
SQUARE SECTION TRUSS

Code	Length (cm)	weight (kg)
<u>T100R/300</u>	<u>300</u>	<u>75.00</u>
<u>T100R/250</u>	<u>250</u>	<u>58.50</u>
<u>T100R/240</u>	<u>240</u>	<u>58.00</u>
<u>T100R/200</u>	<u>200</u>	<u>43.00</u>
<u>T100R/150</u>	<u>150</u>	<u>31.50</u>
<u>T100R/100</u>	<u>100</u>	<u>23.50</u>
<u>T100R/50</u>	<u>50</u>	<u>14.50</u>

INERTIAL PROPERTIES

Area (A)	34.40 cm ²
Elastic modulus (E)	700.000 Kg / cm ²
Moment of inertia (I _{yy})	76615 cm ⁴
Elastic section modulus (W _y)	1537 cm ³
Moment of inertia (I _{xx})	23254 cm ⁴
Elastic section modulus (W _x)	802 cm ³
Right weight	25.00 Kg/ml

TECHNICAL DATA

Section:	Rectangular section 101x25 cm
Material:	Aluminium EN AW 6082 T6
Ends :	Fast conical connection system Aluminium EN AW 6082 T6
Connection:	KT52Q
Welding:	TIG UNI EN 9606-2:2006
Main tubes :	Ø60x5 mm (EN AW 6082 T6)
Diagonals long side:	Ø50x4 mm (EN AW 6082 T6)
Diagonal short side:	Ø30x3.5 mm

HIGH LOAD

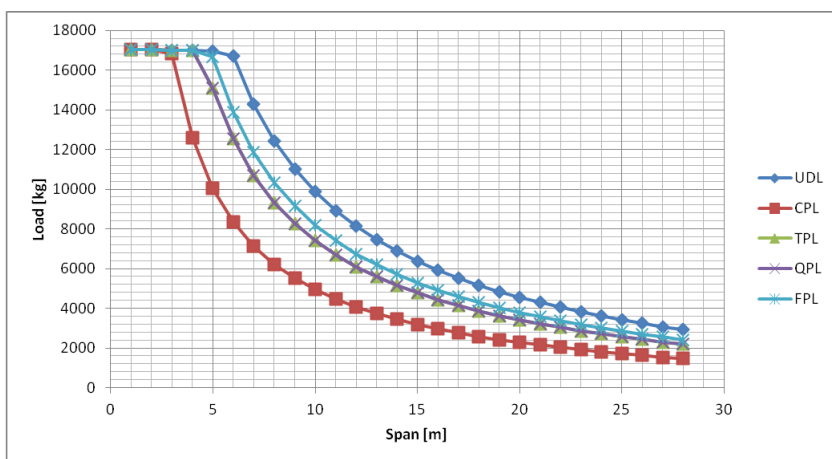
TABLE OF MAXIMUM ALLOWABLE LOADS

T100R: maximum load - no limit on deflection															
UNIFORMLY DISTRIBUTED LOAD (UDL)		CENTER POINT LOAD (CPL)			SINGLE THIRD POINT LOAD (TPL)			SINGLE QUARTER POINT LOAD (QPL)			SINGLE FIFTH POINT LOAD (FPL)				
Span [m]	q _m kg/m	q _m *L Kg	def. mm	F _{am} kg/m	F _{am} Kg	def. mm	F _{am} Kg	2*F _{am} Kg	def. mm	F _{am} Kg	3*F _{am} Kg	def. mm	F _{am} Kg	4*F _{am} Kg	def. mm
1	17050	17050	0	17050	17050	0,1	8525	17050	0,1	5683	17050	0,1	4262	17050	0,1
2	8512	17025	0,3	17025	17025	0,5	8512	17025	0,5	5675	17025	0,4	4256	17025	0,4
3	5667	17000	1	16823	16823	2	8500	17000	2	5667	17000	1	4250	17000	1
4	4244	16975	3	12595	12595	3	8487	16975	4	5658	16975	3	4244	16975	3
5	3390	16950	5	10054	10054	5	7540	15081	6	5027	15081	6	4172	16689	6
6	2785	16711	9	8355	8355	7	6266	12533	9	4178	12533	8	3467	13870	9
7	2040	14277	12	7138	7138	10	5354	10708	12	3569	10708	11	2962	11850	12
8	1556	12445	16	6223	6223	13	4667	9334	16	3111	9334	15	2582	10330	16
9	1224	11015	20	5508	5508	16	4131	8262	20	2754	8262	19	2286	9143	20
10	987	9866	25	4933	4933	20	3700	7400	25	2467	7400	23	2047	8189	25
11	811	8922	30	4461	4461	24	3346	6691	30	2230	6691	28	1851	7405	30
12	678	8130	35	4065	4065	29	3049	6098	36	2033	6098	34	1687	6748	36
13	574	7457	42	3728	3728	34	2796	5593	42	1864	5593	40	1547	6189	42
14	491	6876	48	3438	3438	39	2578	5157	49	1719	5157	46	1427	5707	48
15	425	6369	55	3185	3185	45	2388	4777	56	1592	4777	53	1322	5286	55
16	370	5923	63	2961	2961	51	2221	4442	64	1481	4442	60	1229	4916	63
17	325	5526	71	2763	2763	58	2072	4144	72	1381	4144	68	1147	4586	71
18	287	5170	80	2585	2585	65	1939	3878	81	1293	3878	76	1073	4291	80
19	255	4849	89	2425	2425	73	1819	3637	90	1212	3637	85	1006	4025	89
20	228	4558	98	2279	2279	81	1709	3419	100	1140	3419	94	946	3783	99
21	204	4292	108	2146	2146	89	1610	3219	110	1073	3219	103	891	3563	109
22	184	4048	119	2024	2024	98	1518	3036	121	1012	3036	114	840	3360	119
23	166	3823	130	1912	1912	107	1434	2868	132	956	2868	124	793	3173	130
24	151	3615	141	1808	1808	117	1356	2711	144	904	2711	135	750	3001	142
25	137	3422	154	1711	1711	128	1283	2566	156	855	2566	147	710	2840	154
26	125	3241	166	1620	1620	138	1215	2431	169	810	2431	159	672	2690	167
27	114	3072	179	1536	1536	150	1152	2304	182	768	2304	172	637	2550	180
28	104	2913	193	1456	1456	162	1092	2185	196	728	2185	185	604	2418	193

The calculation at the base of the table has been prepared in accordance with the UNI EN 1999-1-1.

The allowable loads are net of the weight of the truss .
 The deflection includes the weight of the truss.

The constraints must be considered as an ideal condition; It will be the customer's responsibility analyze the structure in the light of the actual conditions of load, constraint and use.



HIGH LOAD

