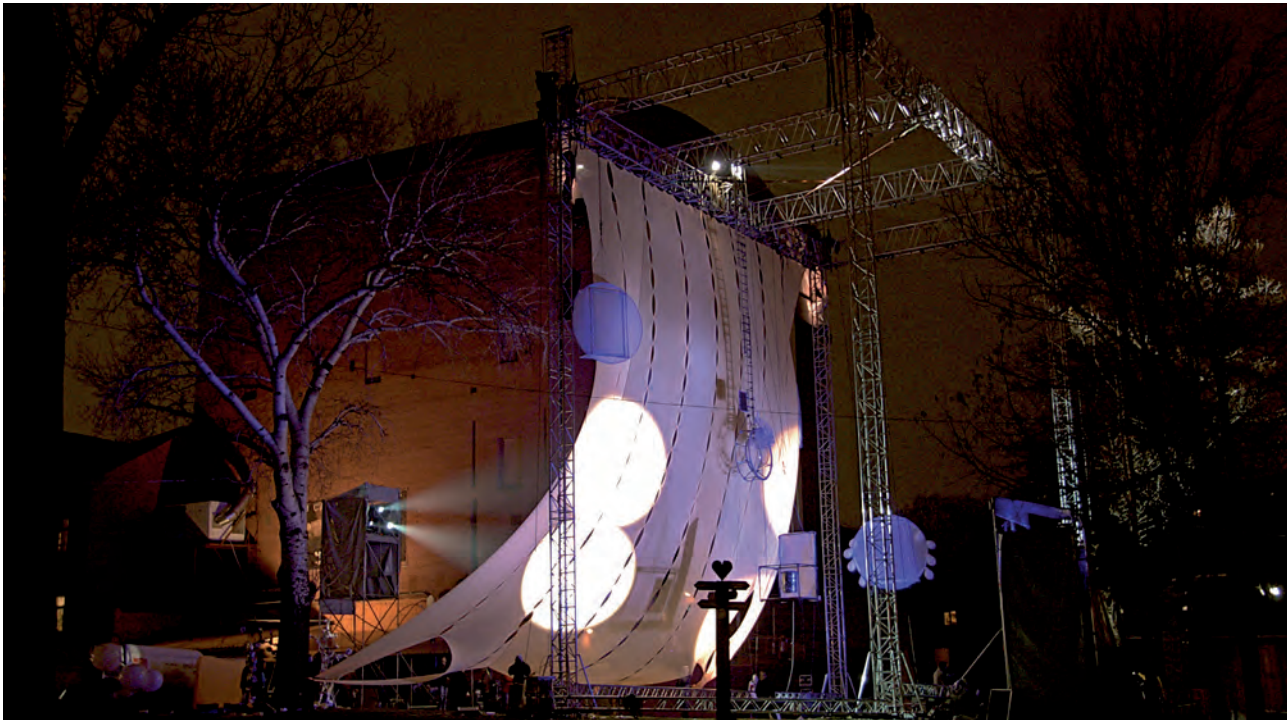


Photo: Modific, Russian Federation. Project: Russian telecommunication company "Caravan".

The CT tower is based on C52T mast sections. These mast sections have onesided horizontal bracing to facilitate safe and easy climbing of the towers. C52T truss is constructed of main tubes of 60 x 5 mm and diagonals of 30 x 3/48 x 3 mm. Use the CCS7 coupling system with the CCS7-704 or CCS7-703-C52T shortened spigot pin. The base section of the CT tower is similar to the ST tower; the outside dimensions and setup are the same. Extra spindles are added to the base section to absorb the extra forces resulting from the tower's higher loading capacity. Existing ST base sections can be upgraded to accommodate CT towers on request.

The CT tower uses several sleeve blocks that combine all the trusses from the S and B Series. This makes it possible to fit almost all S Series trusses to all four sides by means of bolted female CCS7 couplers. The outside dimensions of the CT sleeve block are the same as the ST sleeve block; both can be combined in one grid. The CT tower has a self-weight of 140 kg. The CT sleeve block is a fully bolted structural element, making it much stronger and more precise than conventional welded versions.

The CT tower is a cost-effective investment. You need only purchase the special parts if you wish to expand your truss system with towers. There is a structural relation between tower length and size. Additionally, the applied load and the method of restraining the tower base also contribute to determination of the total loading capacity. All these factors must be taken into consideration when determining the allowable load and tower length. The allowable load given is based on a uniformly distributed load (UDL). Load cases with several point loads can show much better loading capacities.



CT Series - standard available lengths										
Meters	0,5	1,00	1,50	2,00	2,50	3,00	3,50	4,00	5,00	Avarage weight per meter = 16,5 kg.
Feet	1,64	3,28	4,92	6,56	8,20	9,84	11,48	13,12	16,4	Avarage weight in pounds per feet = 11,1 lbs.



