



Photo: Creativ-Design, Germany.

H30 Series truss is constructed of main tubes (48,3 x 3 mm) and diagonals (16 x 2 mm), and uses the CCS6 coupling system. PolyteStructures supplies a variety of H30 Series truss elements that provide maximum

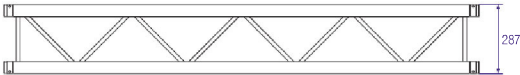
flexibility, including standard or custom-made lengths, circles and arches and several types of corners. PolyteStructures can create custom-made pieces on request.

### H30L

Top View



Side View



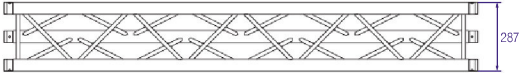
X Coupler - 1 ring

H Coupler - 2 rings

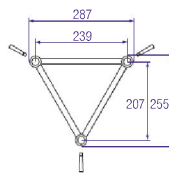
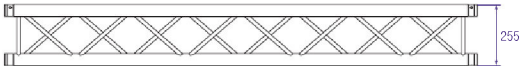
The number of recessed rings in the coupler receiver distinguishes the X and H series.

### H30D

Top View

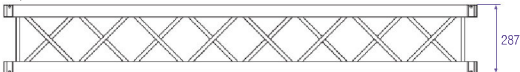


Side View

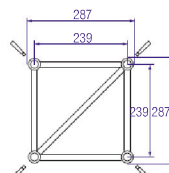
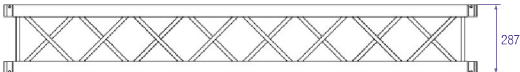


### H30V

Top View



Side View





### H30D - 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		DEFLECTION		TPL		QPL		FPL		total weight
m	ft	kg/m	lbs/ft	mm	inch	kgs	lbs	mm	inch	kgs	lbs	kgs	lbs	kgs	lbs	
1	3.3	1718,7	1156.5	1	0.04	1718,7	3793.3	1	0.04	859,4	1896.6	572,1	1262.6	429,7	948.3	5,0
2	6.6	856,9	576.6	4	0.16	1259,2	2779.1	3	0.12	856,9	1891.1	569,6	1257.1	428,4	945.6	10,0
3	9.8	556,9	374.7	8	0.31	835,3	1843.5	6	0.24	626,5	1382.6	417,7	921.8	346,7	765.1	15,0
4	13.1	311,1	209.3	14	0.55	622,1	1373.0	11	0.43	466,6	1029.7	311,1	686.5	258,2	569.8	20,0
5	16.4	197,3	132.7	22	0.87	493,2	1088.5	18	0.71	369,9	816.3	246,6	544.2	204,7	451.7	25,0
6	19.7	135,5	91.2	32	1.26	406,4	896.9	26	1.02	304,8	672.7	203,2	448.5	168,7	372.2	30,0
7	23.0	98,2	66.1	44	1.73	343,7	758.5	35	1.38	257,8	568.9	171,9	379.3	142,6	314.8	35,0
8	26.2	74,0	49.8	57	2.24	296,1	653.4	46	1.81	222,0	490.0	148,0	326.7	122,9	271.2	40,0
9	29.5	57,4	38.6	72	2.83	258,4	570.4	58	2.28	193,8	427.8	129,2	285.2	107,3	236.7	45,0
10	32.8	45,6	30.7	89	3.50	227,8	502.8	71	2.79	170,9	377.1	113,9	251.4	94,6	208.7	50,0
11	36.1	36,8	24.8	108	4.25	202,4	446.6	86	3.39	151,8	334.9	101,2	223.3	84,0	185.3	55,0
12	39.4	30,1	20.3	128	5.04	180,7	398.8	103	4.06	135,5	299.1	90,4	199.4	75,0	165.5	60,0
13	42.6	24,9	16.8	150	5.91	162,0	357.5	120	4.72	121,5	268.1	81,0	178.8	67,2	148.4	65,0
14	45.9	20,8	14.0	174	6.85	145,6	321.3	140	5.51	109,2	241.0	72,8	160.7	60,4	133.4	70,0
15	49.2	17,5	11.8	200	7.87	131,1	289.3	160	6.30	98,3	216.9	65,5	144.6	54,4	120.0	75,0
16	52.5	14,8	9.9	228	8.98	118,0	260.5	182	7.17	88,5	195.4	59,0	130.2	49,0	108.1	80,0

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 Customer Service
- 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 setup use the KYLo program
- ProlyteStructures can create custom-made pieces on request.
- Loading tables triangle truss only valid for apex-up or apex-down



Mark approval certificate  
No. 2233/04.  
Test report No. 2232/04.  
TUV certification only valid  
for loading table above.

