

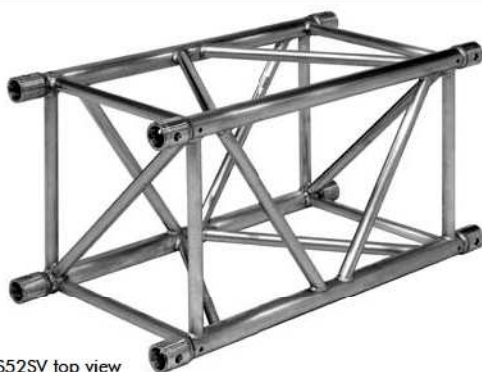
PROLYTE S52F / S52V / S52SV TRUSS

Photo : AED Rent, Belgium
Project : Party tent

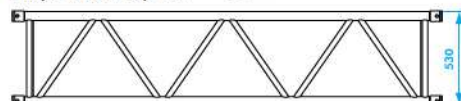


The S52 truss is constructed of main tubes of 50 x 4 mm and diagonals of 25 x 3 mm (S52F) or 30 x 3mm (S52V and SV), and uses the CCS7 coupling system. Prolyte supplies a variety of S52 truss elements that provide maximum flexibility, like standard or custom-made lengths, circles and arches and several types of corners. Prolyte can deliver custom-made pieces on request. For obvious reasons, the S52F is not available in curved sections.

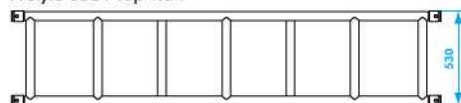
The S52SV has 4-sided diagonal webbing and can therefore handle vertical as well as horizontal loads. The S52V/S52F can only handle vertical loading. The S52F folding truss can save up to 70-80% of warehouse and truck space, while the smart placing of the hinges prevents personal injuries. Thanks to the clever spigot pin orientation in the couplers, assembly of the truss is foolproof.



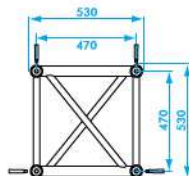
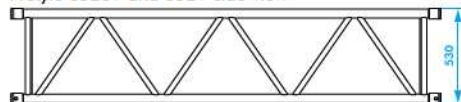
Prolyte S52SV top view



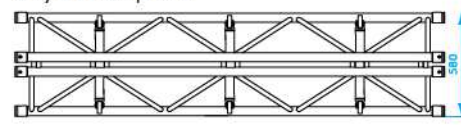
Prolyte S52V top view



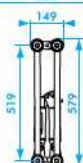
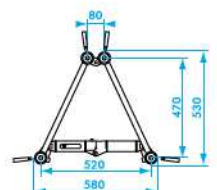
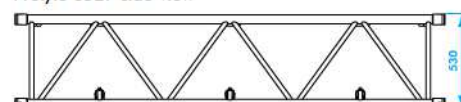
Prolyte S52SV and S52V side view



