BEAMO 80

SPECIFICATIONS

Alpha Supply

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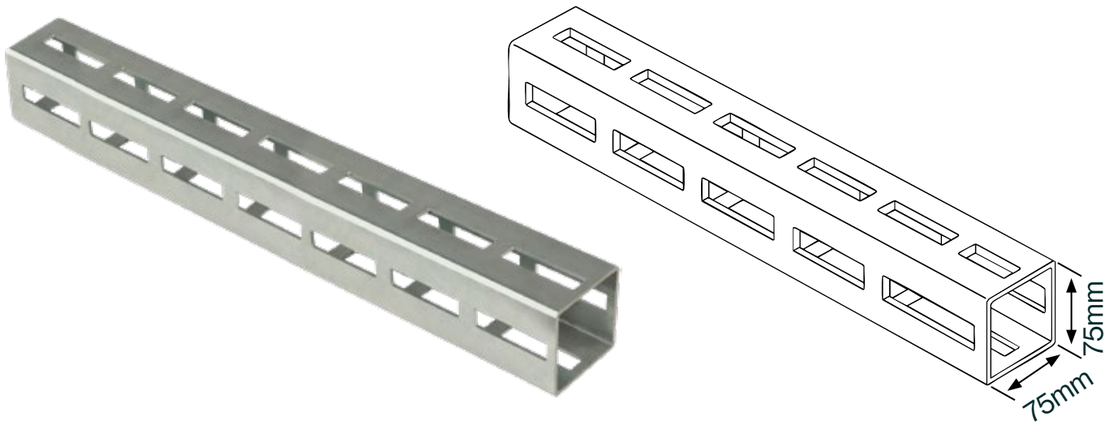
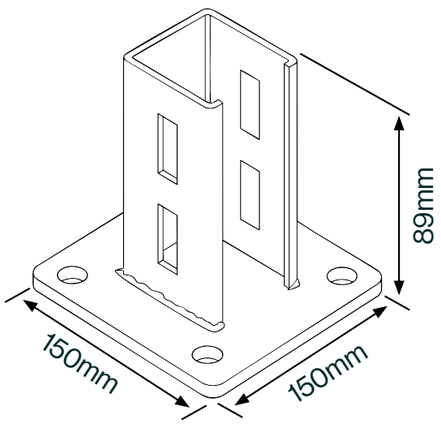
Material:
Zinc Plating (ZP): 8-15 MICRON | Hot Dip Galvanising (HDG): 50-70 MICRON | Standards to comply: AS/NZS 4680, AS1397.



PART NO.	DESCRIPTION	DIMENSIONS
BM80BS3	BEAM 80 SECTION	75 x 3000mm
BM80BS6	BEAM 80 SECTION	75 x 6000mm



PART NO.	DESCRIPTION	DIMENSIONS
BM80BP	BASE PLATE	89 x 150 x 150mm

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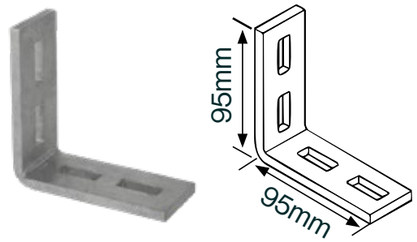
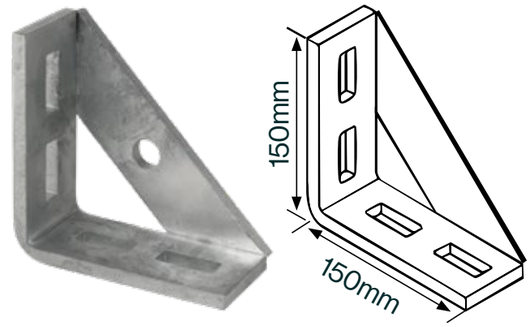
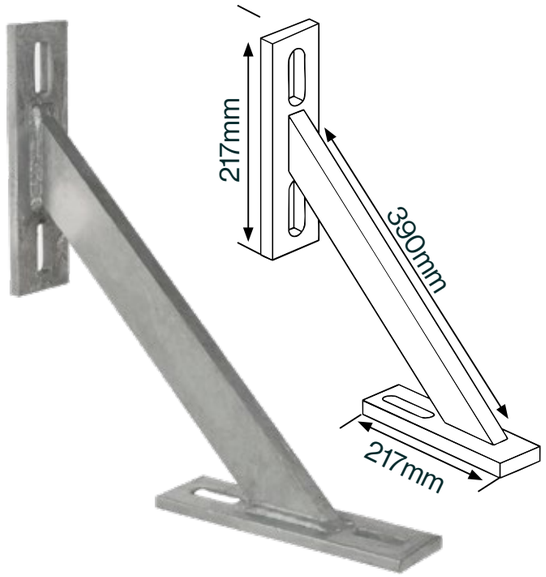


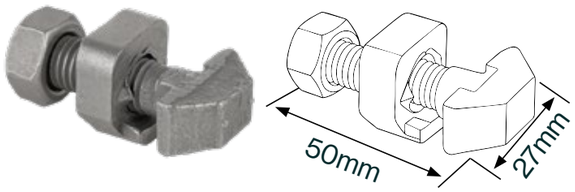
PART NO.	DESCRIPTION	DIMENSIONS
BM80AB	ANGLE BRACKET	95 x 95mm



