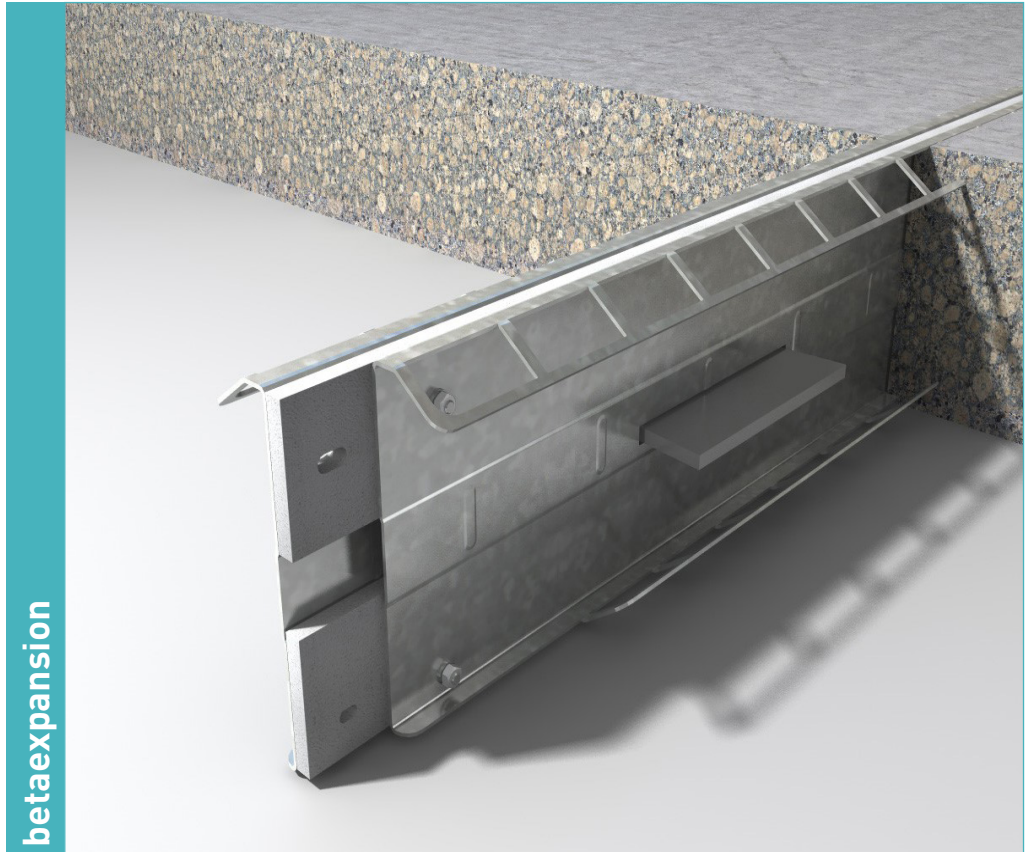
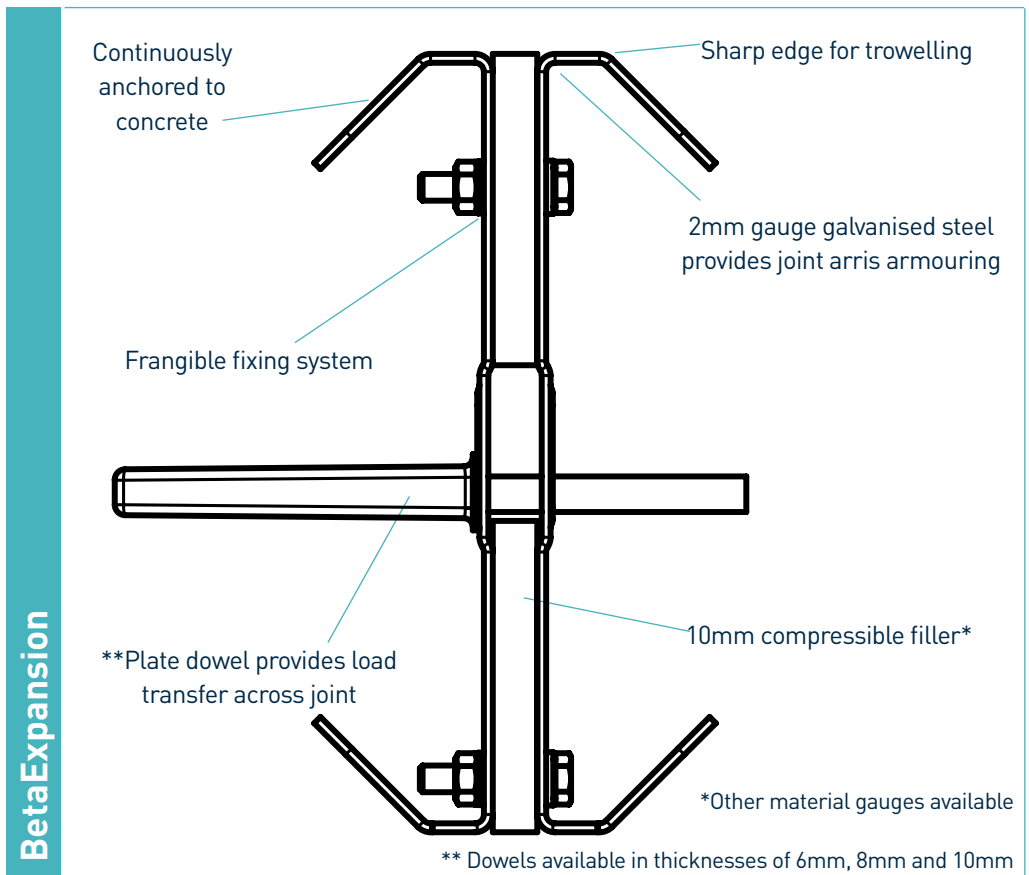


