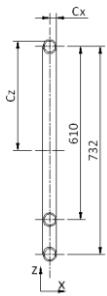


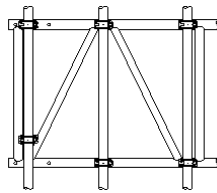
Article	Image	Description	Weight
BA1000		D78 Beam 1.0m	8.17
BA2000		D78 Beam 2.0m	9.17
BA3000		D78 Beam 3.0m	17.17
BA4000		D78 Beam 4.0m	23.07
BA5000		D78 Beam 5.0m	27.92
BA6000		D78 Beam 6.0m	33.62
BS0001		D78 Spigot 6HS	1.50
BS0002		D78 Spigot 4HS	0.65

**Cross section:**

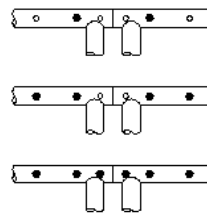


Cx: 2.415 cm  
Cz: 36.60 cm  
Ax: 12.3 cm<sup>2</sup>  
Ixx: 16519.9 cm<sup>4</sup>  
Izz: 29.9 cm<sup>4</sup>

**Puncheon locations:**



**Connections:**



BS0001,BS0002,  
BS0003,BS0004

BS0001,BS0002,  
BS0003, BS0004

BS0001, BS0002

**Permissible bending moment (kNm):**

Joint, 1 bolt each side, all lacing intervals(not recommended) :-	18.80
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> :-	<b>38.84</b> * requires 6 bolts total at each joint
Beam, compression chord lacing at 1.2m c/c <sup>(See Note 9)</sup> :-	31.86 * requires 4 bolts total at each joint

**Permissible shear force (kN):**

All restraint intervals :-	<b>23.71</b>
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**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

**Maximum single point load limited to 23.7kN across all load conditions.**

**Notes:**

- 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 BS0001 or BS0003 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.