## C52T - Allowable loading

SPAN		Uniformly Distributed Load		DEFLECTION		MAXIMUM ALLOWABLE POINT LOADS										SPAN
						Centre Point Load		DEFLECTION		Single Load Third Points Load per Point		Single Load Fourth Points Load per Point		Single Load Fifth Points Load per Point		
		UDL				CPL				TPL		QPL		FPL		total weight
m	ft	kg/m	lbs/ft	mm	inch	kgs	lbs	mm	inch	kgs	lbs	kgs	lbs	kgs	lbs	
6	19,7	933,4	628,0	21	0,8	3049,7	6730,6	17	0,7	2045,5	4514,3	1687,8	3724,9	1396,5	3082,0	114
7	23,0	798,1	537,0	28	1,1	2716,4	5995,1	23	0,9	1809,1	3992,6	1517,7	3349,6	1197,4	2642,7	133
8	26,2	696,7	468,8	37	1,5	2446,1	5398,6	30	1,2	1647,4	3635,9	1378,7	3042,8	1058,1	2335,2	152
9	29,5	613,6	412,9	47	1,8	2222,1	4904,2	38	1,5	1510,8	3334,4	1238,0	2732,4	957,8	2113,8	171
10	32,8	494,5	332,7	58	2,3	2033,2	4487,4	46	1,8	1393,7	3075,9	1121,9	2476,0	873,7	1928,3	190
11	36,1	406,3	273,4	70	2,8	1871,6	4130,6	56	2,2	1292,1	2851,6	1024,3	2260,6	802,2	1770,4	209
12	39,4	339,3	228,3	83	3,3	1731,4	3821,3	67	2,6	1202,9	2654,8	940,9	2076,6	740,5	1634,3	228
13	42,6	287,1	193,2	98	3,8	1608,6	3550,2	78	3,1	1124,0	2480,6	868,8	1917,5	686,7	1515,5	247
14	45,9	245,7	165,3	113	4,5	1500,0	3310,4	91	3,6	1053,5	2325,1	805,8	1778,3	639,3	1410,9	266
15	49,2	212,3	142,8	130	5,1	1403,0	3096,4	104	4,1	990,1	2185,2	750,1	1655,4	597,1	1317,8	285
16	52,5	184,9	124,4	148	5,8	1315,8	2904,1	119	4,7	932,8	2058,6	700,5	1545,9	559,3	1234,5	304
17	55,8	162,3	109,2	167	6,6	1237,0	2730,0	134	5,3	880,5	1943,3	655,9	1447,6	525,3	1159,2	323
18	59,0	143,3	96,4	187	7,4	1165,1	2571,4	150	5,9	832,7	1837,7	615,7	1358,8	494,3	1090,9	342
19	62,3	127,2	85,6	209	8,2	1099,4	2426,3	167	6,6	788,6	1740,5	579,1	1278,0	466,0	1028,5	361
20	65,6	113,5	76,4	231	9,1	1038,8	2292,7	185	7,3	747,9	1650,7	545,6	1204,1	440,1	971,2	380
21	68,9	101,7	68,4	255	10,0	982,9	2169,2	204	8,0	710,2	1567,3	514,8	1136,2	416,1	918,4	399
22	72,2	91,5	61,5	280	11,0	930,9	2054,6	224	8,8	674,9	1489,6	486,4	1073,4	393,9	869,4	418
23	75,4	82,5	55,5	306	12,0	882,5	1947,8	245	9,6	642,0	1416,9	460,0	1015,2	373,3	823,9	437

- Tüv certification only valid for loading table above.
- Loading figures are only valid for static loads.
- Loading figures are only valid for single spans with supports at both ends.
- All static systems, other than single spans, need an individual structural calculation. Please contact a structural engineer or Prolyte Group for assistance.
- Loading figures are calculated according to and in full compliance with European standards (Eurocode).
- The self-weight of the trusses is already taken into account.
- Loading figures are only valid for the cross sectional orientation of the truss as shown by the icon in the loading table.
- The interaction between bending moment and shear force at the connection point is already taken into account.
- Truss spans can be assembled from different truss lengths.
- Read the manual before assembling, using and loading the truss.



### Technical specifications CT Tower

max. height	20,00 m
max. loading capacity*	5000 kg**
sleeve block suitable for truss-series	S52F•V, S66R•V, S100F and B100RV (with various sleeve blocks)
alloy alu parts	EN-AW 6082 T6

\* To be used with chainhoist only.

\*\* There is a structural relation between tower height and size, further the applied load and the method of restraining the tower base and top also have its influence on the total loading capacity. All these factors must be taken into consideration when determining the allowable load.

