

# TECHNICAL INFORMATION

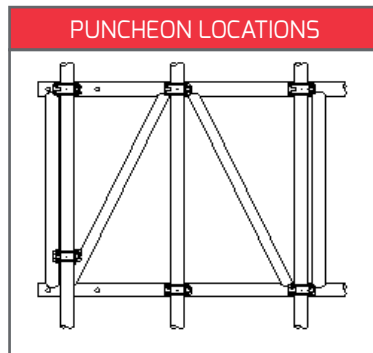
## D78 ALUMINIUM SCAFFOLD BEAM

### TIS17001A

ARTICLE	IMAGE	DESCRIPTION	WEIGHT (kg)
BA0018		D78 Ridge 18°	7.50
BA0036		D78 Ridge 36°	11.10
BA0118		D78 Eaves Beam	5.75
BA1000		D78 Beam 1.0m	6.34
BA2000		D78 Beam 2.0m	11.63
BA3000		D78 Beam 3.0m	16.92

ARTICLE	IMAGE	DESCRIPTION	WEIGHT (kg)
BA4000		D78 Beam 4.0m	22.21
BA5000		D78 Beam 5.0m	27.50
BA6000		D78 Beam 6.0m	32.80
B50001		D78 Spigot 6HS	1.41
B50003		D78 Spigot 4HS	1.44

CROSS SECTIONAL PROPERTIES
<p>           Cx: 2.415 cm            Cz: 36.60 cm            Ax: 12.3 cm<sup>2</sup>            Ixx: 16519.9 cm<sup>4</sup>            Izz: 29.9 cm<sup>4</sup> </p>



CONNECTIONS	
	B50001, B50002, B50003, B50004
	B50001, B50002, B50003, B50004
	B50001, B50002

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 <sup>(See Note 9)</sup> :	38.84 * req. 6 bolts total at each joint	<b>MAXIMUM SINGLE POINT LOAD LIMITED TO 23.7kN ACROSS ALL LOAD CONDITIONS.</b>	
Beam, compression chord lacing at 1.2m c/c <sup>(See Note 9)</sup> :	31.86 * req. 4 bolts total at each joint		

COMPRESSION CHORD LACING AT 1.0-1.3M C/C		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  |
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| 1a. Safe load data given for guidance only and assumes simple supports each end.   |
| 1b. Safe load data tables based on global member capacities, local forces should be assessed specifically by project.    |
| 2. This TI sheet is to be read in conjunction with the Beam User Guide USG001.   |
| 3. Data provided is calculated in accordance with EN 1999 and factored to EN 12811.                                      |
| 4. Data provided assumes spigoted connections using DESSA steel spigot B50001 or B50003 or aluminium B0002, B0004.       |
| 5. All spigoted connections secured using quick release pin AF0001 or G8.8 M12x60 Bolt with nut AF0007                   |
| 6. All loads must be applied across 2 chords within 150mm from a node point.   |
| 7. All supports must have a minimum width of 35mm.   |
| 8. Lacing tubes must be connected using a minimum 3kN connection.  |
| 9. For 4 bolt connections joint moment is decisive. Higher values may only be used where joint positions can be planned. |

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