#### Technical Specifications - H30 Series

Types	Ladder (L), Triangular (D), Square (V)
Alloy	EN AW 6082 T6
Main Tubes (Chords)	48,3 x 3 mm
Braces	16 x 2 mm
Coupling System	CCS6

Type		H30D	H30V	
Allowable Normal Force in Main Chord	N	30,54	30,54	kN
Allowable Normal Force in Diagonals	N	7,04	7,04	kN
Surface area Complete Truss	A	12,72	16,96	cm <sup>2</sup>
Moment of Inertia Y-axis	Iy	1057,3	2095,9	cm <sup>4</sup>
Moment of Inertia Z-axis	Iz	1047,9	2095,9	cm <sup>4</sup>
Allowable bending moment Y-axis	My	6,32	14,60	kNm
Allowable bending moment Z-axis	Mz	7,30	14,60	kNm
Allowable shear force Z-axis	Qz/Vz	8,62	9,95	kN
Allowable shear force Y-axis	Qy/Vy	4,98	9,95	kN
Self-weight	kg	5	6,3	kg/m

#### H30 Series - Standard available Lengths and Codes

Metres	Feet	Code*
0.25/1.00 m in 5 mm steps	0.82'/3.28', in 0.2' steps	
0,25	0.82	H30•-L025
0,29	0.95	H30•-L029
0,50	1.64	H30•-L050
0,71	2.33	H30•-L071
0,75	2.46	H30•-L075
1,00	3.28	H30•-L100
1,50	4.57	H30•-L150
2,00	6.56	H30•-L200
2,50	8.20	H30•-L250
3,00	9.84	H30•-L300
3,50	11.48	H30•-L350
4,00	13.12	H30•-L400
4,50	14.76	H30•-L450
5,00	16.40	H30•-L500

\*on • indicate L for Ladder, D for Triangular or  
V for Square truss. Example: H30V-L200

# H30 SERIES

## H30V - 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	CPL		DEFLECTION		TPL		QPL		FPL		total weight
						kgs	lbs	mm	inch	kgs	lbs	kgs	lbs	kgs	lbs	
1	3.3	1984,1	1335.0	1	0.04	1984,1	4378.9	1	0.04	992,1	2189.5	660,3	1457.3	496,0	1094.7	6,3
2	6.6	988,9	665.4	4	0.16	1977,8	4365.0	3	0.12	988,9	2182.5	657,2	1450.4	494,5	1091.3	12,6
3	9.8	657,2	442.2	9	0.35	1936,7	4274.4	7	0.28	985,8	2175.6	654,0	1443.4	492,9	1087.8	18,9
4	13.1	491,3	330.6	17	0.67	1447,0	3193.6	13	0.51	982,6	2168.6	650,9	1436.5	491,3	1084.3	25,2
5	16.4	391,8	263.6	26	1.02	1152,0	2542.4	21	0.83	864,0	1906.8	576,0	1271.2	478,1	1055.1	31,5
6	19.7	318,1	214.0	37	1.46	954,2	2105.9	30	1.18	715,6	1579.4	477,1	1052.9	396,0	873.9	37,8
7	23.0	232,0	156.1	51	2.01	812,0	1792.1	41	1.61	609,0	1344.1	406,0	896.1	337,0	743.7	44,1
8	26.2	176,2	118.5	66	2.60	704,6	1555.1	53	2.09	528,5	1166.3	352,3	775.5	292,4	645.4	50,4
9	29.5	137,9	92.8	84	3.31	620,4	1369.2	67	2.64	465,3	1026.9	310,2	684.6	257,5	568.2	56,7
10	32.8	110,5	74.3	104	4.09	552,4	1219.0	83	3.27	414,3	914.3	276,2	609.5	229,2	505.9	63,0
11	36.1	90,2	60.7	125	4.92	496,1	1095.0	100	3.94	372,1	821.2	248,1	547.5	205,9	454.4	69,3
12	39.4	74,8	50.3	149	5.87	448,7	990.4	119	4.69	336,6	742.8	224,4	495.2	186,2	411.0	75,6
13	42.6	62,8	42.3	175	6.89	408,2	900.8	140	5.51	306,1	675.6	204,1	450.4	169,4	373.8	81,9
14	45.9	53,3	35.8	203	7.99	372,9	823.1	163	6.42	297,7	617.3	186,5	411.5	154,8	341.6	88,2
15	49.2	45,6	30.7	233	9.17	342,0	754.8	187	7.36	256,5	566.1	171,0	377.4	141,9	313.2	94,5
16	52.5	39,3	26.5	265	10.43	314,5	694.1	212	8.35	235,9	520.6	157,3	347.1	130,5	288.1	100,8

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

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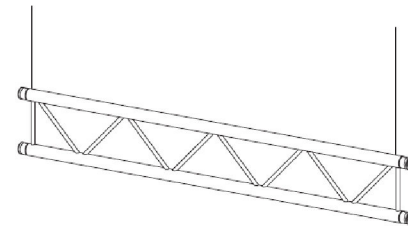


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TUV certification only valid  
for loading table above.



