

# Connecting the world

## M290 Regular



- Certified 50mm tube M290 series modular truss range
- Interior & exterior applications
- Durable construction with diagonal anti-twist end brace
- Fast connection for quick, simple and secure assembly
- Great free-span & loading characteristics (up to 20m / 65.61 ft)
- Connection kit supplied with every truss length & junction
- Compatible with 200/400/500/600 series cell clamps
- Compatible with Xtruss accessories
- Powder coat colour finish available on request

M290 DUO			LOADING CHART													
Span	m	ft	3.00	9.84	4.00	13.12	5.00	16.40	6.00	19.69	7.00	22.97	8.00	26.25	9.00	29.53
point load	kg	lbs	667.50	1471.58	577.60	1273.39	460.00	1014.13	381.10	840.18	324.50	715.40	281.70	621.04	248.10	546.97
deflection	mm	inch	6.00	0.24	12.30	0.48	19.30	0.76	27.80	1.09	38.00	1.50	49.80	1.96	63.20	2.49
two point load	kg	lbs	333.70	735.68	332.60	733.26	331.40	730.61	285.80	630.08	243.30	536.38	211.20	465.62	186.10	410.28
deflection	mm	inch	5.10	0.20	12.10	0.48	23.60	0.93	35.40	1.39	48.20	1.90	63.00	2.48	79.70	3.14
three point load	kg	lbs	222.50	490.53	221.70	488.76	220.90	487.00	190.60	420.20	162.20	357.59	140.80	310.41	124.10	273.59
deflection	mm	inch	4.70	0.19	11.20	0.44	22.00	0.87	32.90	1.30	44.90	1.77	58.70	2.31	74.40	2.93
four point load	kg	lbs	166.90	367.95	166.30	366.63	165.70	365.31	158.80	350.09	135.20	298.06	117.40	258.82	103.40	227.96
deflection	mm	inch	4.50	0.18	10.70	0.42	21.00	0.83	34.90	1.37	47.50	1.87	62.10	2.44	78.70	3.10
distributed load	kg/m	lbs/ft	222.50	149.51	166.30	111.75	132.50	89.04	110.10	73.98	92.70	62.29	70.40	47.31	55.10	37.03
deflection	mm	inch	3.80	0.15	8.90	0.35	17.40	0.69	30.10	1.19	47.20	1.86	61.60	2.43	78.10	3.07

DUO figures are based on use in vertical mode and stabilized every 1m • Higher loading values for U version available

M290 TRIO			LOADING CHART													
Span	m	ft	4.00	13.12	6.00	19.69	8.00	26.25	10.00	32.81	12.00	39.37	14.00	45.93	16.00	52.49
point load	kg	lbs	497.20	1096.14	325.60	717.82	238.00	524.70	184.10	405.87	147.00	324.08	119.40	263.23	97.90	215.83
deflection	mm	inch	10.60	0.42	24.00	0.94	43.10	1.70	68.10	2.68	99.50	3.92	137.70	5.42	183.20	7.21
two point load	kg	lbs	372.90	822.10	244.20	538.37	178.50	393.52	138.10	304.46	110.20	242.95	89.60	197.53	73.40	161.82
deflection	mm	inch	13.50	0.53	30.40	1.20	54.10	2.13	84.80	3.34	122.50	4.82	167.40	6.59	219.60	8.65
three point load	kg	lbs	248.60	548.07	162.80	358.91	119.00	262.35	92.00	202.83	73.50	162.04	59.70	131.62	48.90	107.81
deflection	mm	inch	12.50	0.49	28.30	1.11	50.50	1.99	79.40	3.13	115.00	4.53	157.70	6.21	207.80	8.18
four point load	kg	lbs	207.20	456.80	135.70	299.17	99.20	218.70	76.70	169.09	61.20	134.92	49.80	109.79	40.80	89.95
deflection	mm	inch	13.30	0.52	30.00	1.18	53.40	2.10	83.70	3.30	121.00	4.76	165.50	6.52	217.30	8.56
distributed load	kg/m	lbs/ft	248.60	167.05	108.50	72.91	59.50	39.98	36.80	24.73	24.50	16.46	17.10	11.49	12.20	8.20
deflection	mm	inch	13.20	0.52	29.70	1.17	53.00	2.09	83.10	3.27	120.20	4.73	164.40	6.47	216.00	8.50

