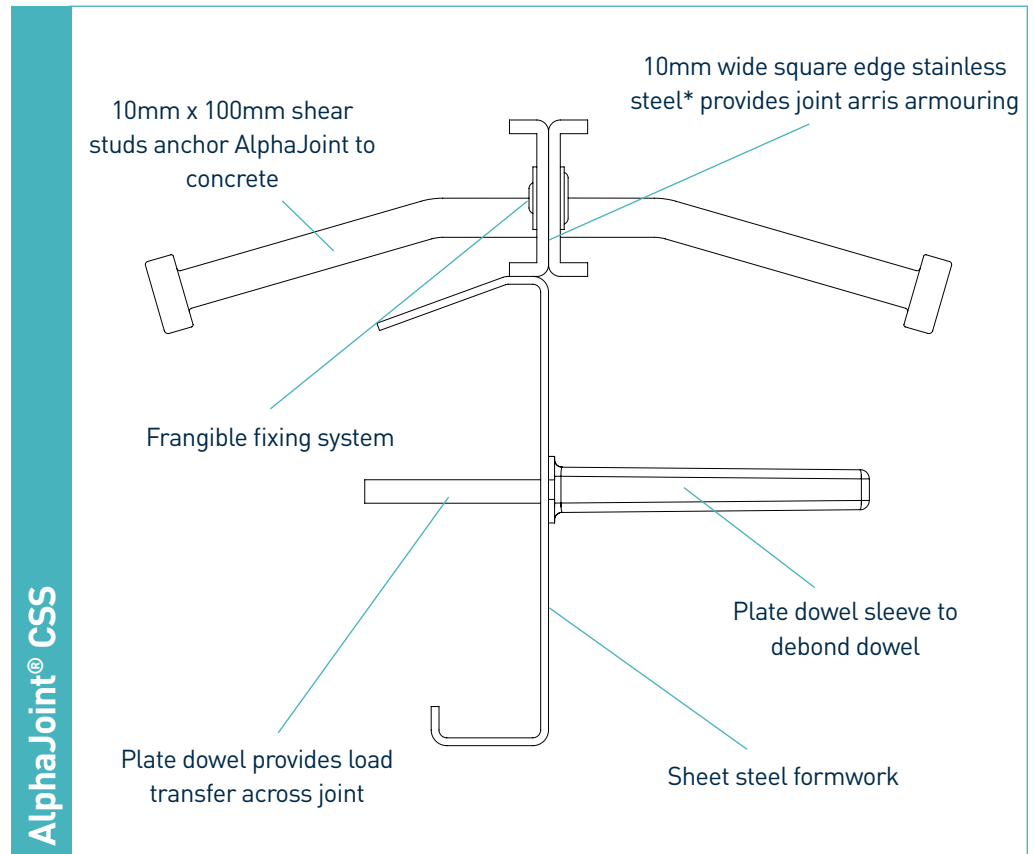


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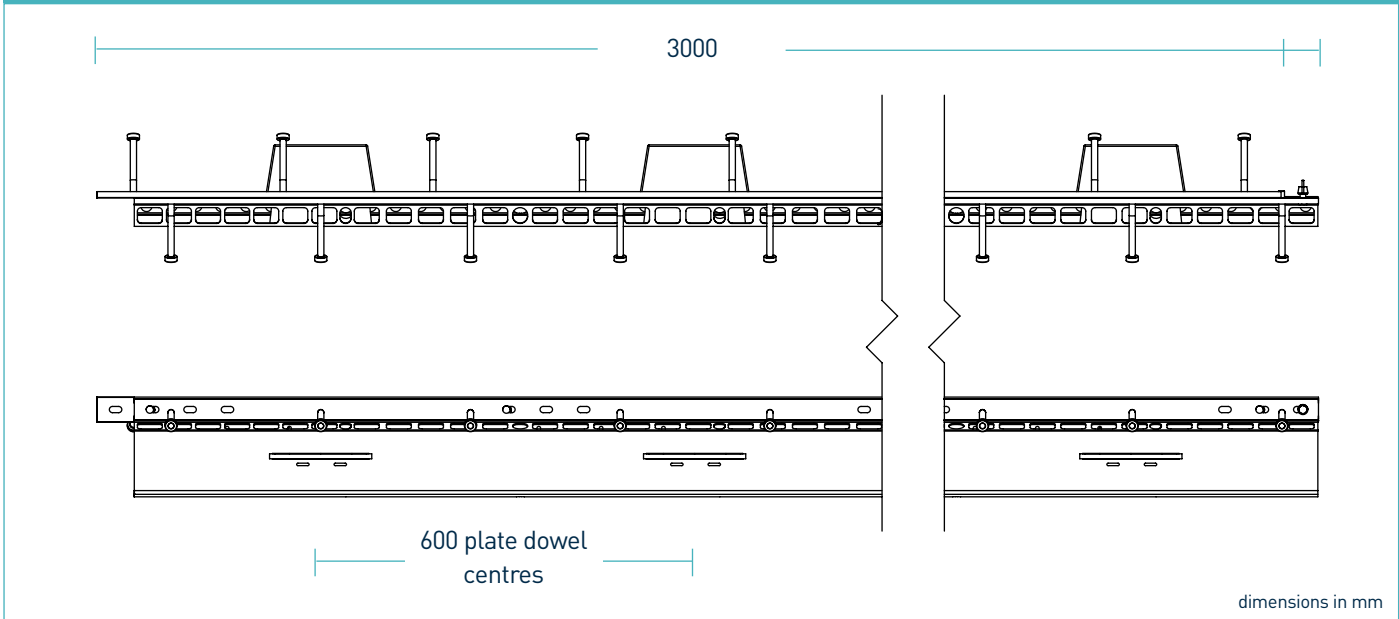
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manufacturing tolerances

Length	±2.0mm	Height	±1mm	Straightness	±0.5mm/600mm
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dimensions of AlphaJoint® CSS



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	21.7	63	1487.1
170	150				22.6	61	1498.6
190	175				23.8	52	1357.6
210	200				24.9	52	1414.8

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

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theoretical calculated ultimate loads at failure of dowel or concrete

(For typical slabs, 40N/mm² concrete and 20mm joint opening)

Slab Depth (mm)	Dowel Type	Unreinforced Slab	
		Bursting (kN/m)	Bending (kN/m)
150	TD6	31.2	53.4
	TD8	31.2	87.2
	TD10	31.2	124.7
175	TD6	40.0	53.4
	TD8	40.0	87.2
	TD10	40.0	124.7
200	TD6	49.9	53.4
	TD8	49.9	87.2
	TD10	49.9	124.7
225	TD6	60.7	53.4
	TD8	60.7	87.2
	TD10	60.7	124.7
250	TD6	72.4	53.4
	TD8	72.4	87.2
	TD10	72.4	124.7
275	TD6	85.6	53.4
	TD8	85.6	87.2
	TD10	85.6	124.7
300	TD6	86.9	53.4
	TD8	85.9	87.2
	TD10	85.9	124.7

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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 structural engineer.

compatible dowel systems