Prolyte S52F top view



Prolyte S52F side view



PROLYTE S52F TRUSS

PROLYTE S52F - 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		
m	ft	kg/m	lbs/ft	mm	inch	kg	lbs	mm	inch	kg	lbs	kg	lbs	kg	lbs	total weight
3	9.8	957,4	644.2	3	0.11	2393,5	5282.5	2	0.07	1196,7	2641.2	794,8	1754.2	598,4	1320.6	36,0
4	13.1	716,2	481.9	5	0.19	1944,1	4290.7	3	0.11	1193,7	2634.6	791,8	1747.6	596,9	1317.3	48,0
5	16.4	666,8	448.7	9	0.35	1549,9	3420.6	5	0.19	1162,4	2565.5	775,0	1710.3	595,4	1314.0	60,0
6	19.7	633,5	426.2	15	0.59	1414,7	3122.2	8	0.31	1061,0	2341.7	707,3	1561.1	587,1	1295.7	72,0
7	23.0	501,4	337.4	21	0.82	1206,5	2662.7	12	0.47	904,9	1997.0	603,2	1331.3	500,7	1105.0	84,0
8	26.2	429,3	288.9	31	1.22	1144,9	2526.7	16	0.62	858,7	1895.1	572,4	1263.4	475,1	1048.6	96,0
9	29.5	374,4	251.9	43	1.69	1095,1	2416.9	22	0.86	821,3	1812.7	547,6	1208.5	454,5	1003.0	108,0
10	32.8	301,0	202.5	53	2.08	978,2	2158.9	28	1.10	733,6	1619.1	489,1	1079.4	405,9	895.9	120,0
11	36.1	246,7	166.0	65	2.55	949,6	2095.9	36	1.41	712,2	1571.9	474,8	1047.9	394,1	869.8	132,0
12	39.4	205,3	138.2	77	3.03	924,1	2039.4	46	1.81	693,0	1529.6	462,0	1019.7	383,5	846.4	144,0
13	42.6	173,2	116.5	90	3.54	900,6	1987.7	58	2.28	675,5	1490.7	450,3	993.8	373,8	824.9	156,0
14	45.9	147,7	99.4	105	4.13	827,0	1825.3	67	2.63	620,3	1368.9	413,5	912.6	343,2	757.5	168,0
15	49.2	127,1	85.5	120	4.72	810,3	1788.3	82	3.22	607,7	1341.2	405,1	894.1	336,3	742.1	180,0
16	52.5	110,3	74.2	137	5.39	749,8	1654.7	93	3.66	562,3	1241.0	374,9	827.4	311,1	686.7	192,0
17	55.8	96,3	64.8	154	6.06	736,7	1625.9	111	4.37	552,5	1219.4	368,3	812.9	305,7	674.7	204,0
18	59.0	84,6	56.9	173	6.81	685,3	1512.4	125	4.92	513,9	1134.3	342,6	756.2	284,4	627.6	216,0
19	62.3	74,7	50.3	193	7.59	638,7	1409.5	139	5.47	479,0	1057.2	319,3	704.8	265,0	585.0	228,0
20	65.6	66,2	44.6	214	8.42	629,3	1388.9	162	6.37	472,0	1041.7	314,7	694.5	261,2	576.4	240,0
21	68.9	59,0	39.7	235	9.25	619,2	1366.6	188	7.40	464,4	1024.9	309,6	683.3	257,0	567.1	252,0
22	72.2	52,7	35.4	258	10.15	579,3	1278.6	207	8.14	434,5	958.9	289,7	639.3	240,4	530.6	264,0
23	75.4	47,2	31.7	282	11.10	542,4	1197.1	226	8.89	406,8	897.8	271,2	598.5	225,1	496.8	276,0
24	78.7	42,3	28.5	307	12.08	508,0	1121.3	246	9.68	381,0	840.9	254,0	560.6	210,8	465.3	288,0

1 inch = 25,4 mm | 1m = 3.28 ft | 1 lbs = 0,453 kg

- Loading figures only valid for static loads and spans with two supporting points
- Spans must be supported at each end
- If dynamic loads or wind loads are involved, or more supporting points are applied, contact a structural engineer or Prolyte
- Loading figures are based on German DIN standards; to comply with BS 7905-2 / ANSI E1.2-2006 / CWA 15902-2, the loading data must be multiplied by 0.85
- The self-weight of the trusses has already been taken into account
- For spans longer than indicated and with a different loading set-up use the KYLo programme
- For structures contact Prolyte



Mark approval certificate No. 860/96
 Test report No. 859/96
 TÜV certification only valid for loading table above.

PROLYTE S52SV AND S52V - 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		
m	ft	kg/m	lbs/ft	mm	inch	kg	lbs	mm	inch	kg	lbs	kg	lbs	kg	lbs	total weight
2	6.6	2864,0	1927.1	2	0.07	5728,0	12641.6	2	0.07	2864,0	6320.8	1904,3	4202.8	1432,0	3160.4	30,0
3	9.8	1904,3	1281.4	5	0.19	5193,9	11462.8	4	0.15	2856,5	6304.3	1896,8	4186.3	1428,2	3152.1	45,0
4	13.1	1424,5	958.5	9	0.35	3882,3	8568.2	7	0.27	2849,0	6287.7	1889,3	4169.7	1424,5	3143.9	60,0
5	16.4	1136,6	764.8	13	0.51	3092,3	6824.7	11	0.43	2319,2	5118.5	1546,2	3412.4	1283,3	2832.3	75,0
6	19.7	854,4	574.9	19	0.74	2563,2	5656.9	15	0.59	1922,4	4242.7	1281,6	2828.5	1063,7	2347.6	90,0
7	23.0	623,7	419.7	26	1.02	2183,1	4818.1	21	0.82	1637,3	3613.5	1091,5	2409.0	906,0	1999.5	105,0
8	26.2	474,0	319.0	34	1.33	1896,1	4184.8	27	1.06	1422,1	3138.6	948,1	2092.4	786,9	1736.7	120,0
9	29.5	371,4	249.9	43	1.69	1671,3	3688.5	35	1.37	1253,5	2766.4	835,6	1844.3	693,6	1530.7	135,0
10	32.8	298,0	200.5	53	2.08	1489,9	3288.2	43	1.69	1117,4	2466.2	745,0	1644.1	618,3	1364.6	150,0
11	36.1	243,7	164.0	65	2.55	1340,1	2957.7	52	2.04	1005,1	2218.3	670,1	1478.8	556,2	1227.4	165,0
12	39.4	202,3	136.2	77	3.03	1214,1	2679.5	62	2.44	910,6	2009.6	607,0	1339.7	503,8	1112.0	180,0
13	42.6	170,2	114.5	90	3.54	1106,3	2441.5	72	2.83	829,7	1831.2	553,1	1220.8	459,1	1013.2	195,0
14	45.9	144,7	97.4	105	4.13	1012,8	2235.2	84	3.30	759,6	1676.4	506,4	1117.6	420,3	927.6	210,0
15	49.2	124,1	83.5	120	4.72	930,8	2054.2	96	3.77	698,1	1540.7	465,4	1027.1	386,3	852.5	225,0
16	52.5	107,3	72.2	137	5.39	858,1	1893.8	109	4.29	643,5	1420.3	429,0	946.9	356,1	785.9	240,0
17	55.8	93,3	62.8	154	6.06	793,0	1750.2	123	4.84	594,8	1312.7	396,5	875.1	329,1	726.3	255,0
18	59.0	81,6	54.9	173	6.81	734,4	1620.8	138	5.43	550,8	1215.6	367,2	810.4	304,8	672.6	270,0
19	62.3	71,7	48.2	193	7.59	681,1	1503.3	154	6.06	510,9	1127.4	340,6	751.6	282,7	623.9	285,0
20	65.6	63,2	42.6	214	8.42	632,5	1395.8	171	6.73	474,3	1046.9	316,2	697.9	262,5	579.3	300,0
21	68.9	56,0	37.7	235	9.25	587,7	1297.0	188	7.40	440,8	972.8	293,8	648.5	243,9	538.3	315,0
22	72.2	49,7	33.4	258	10.15	546,3	1205.7	207	8.14	409,7	904.3	273,2	602.9	226,7	500.4	330,0
23	75.4	44,2	29.7	282	11.10	507,9	1120.9	226	8.89	380,9	840.7	253,9	560.5	210,8	465.2	345,0
24	78.7	39,3	26.5	307	12.08	472,0	1041.8	246	9.68	354,0	781.4	236,0	520.9	195,9	432.3	360,0