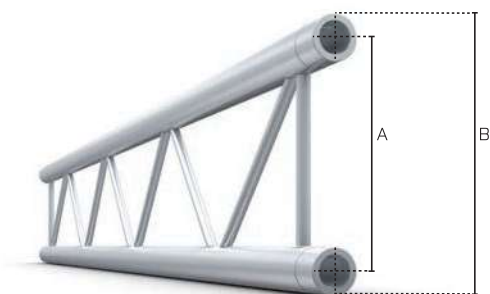
TRIO figures are based on use in apex up/down orientation • Higher loading values for U version available

M290 QUATRO			LOADING CHART													
Span	m	ft	4.00	13.12	6.00	19.69	8.00	26.25	10.00	32.81	12.00	39.37	14.00	45.93	16.00	52.49
point load	kg	lbs	1155.40	2547.22	762.50	1681.02	563.70	1242.74	442.50	975.54	360.20	794.10	300.00	661.39	253.80	559.53
deflection	mm	inch	12.30	0.48	27.80	1.09	49.70	1.96	78.30	3.08	113.70	4.48	156.20	6.15	206.40	8.13
two point load	kg	lbs	665.30	1466.73	571.90	1260.82	422.80	932.11	331.90	731.71	270.10	595.47	225.00	496.04	190.30	419.54
deflection	mm	inch	12.10	0.48	35.40	1.39	63.00	2.48	98.50	3.88	142.10	5.59	193.90	7.63	253.90	10.00
three point load	kg	lbs	443.50	977.75	381.30	840.62	281.80	621.26	221.30	487.88	180.10	397.05	150.00	330.69	126.90	279.77
deflection	mm	inch	11.20	0.44	32.90	1.30	58.70	2.31	91.90	3.62	132.90	5.23	181.70	7.15	238.50	9.39
four point load	kg	lbs	332.60	733.26	317.70	700.41	234.90	517.87	184.40	406.53	150.10	330.91	125.00	275.58	105.70	233.03
deflection	mm	inch	10.70	0.42	34.90	1.37	62.10	2.44	97.20	3.83	140.30	5.52	191.50	7.54	250.90	9.88
distributed load	kg/m	lbs/ft	332.60	223.50	220.20	147.97	140.90	94.68	88.50	59.47	60.00	40.32	42.90	28.83	31.70	21.30
deflection	mm	inch	8.90	0.35	30.10	1.19	61.60	2.43	96.50	3.80	139.30	5.48	190.10	7.48	249.20	9.81

Higher loading values for U version available

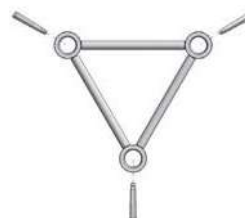
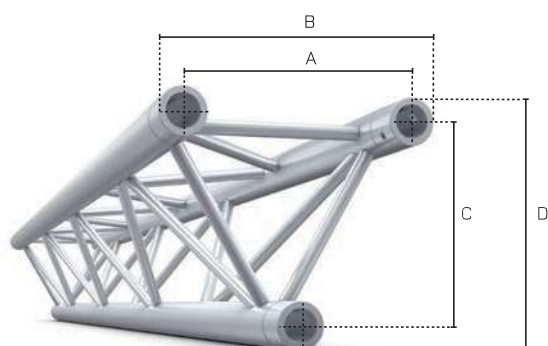
**All truss loading calculations and TUV certifications are based on:**