### H30L - Allowable Loading (Span supported on top chord.)

SPAN		Uniformly Distributed Load		DEFLECTION		CPL		DEFLECTION	
m	ft	kg/m	lbs/ft	mm	inch	kgs	lbs	mm	inch
1	3.3	992,2	667.6	0	0	992,2	2189.8	0	0
2	6.6	359,0	241.6	1	0.04	389,0	858.5	1	0.04
3	9.8	135,0	90.8	2	0.08	203,0	448.0	2	0.08
4	13.1	52,0	35.0	2	0.08	104,0	229.5	2	0.08
5	16.4	25,0	16.8	3	0.12	62,0	136.8	2	0.08
6	19.7	11,0	7,4	3	0.12	33,0	72.8	2	0.08

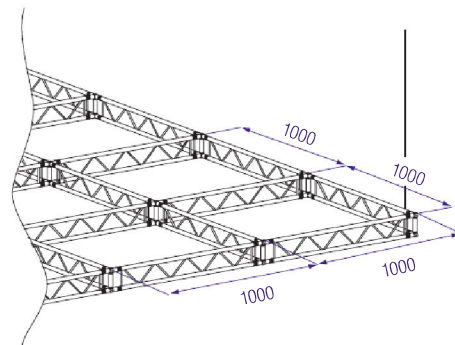


1 inch = 25,4 mm | 1m = 3.28 ft | 1 lbs = 0,453 kg

Spans must be supported at each end.  
Loads must be suspended from bottom chord only.

### H30L - Allowable Loading (Top chord sideways supported each metre.)

SPAN		Uniformly Distributed Load		DEFLECTION		CPL		DEFLECTION	
m	ft	kg/m	lbs/ft	mm	inch	kgs	lbs	mm	inch
4	13.1	245,8	165.4	17	0.67	724,0	1597.9	13	0.51
5	16.4	196,0	131.9	26	1.02	576,5	1272.3	21	0.83
6	19.6	159,2	107.1	37	1.46	477,7	1054.2	30	1.18
7	23.0	116,2	78.2	51	2.01	406,6	897.5	41	1.61
8	26.2	88,3	59.4	66	2.60	353,0	779.1	53	2.09
9	29.5	69,1	46.5	84	3.31	310,9	686.3	67	2.64
10	32.8	53,3	35.8	100	3.94	277,0	611.3	83	3.27
11	36.1	39,3	26.4	110	4.33	249,0	549.4	100	3.94
12	39.4	29,6	19.9	120	7.72	225,3	497.3	119	4.69

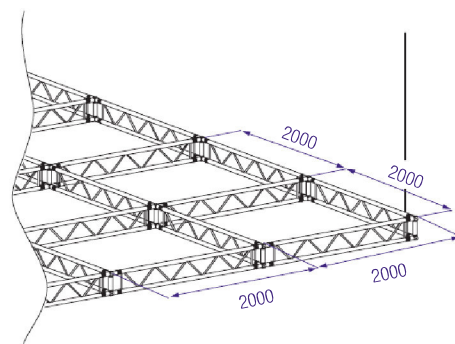


1 inch = 25,4 mm | 1m = 3.28 ft | 1 lbs = 0,453 kg

Spans must be supported at each end.  
Loads must be suspended from bottom chord only.

### H30L - Allowable Loading (Top chords sideways supported every 2 metres.)

SPAN		Uniformly Distributed Load		DEFLECTION		CPL		DEFLECTION	
m	ft	kg/m	lbs/ft	mm	inch	kgs	lbs	mm	inch
4	13.1	95,0	63.9	4	0.16	190,0	419.3	4	0.16
5	16.4	59,7	40.2	7	0.28	149,3	329.5	6	0.24
6	19.7	40,6	27.3	10	0.39	121,7	268.5	8	0.31
7	23.0	29,0	19.5	14	0.55	101,5	224.0	11	0.43
8	26.2	21,5	14.5	18	0.71	86,0	189.8	14	0.55
9	29.5	16,4	11.0	23	0.91	73,6	162.5	18	0.71
10	32.8	12,7	8.5	28	1.10	63,4	139.9	22	0.87
11	36.1	10,0	6.7	34	1.34	54,8	120.9	27	1.06
12	39.4	7,9	5.3	40	1.57	47,3	104.5	32	1.26



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

Spans must be supported at each end.  
Loads must be suspended from bottom chord only.