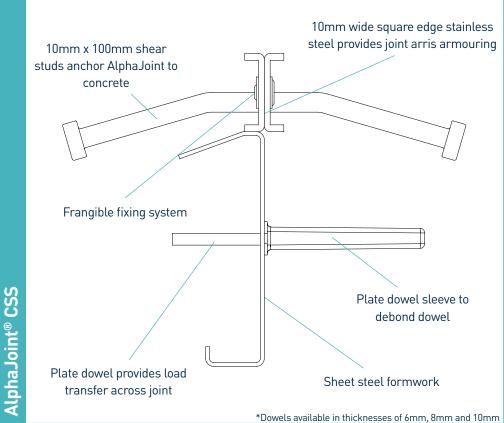


Alpha Joint CSS





Specification Sheet Issue 3.8 01/08/2023









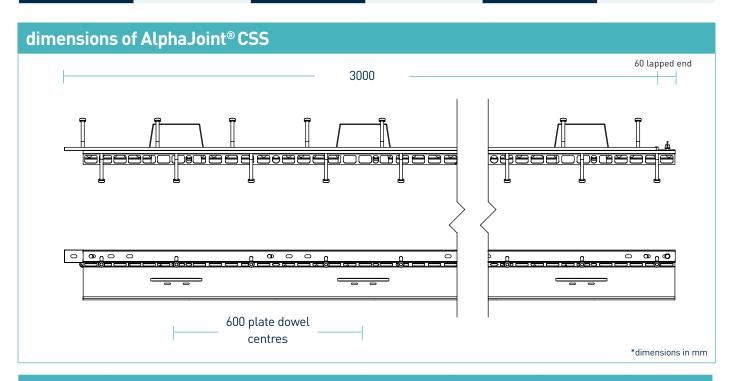


AlphaJoint® CSS

Specification Sheet Issue 3.8 01/08/2023

manufacturing tolerances

Length±2.0mmHeight±1mmStraightness±0.5mm/600mm



dimensions and weight of AlphaJoint® CSS

Nominal Slab Depth (mm)	Joint Height, h (mm)	Dowel Size (mm)	Dowel Centres (mm)	Length (mm)	Single Joint Weight (kg)	Number Per Bundle	Bundle Weight (kg)
150	130	151 x 120 x 8	600	3000	20	45	1025
175	150				21	40	965
200	175				22	40	1055
225	200				23	40	1045
250	225				24	40	1085

Typical height and length values shown only. Weight values shown are based on AlphaJoint® CSS including TD8 dowels and are approximate.

materials

Component	Material				
Joint arris armouring (CSS)	EN 10088-2 1.4301 304L				
Sheet steel formwork	EN 10130:2006 DC01				
Shear stud	EN ISO 13918:2017 S235J2				
Plate dowel	EN 10025-2:2004 S275JR				
Plate dowel sleeve	HDPP				











AlphaJoint® CSS

Specification Sheet Issue 3.8 01/08/2023

theoretical calculated ultimate loads at failure of dowel or concrete

(For typical slabs, 40N/n	nm ² concrete and 20mm joint opening)	Unreinforced Slab		
Slab Depth (mm)	Dowel Type	Bursting (kN/m)	Bending (kN/m)	
	TD6	35.7	53.4	
150	TD8	35.7	87.2	
	TD10	35.7	124.7	
	TD6	35.7	53.4	
175	TD8	35.7	87.2	
	TD10	35.7	124.7	
	TD6	35.7	53.4	
200	TD8	35.7	87.2	
	TD10	35.7	124.7	
	TD6	60.7	53.4	
225	TD8	60.7	87.2	
	TD10	60.7	124.7	
	TD6	72.6	53.4	
250	TD8	72.6	87.2	
	TD10	72.6	124.7	
	TD6	85.6	53.4	
275	TD8	85.6	87.2	
	TD10	85.6	124.7	
	TD6	86.9	53.4	
300	TD8	86.9	87.2	
	TD10	86.9	124.7	
	TD6	82.1	53.4	
325	TD8	82.1	87.2	
	TD10	82.1	124.7	









AlphaJoint® CSS

Specification Sheet Issue 3.8 01/08/2023



Ultimate load (kN/m)

This table shows the load at failure in bursting (failure of the concrete) and bending (failure of the dowel) for a joint opening of 200 - larger joint openings can be accommodated. The ultimate load has been calculated in accordance with TR34 4th Edition. Dowel positions taken at mid depth of slab. For more detailed analysis please contact RCR Flooring Products Ltd.

*All design calculations should be verified by a suitably qualified structual engineer.