1 inch = 25,4 mm | 1m = 3.28 ft | 1 lbs = 0,453 kg

- Loading figures only valid for static loads and spans with two supporting points
- Spans must be supported at each end
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- Loading figures are based on German DIN standards; to comply with BS 7905-2 / ANSI E1.2-2006 / CWA 15902-2, the loading data must be multiplied by 0.85
- The self-weight of the trusses has already been taken into account
- For spans longer than indicated and with a different loading set-up use the KYLo programme
- For structures contact Prolyte



S52SV
Mark approval certificate No. 2993/05
Test report No. 2992/05
TÜV certification only valid for loading table above.



S52V
Mark approval certificate No. 2991/05
Test report No. 2990/05
TÜV certification only valid for loading table above.

PROLYTE S52F / S52V / S52SV TRUSS

TECHNICAL SPECIFICATIONS S52 SERIES

Types	Folding (F), Square (V)
Alloy	EN AW 6082 T6
Main tubes (chords)	50 x 4 mm
Braces	S52F - 25 x 3 mm S52V/SV - 30 x 3 mm
Coupling system	CCS7 series

Type		S52F	S52V	S52SV	
Allowable Normal Force in Main Chord	N	41,62	41,62	41,62	kN
Allowable Normal Force in Diagonals	N	16,59	20,36	20,36	kN
Surface area Complete Truss	A	23,12	23,12	23,12	cm ²
Moment of Inertia Y-axis	I _y	10906,2	10906,2	10906,2	cm ⁴
Moment of Inertia Z-axis	I _z	————	————	10906,2	cm ⁴
Allowable bending moment Y-axis	M _y	39,12	39,12	39,12	kNm
Allowable bending moment Z-axis	M _z	————	————	39,12	kNm
Allowable shear force Z-axis	Q _z /V _z	18,0	28,79	28,79	kN
Allowable shear force Y-axis	Q _y /V _y	————	————	28,79	kN
Selfweight	kg	12	15	15	kg/m

S52V / SV / S52F SERIES - STANDARD AVAILABLE LENGTHS AND CODES

Meters	Feet	Code*
0,25 / 1,00 m in steps of 5 mm	0.82' / 3.28' in steps of 0.2"	
0,50	1.64	S52V/•-L050
0,60	1.97	S52V/•-L060 S52F-L050
0,80	2.62	S52V/•-L080 S52F-L060
1,00	3.28	S52V/•-L100
1,20	3.94	S52V/•-L120 S52F-L120
1,50	4.57	S52V/•-L150
1,60	5.25	S52V/•-L160 S52F-L160
2,00	6.56	S52V/•-L200
2,40	7.87	S52V/•-L240 S52F-L240
2,50	8.20	S52V/•-L250
3,00	9.84	S52V/•-L300
3,20	10.50	S52V/•-L320
4,00	13.12	S52V/•-L400

*on • indicate F for Folding, V for Square and SV for Square truss with 4-sided webbing. Example: S52V-L200