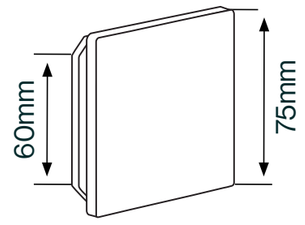
PART NO.	DESCRIPTION	DIMENSIONS
BM80ABG	ANGLE BRACKET WITH GUSSET	150 x 150mm



PART NO.	DESCRIPTION	DIMENSIONS
BM80AB	ANGLE BRACKET	95 x 95mm



PART NO.	DESCRIPTION	DIMENSIONS
BM80BM12	BOLT M12	150 x 150mm



PART NO.	DESCRIPTION	DIMENSIONS
BM80EC	END CAP	150 x 150mm

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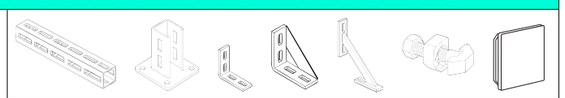

DO NOT SCALE

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Tullamarine, VIC 3043
ABN: 78 602 043 998

AutoCAD

IF IN DOUBT ASK

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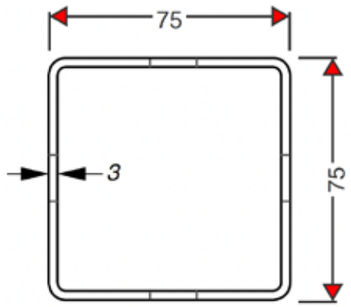
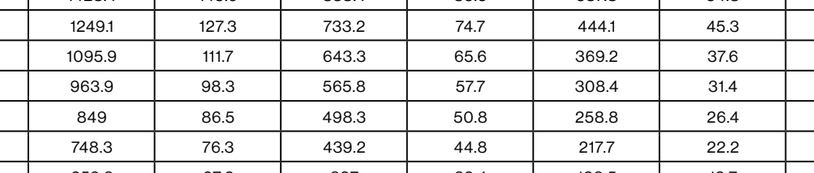


INPUTS	
Profile	BEAMO 80
fy (MPa)	345
E (GPa)	200
Phi ϕ (bending capacity factor)	0.9
y_u (ULS>working divisor)	1.5
Deflection limit: L / N	L/200

PROPERTIES	
Z (mm^3)	15830
I (mm^4)	594000
Self-weight (kg/m)	5.76
Self-weight (N/m)	56.5056

Assumptions

Supports: *Simply supported (pin–roller), no end fixity; span L between bearing centres.*
Member: *Prismatic, straight, constant props; no holes/copes/notches; no camber. Loading: Bending from vertical gravity only; P1 (mid-span), P2 (third-points, each), W (uniform); concentric loads.*
Bearing: *Sufficient bearing/stiffening at supports and load points so local crushing/web yielding is non-governing.*
Material/Facts: *f_y,E per table; ambient temp; ϕ and Gamma_u as stated.*
Serviceability: *Deflection limit L/N at working load; self-weight included.*



	POINT LOAD		DOUBLE POINT LOAD		DISTRIBUTED		TOTAL LOAD ACROSS SPAN
	F1		F2		w		W
Length L (m)	N	Kg	N each	Kg each	N/m	Kg/m	Kg total
0.5	26200.4	2670.8	19650.3	2003.1	104801.4	10683.1	5341.6
0.75	17455.1	1779.3	13091.3	1334.5	46547	4744.9	3558.6
1	13079	1333.2	9809.2	999.9	26158	2666.5	2666.5
1.25	10450.5	1065.3	7837.9	799	16720.8	1704.5	2130.6
1.5	8695.8	886.4	6521.8	664.8	11594.4	1181.9	1772.8
1.75	7440.4	758.5	5428.3	553.3	8455.5	861.9	1508.4
2	6497.1	662.3	4142.4	422.3	5645.9	575.5	1151
2.25	5552.5	566	3259.1	332.2	3948.5	402.5	905.6
2.5	4473.6	456	2625.8	267.7	2863.1	291.9	729.6
2.75	3673.1	374.4	2155.9	219.8	2137.1	217.8	599.1
3	3062.1	312.1	1797.3	183.2	1633.1	166.5	499.4
3.25	2584.6	263.5	1517	154.6	1272.4	129.7	421.5
3.5	2203.9	224.7	1293.6	131.9	1007.5	102.7	359.5
3.75	1895.1	193.2	1112.3	113.4	808.6	82.4	309.1
4	1640.7	167.3	963	98.2	656.3	66.9	267.6
4.25	1428.4	145.6	838.4	85.5	537.8	54.8	233
4.5	1249.1	127.3	733.2	74.7	444.1	45.3	203.7
4.75	1095.9	111.7	643.3	65.6	369.2	37.6	178.7
5	963.9	98.3	565.8	57.7	308.4	31.4	157.2
5.25	849	86.5	498.3	50.8	258.8	26.4	138.5
5.5	748.3	76.3	439.2	44.8	217.7	22.2	122
5.75	659.3	67.2	387	39.4	183.5	18.7	107.5
6	580.1	59.1	340.5	34.7	154.7	15.8	94.6

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