



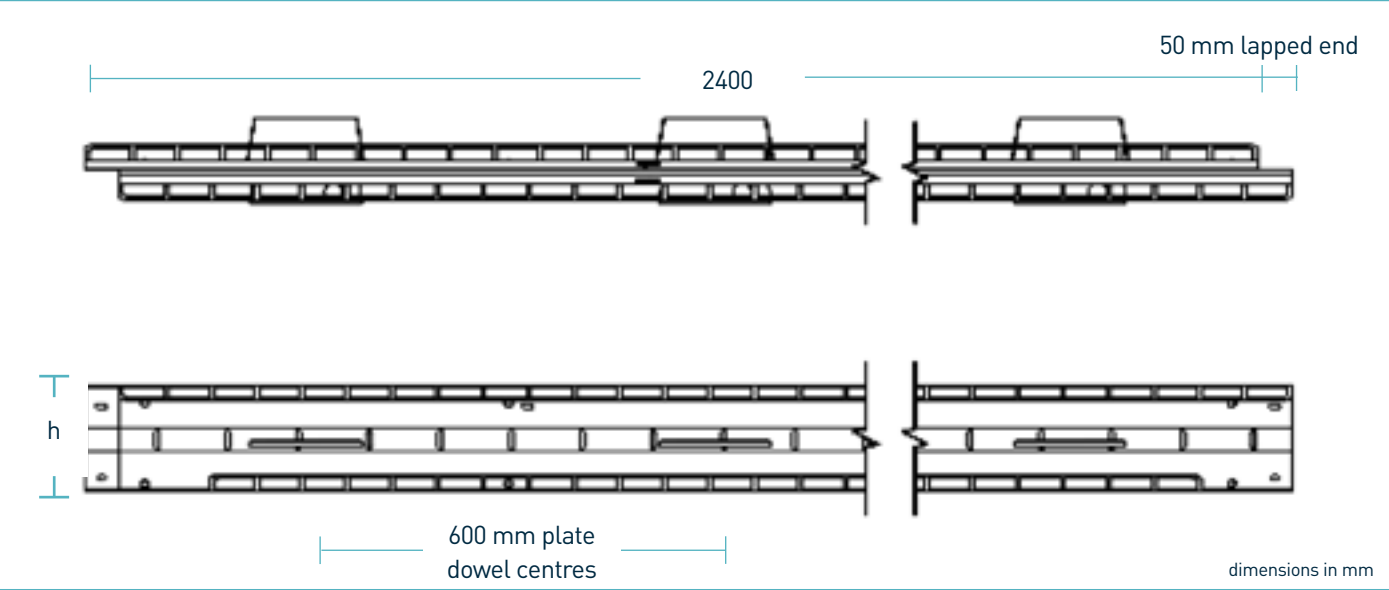
BetaExpansion®

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manufacturing tolerances

Length	±2.0mm	Height	±1mm	Straightness	±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	Bundle Weight (kg)
150	130	151 x 120 x 8	600	2400	15.5	66	1148
175	150				17.5	55	1087.5
200	175				19.5	44	983
225	200				21.5	44	1071

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 Dx51D+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/mm² concrete and 20mm joint opening)

		Unreinforced Slab	
Slab Depth (mm)	Dowel Type	Bursting (kN/m)	Bending (kN/m)
150	TD6	35.7	53.4
	TD8	35.7	87.2
	TD10	35.7	124.7
175	TD6	35.7	53.4
	TD8	35.7	87.2
	TD10	35.7	124.7
200	TD6	35.7	53.4
	TD8	35.7	87.2
	TD10	35.7	124.7
225	TD6	60.7	53.4
	TD8	60.7	87.2
	TD10	60.7	124.7
250	TD6	72.6	53.4
	TD8	72.6	87.2
	TD10	72.6	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
325	TD6	82.1	53.4
	TD8	82.1	87.2
	TD10	82.1	124.7

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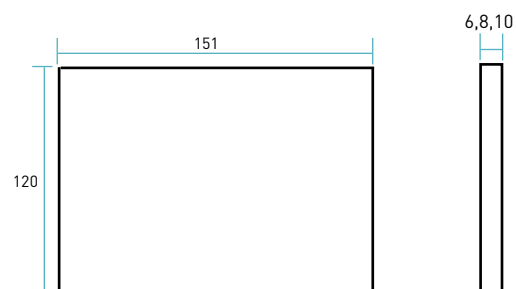
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Ultimate load (kN/m)

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 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



Dimensions in mm