Truss supported or suspended at both ends • Static loadings only • Loads applied in the node points • Self weight of trusses included • Spans made of different truss lengths • Interaction of bending moment and shear force at connector • Structural calculations made in 2014 are based on DIN EN 1999-1-1 and DIN EN 1999-1-1/A2 • All loading data should be multiplied by 0.85 to comply with BS 7905-2 / ANSI E12-2006 / CWA 15902-2 • For any other application, or in case of an assembled structure, contact MILOS or a Structural Engineer • Safety factors used – self weight 1.35 / loading 1.5



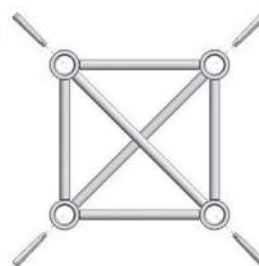
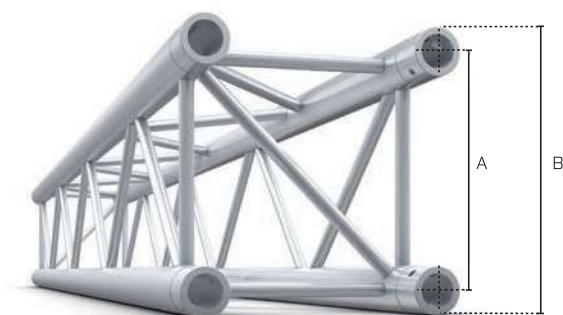
## DUO

M290	Main Tubes		Braces		Alloy	A		B		Coupler
BTB	50x2mm	2"x0.08"	16x2mm	0.62"x0.08"	EN - AW 6082 T6	239mm	9.41"	289mm	11.37"	CCB
BTF	50x2mm	2"x0.08"	16x2mm	0.62"x0.08"	EN - AW 6082 T6	239mm	9.41"	289mm	11.37"	CCF
BTU	50x2mm	2"x0.08"	20x2mm	0.78"x0.08"	EN - AW 6082 T6	239mm	9.41"	289mm	11.37"	CCU



## TRIO

M290	Main Tubes		Braces		Alloy	A		B		C		D		Coupler
STB	50x2mm	2"x0.08"	16x2mm	0.62"x0.08"	EN - AW 6082 T6	240mm	9.44"	289mm	11.37"	207mm	8.15"	257mm	10.12"	CCB
STF	50x2mm	2"x0.08"	16x2mm	0.62"x0.08"	EN - AW 6082 T6	239mm	9.41"	289mm	11.37"	207mm	8.15"	257mm	10.12"	CCF
STU	50x2mm	2"x0.08"	20x2mm	0.78"x0.08"	EN - AW 6082 T6	239mm	9.41"	289mm	11.37"	207mm	8.15"	257mm	10.12"	CCU



## QUATRO

M290	Main Tubes		Braces		Alloy	A		B		Coupler
QTB	50x2mm	2"x0.08"	16x2mm	0.62"x0.08"	EN - AW 6082 T6	240mm	9.44"	290mm	11.41"	CCB
QTF	50x2mm	2"x0.08"	16x2mm	0.62"x0.08"	EN - AW 6082 T6	239mm	9.41"	289mm	11.37"	CCF
QTU	50x2mm	2"x0.08"	20x2mm	0.78"x0.08"	EN - AW 6082 T6	239mm	9.41"	289mm	11.37"	CCU

### STANDARD LENGTHS AND WEIGHTS AVAILABLE

	m	ft	0.50	1.64	1.00	3.28	1.50	4.92	2.00	6.56	2.50	8.20	3.00	9.84	4.00	13.12	5.00	16.41
DUO	kg	lbs	1.70	3.75	2.60	5.73	3.60	7.94	4.50	9.92	5.50	12.13	6.60	14.55	8.50	18.74	10.30	22.71
TRIO	kg	lbs	2.80	6.17	4.50	9.92	6.00	13.22	7.70	16.98	9.10	20.06	10.80	23.81	14.10	31.09	18.00	39.68
QUATRO	kg	lbs	3.90	8.60	6.00	13.23	8.30	18.30	10.60	23.37	12.90	28.44	15.00	33.07	19.60	43.21	23.50	51.81

Connection material (pins/clips/couplers) and packaging not included in above weights