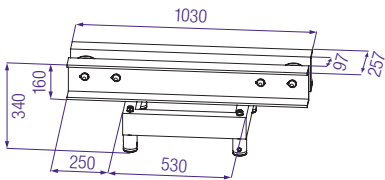
More information can be found in the Prolyte BlackBook.

### Technical Specifications - C52T

Types	Tower truss
Alloy	EN AW 6082 T6
Main Tubes (Chords)	60 x 5 mm
Braces	30 x 3 / 48 x 3 mm
Coupling System	CCS7

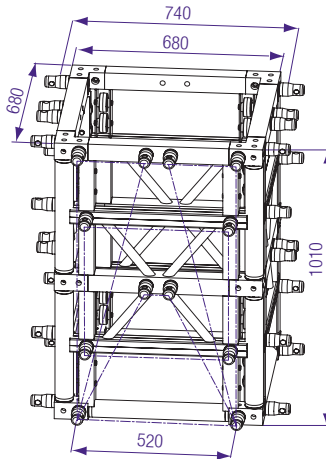
Structural data can be found at [www.prolyte.com](http://www.prolyte.com)

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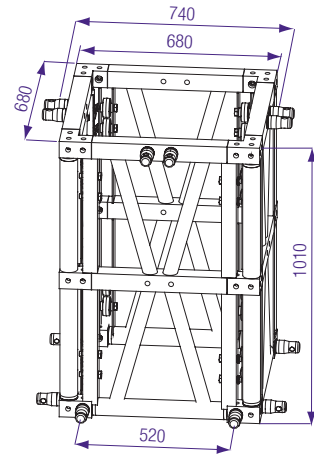
### C52T-009

Top section. Pullly suitable for 8 mm chain or 8 mm steelwire.



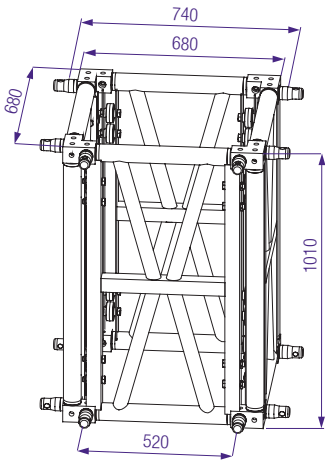
### C52T 010 - 4 - 100 - 52 - 0

Sleeve block for B100RV / S52F / S52V / S100F.



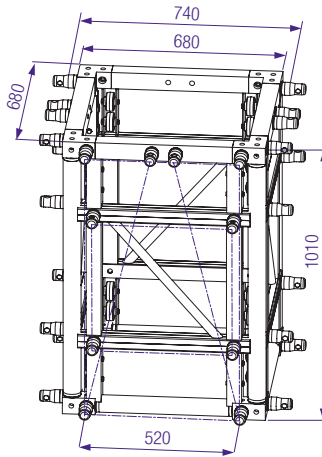
### C52T 010 - 4 - 100 - 52F - 0

Sleeve block for B100RV / S52F / S100F.



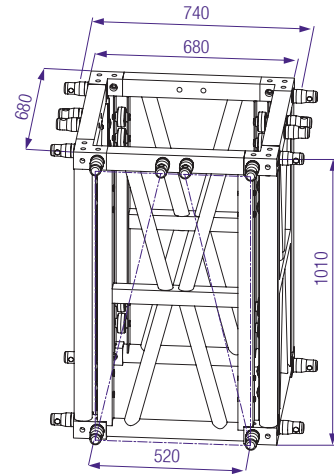
### C52T 010 - 4 - B100 - 0

Sleeve block for B100RV.



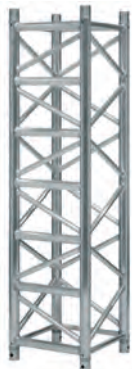
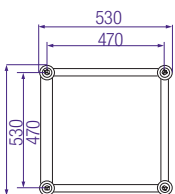
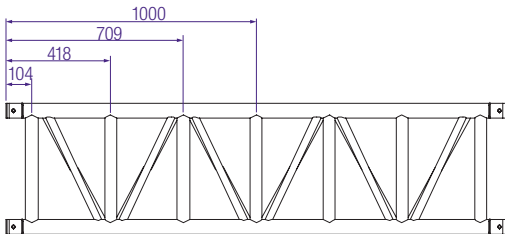
### C52T 010 - 4 - 100 - 52V - 0

Sleeve block for B100RV / S100F / S52V.



### C52T 010 - 4 - B/S100-0

Sleeve block for B100RV / S100F.



### CT - 010 Sleeve Block - Allowable cantilever load

Length (L)	B100RV P (kg)
1	3141
1,5	2383
2	1911
2,5	1587
3	1351
3,5	1169
4	1025
4,5	907
5	808
5,5	724
6	651

