

TECHNICAL INFORMATION

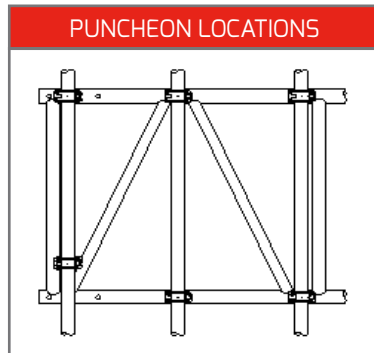
D78 ALUMINIUM SCAFFOLD BEAM

TIS17001C

ARTICLE	IMAGE	DESCRIPTION	WEIGHT (kg)
BA0018		D78 Ridge 18°	7.68
BA0036		D78 Ridge 36°	10.92
BA0118		D78 Eaves Beam	5.61
BA1000		D78 Beam 1.0m	6.35
BA2000		D78 Beam 2.0m	11.52

ARTICLE	IMAGE	DESCRIPTION	WEIGHT (kg)
BA3000		D78 Beam 3.0m	16.82
BA4000		D78 Beam 4.0m	22.14
BA5000		D78 Beam 5.0m	27.62
BA6000		D78 Beam 6.0m	32.67
B50001		D78 Spigot 6HS	1.41

CROSS SECTIONAL PROPERTIES
<p> Cx: 2.415 cm Cz: 36.60 cm Ax: 12.3 cm² Ixx: 16519.9 cm⁴ Izz: 29.9 cm⁴ E: 70,000 N/mm² </p>



CONNECTIONS
<p>2xAF0001 B50001</p>
<p>4xAF0001 B50001</p>
<p>6xAF0001 B50001</p>

PERMISSIBLE BENDING MOMENT (kNm)		PERMISSIBLE SHEAR FORCE (kN)	
Joint, 1 bolt each side, all lacing intervals (not recommended) :	18.80	All restraint intervals :	23.71
Joint, 2 bolts each side, all lacing intervals:	36.70		
Joint, 3 bolts each side, all lacing intervals :	54.50		
Beam, compression chord lacing at 1.0m c/c ^(See Note IX) :	38.84 * req. 6 bolts total at each joint	MAXIMUM SINGLE POINT LOAD LIMITED TO 23.7kN ACROSS ALL LOAD CONDITIONS.	
Beam, compression chord lacing at 1.2m c/c ^(See Note IX) :	31.86 * req. 4 bolts total at each joint		

COMPRESSION CHORD LACING AT 1.0-1.3M C/C SEE NOTE VIII		SPAN (m)				
		4.0	6.0	8.0	10.0	12.0
UNIFORM LOAD	(kN/m)	11.86	7.89	4.83	3.08	2.13
	Deflection (mm)	3.42	11.52	22.26	34.64	49.62
SINGLE POINT LOAD AT MID SPAN	(kN)	23.70	23.70	19.31	15.38	12.75
	Deflection (mm)	2.73	9.22	17.81	27.71	39.70
TWO POINT LOADS AT THIRD SPANS	(kN)	23.70	19.37	14.48	11.54	9.56
	Deflection (mm)	4.66	12.84	22.76	35.41	50.72
THREE POINT LOAD AT QUARTER SPANS	(kN)	15.81	12.92	9.66	7.69	6.38
	Deflection (mm)	4.33	11.94	21.15	32.91	47.14

NOTES	
i)	Safe load data given for guidance only and assumes simple supports each end. Based on global member capacities, local forces should be assessed.
ii)	This TI sheet is to be read in conjunction with the Beam User Guide USG001.
iii)	Material specification for all members EN AW 6082 T6.
iv)	Data provided is calculated in accordance with EN 1999-1-1:2007+A2:2013 using net load factor of 1.65 and factored to EN 12811.
v)	Data provided assumes connection using DESSA steel spigot B50001, secured using 6no. G8.8 M12x60 Bolts with nut.
vi)	All loads must be applied across 2 chords within 150mm from a node point.
vii)	All supports must have a minimum width of 35mm.
viii)	Restraints should be checked as effective. Full compression chord restraint to be either system decking for round tube fitted with appropriate anti-uplift mechanism or EN 39 steel scaffold tube or BS 1139-1.2 alloy scaffold tube connected at 1m c/c using EN 74 90° degree couplers. Advice should be sought from DESSA if alternative methods of restraint are to be used.
ix)	For 4 bolt connections joint moment is decisive. Higher values may only be used where joint positions can be planned.

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