





Specification Sheet Issue 4.8

01/08/2023





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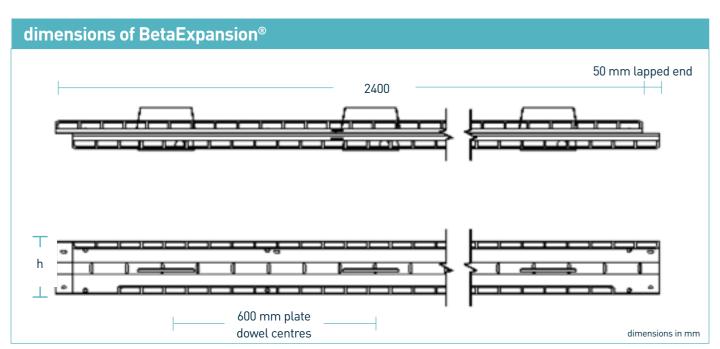
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manufacturing tolerances ±2.0mm ±0.5mm/600mm



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

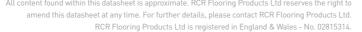
Typical height and length values shown only. Weight values shown are based on BetaExpansion® including TD8 dowels and are approximate.

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

Stab Depth (mm) Dowel Type Bursting (kN/m) Bending (kN/m) 150 TD6 35.7 53.4 150 TD8 35.7 87.2 170 35.7 124.7 175 TD8 35.7 87.2 17010 35.7 124.7 200 TD8 35.7 87.2 17010 35.7 124.7 225 TD8 60.7 53.4 225 TD8 60.7 87.2 17010 60.7 124.7 250 TD8 72.6 53.4 250 TD8 85.6 87.2 170 85.6 124.7 275 TD8 85.6 87.2 170 86.9 53.4 <t< th=""><th>or typical slabs, 40N/mm² concr</th><th>rete and 20mm joint opening)</th><th colspan="3">Unreinforced Slab</th></t<>	or typical slabs, 40N/mm² concr	rete and 20mm joint opening)	Unreinforced Slab		
TD8 35.7 87.2 TD10 35.7 124.7 TD6 35.7 53.4 TD8 35.7 87.2 TD10 35.7 87.2 TD10 35.7 124.7 TD6 35.7 53.4 TD6 35.7 53.4 TD7 TD8 35.7 53.4 TD8 35.7 87.2 TD9 35.7 53.4 TD9 35.7 124.7 TD9 60.7 53.4 TD9 60.7 87.2 TD10 60.7 124.7 TD9 60.7 124.7 TD9 72.6 53.4 TD9 72.6 87.2 TD10 72.6 87.2 TD10 85.6 53.4 TD10 85.6 87.2 TD10 85.6 87.2 TD10 85.6 124.7 TD6 86.9 53.4 TD8 86.9 53.4 TD9 86.9 53.4	Slab Depth (mm)	Dowel Type	Bursting (kN/m)	Bending (kN/m)	
TD10 35.7 124.7 TD6 35.7 53.4 TD8 35.7 87.2 TD10 35.7 124.7 TD6 35.7 53.4 200 TD8 35.7 53.4 200 TD8 35.7 87.2 TD10 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 87.2 TD10 85.6 124.7 TD6 86.9 53.4 300 TD8 86.9 53.4 300 TD8 86.9 97.2 TD10 86.9 124.7 TD6 86.9 53.4 325 TD8 86.9 124.7		TD6	35.7	53.4	
TD6 35.7 53.4 175 1708 35.7 87.2 17010 35.7 124.7 124.7 1706 35.7 53.4 124.7 1706 35.7 53.4 124.7 1706 35.7 53.4 124.7 1700 35.7 124.7 1700 35.7 124.7 1700 35.7 124.7 1700 35.7 124.7 1700 53.4 1700 50.7 124.7 1700 60.7 124.7 1700 60.7 124.7 1700 72.6 72.6 72.6 72.6 72.6 72.6 72.6 72.6	150	TD8	35.7	87.2	
