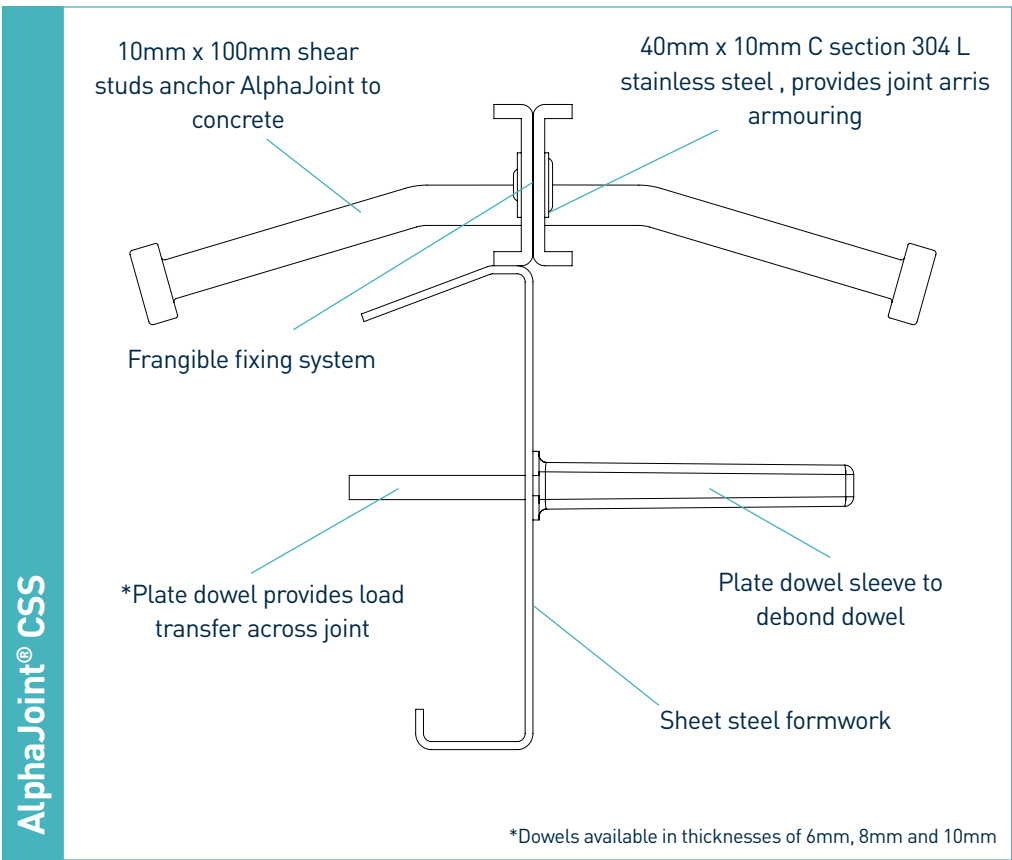


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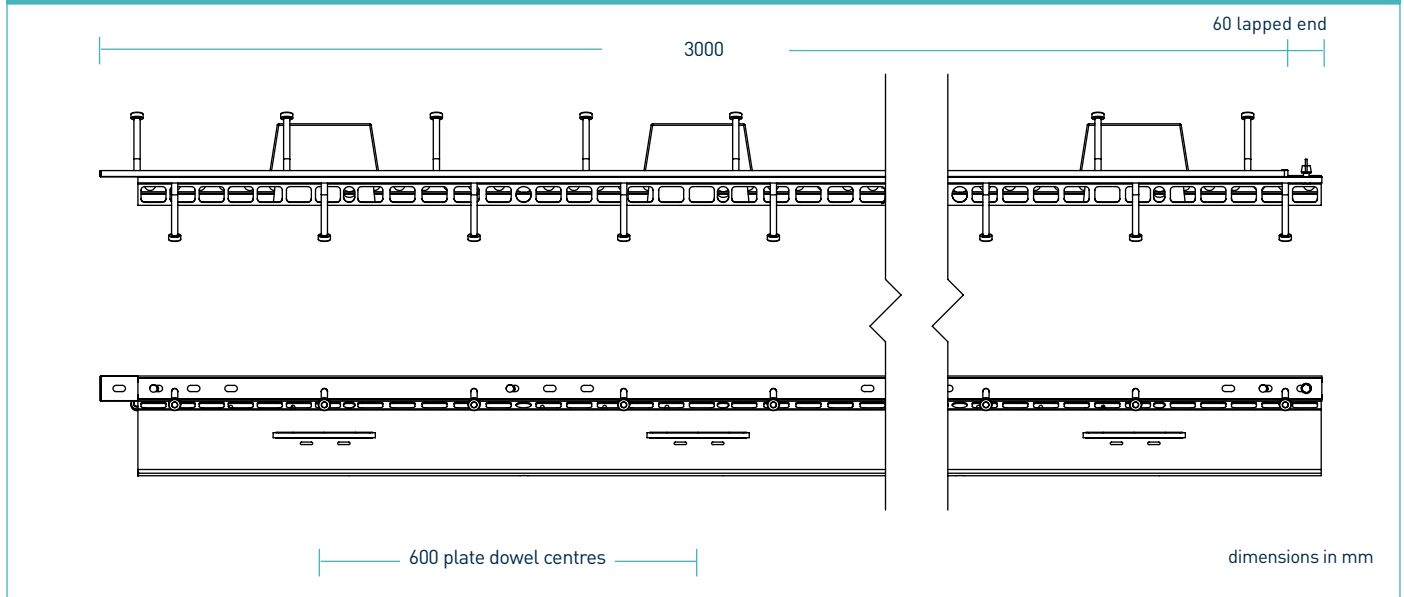
manufacturing tolerances

Length ±2.0mm

Height ±1mm

Straightness ±0.5mm/600mm

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	125	151 x 120 x 8	600	3000	20	45	1025
175	150				21	40	965
200	175				22	40	1005
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

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theoretical calculated ultimate loads at failure of dowel or concrete

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

Unreinforced Slab

Slab Depth (mm)	Dowel Type	Bursting (kN/m)	Bending (kN/m)
150	TD6	30.2	53.0
	TD8	30.2	86.2
	TD10	30.2	123.0
175	TD6	38.7	53.0
	TD8	38.7	86.2
	TD10	38.7	123.0
200	TD6	48.3	53.0
	TD8	48.3	86.2
	TD10	48.3	123.0
225	TD6	58.8	53.0
	TD8	58.8	86.2
	TD10	58.8	123.0
250	TD6	70.3	53.0
	TD8	70.3	86.2
	TD10	70.3	123.0
275	TD6	82.9	53.0
	TD8	82.9	86.2
	TD10	82.9	123.0
300	TD6	84.2	53.0
	TD8	84.2	86.2
	TD10	84.2	123.0
325	TD6	79.5	53.0
	TD8	79.5	86.2
	TD10	79.5	123.0

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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 20mm - 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