# BetaExpansion

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betaexpansion



BetaExpansion

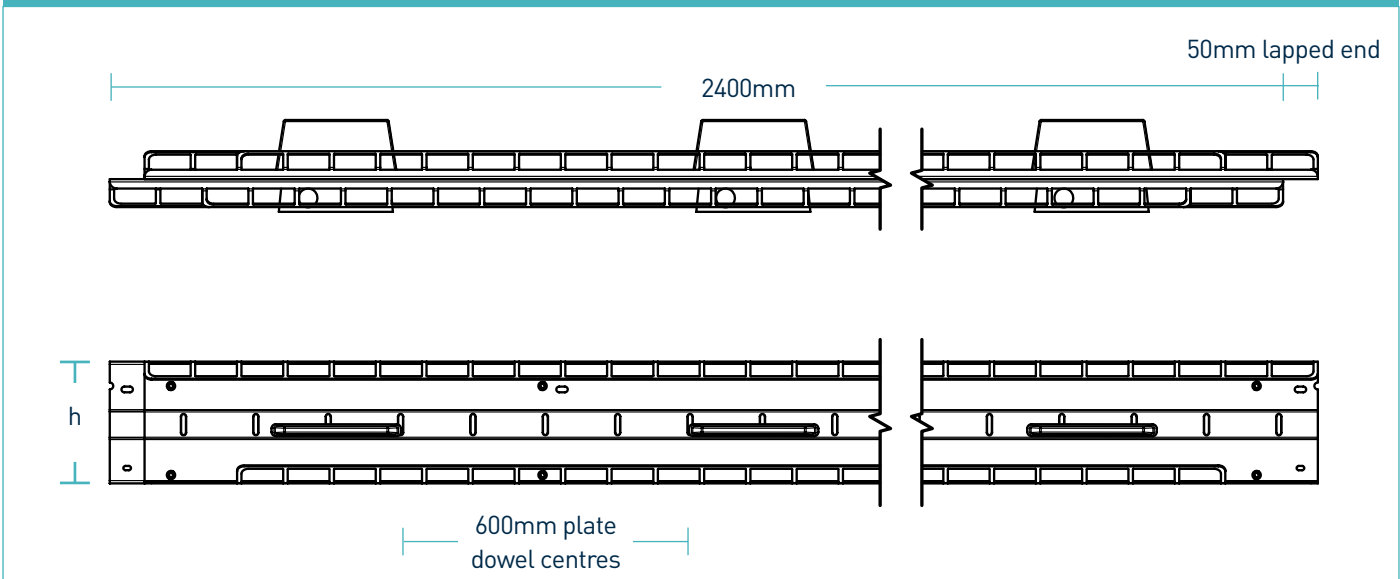
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## manufacturing tolerances

<b>Length</b>	±2.0mm	<b>Height</b>	±1mm	<b>Straightness</b>	±0.5mm/600mm
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## dimensions of BetaExpansion



## dimensions and weight of BetaExpansion

Nominal Slab Depth (mm)	Joint Height, h (mm)	Dowel Size (mm)	Dowel Centres (mm)	Length (mm)	Single Joint Weight (kg)	Number Per Bundle	Weight per bundle incl packaging @ 120 kg
150	130	151 x 120 x 8	600	2400	15.3	72	1222 kg
175	150				17.0	60	1140 kg
200	175				19.5	48	1056 kg
225	200				21.4	48	1147.2 kg

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

## materials

Component	Material
Joint arris armouring	EN 10346: 2015 Dx514+Z
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/mm<sup>2</sup> 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	86.9	87.2
	TD10	86.9	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 200mm – larger joint openings can be accommodated. The ultimate load has been calculated in accordance with TR34 4th edition. Dowel position taken at mid depth 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