175 TD8 35.7 87.2 TD10 35.7 124.7 TD6 35.7 53.4 TD8 35.7 87.2 TD10 35.7 124.7 TD6 60.7 53.4 TD10 60.7 87.2 TD10 60.7 124.7 TD6 72.6 53.4 TD8 72.6 124.7 TD6 85.6 53.4 TD10 72.6 124.7 TD6 85.6 87.2 TD10 85.6 124.7 TD6 86.9 53.4 TD10 86.9 53.4 TD10 86.9 124.7 TD6 86.9 87.2 TD10 86.9 124.7 TD6 86.9 124.7 TD6 86.9 124.7 TD6 86.9 124.7 TD6 86.9 124.7 TD7 7D6 86.9 124.7 TD8 86.9 124.7 TD8<		TD10	35.7	124.7	
TD10 35.7 124.7 TD6 35.7 53.4 TD8 35.7 87.2 TD10 35.7 124.7 TD6 60.7 53.4 TD8 60.7 87.2 TD10 60.7 124.7 TD6 72.6 53.4 TD8 72.6 87.2 TD10 72.6 87.2 TD10 72.6 124.7 TD6 85.6 53.4 TD8 85.6 87.2 TD10 85.6 124.7 TD8 86.9 53.4 TD8 86.9 87.2 TD10 86.9 124.7 TD6 82.1 53.4		TD6	35.7	53.4	
TD6 35.7 53.4 TD8 35.7 87.2 TD10 35.7 124.7 TD6 60.7 53.4 TD8 60.7 87.2 TD10 60.7 124.7 TD6 72.6 53.4 TD10 72.6 87.2 TD10 72.6 124.7 TD6 85.6 53.4 TD8 85.6 87.2 TD10 85.6 124.7 TD6 86.9 53.4 TD8 86.9 87.2 TD10 86.9 124.7 TD6 82.1 53.4 TD6 82.1 53.4	175	TD8	35.7	87.2	
200 TDB 35.7 87.2 TD10 35.7 124.7 TD6 60.7 53.4 60.7 87.2 TD10 60.7 124.7 TD6 72.6 53.4 TD7 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	35.7	124.7	
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 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 TD10 86.9 124.7 TD6 82.1 53.4 325 TD8 82.1 53.4		TD6	35.7	53.4	
TD6 60.7 53.4 TD8 60.7 87.2 TD10 60.7 124.7 TD6 72.6 53.4 TD8 72.6 87.2 TD10 72.6 124.7 TD6 85.6 53.4 TD8 85.6 87.2 TD10 85.6 124.7 TD6 86.9 53.4 TD8 86.9 87.2 TD10 86.9 124.7 TD6 82.1 53.4 TD6 82.1 53.4	200	TD8	35.7	87.2	
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	35.7	124.7	
TD10 60.7 124.7 TD6 72.6 53.4 TD8 72.6 87.2 TD10 72.6 124.7 TD6 85.6 53.4 TD8 85.6 53.4 TD8 85.6 87.2 TD10 85.6 124.7 TD10 85.6 124.7 TD6 86.9 53.4 TD8 86.9 87.2 TD10 86.9 124.7 TD10 86.9 124.7 TD10 86.9 124.7 TD10 86.9 124.7		TD6	60.7	53.4	
TD6 72.6 53.4 TD8 72.6 87.2 TD10 72.6 124.7 TD6 85.6 53.4 275 TD8 85.6 87.2 TD00 85.6 124.7 TD10 85.6 124.7 TD6 86.9 53.4 TD8 86.9 87.2 TD10 86.9 124.7	225	TD8	60.7	87.2	
250 TD8 72.6 87.2 TD10 72.6 124.7 TD6 85.6 53.4 275 TD8 85.6 87.2 TD10 85.6 124.7 300 TD6 86.9 53.4 TD10 86.9 87.2 TD10 86.9 124.7 TD6 82.1 53.4 325 TD8 82.1 87.2		TD10	60.7	124.7	
TD10 72.6 124.7 TD6 85.6 53.4 TD8 85.6 87.2 TD10 85.6 124.7 TD6 86.9 53.4 TD8 86.9 87.2 TD10 86.9 124.7		TD6	72.6	53.4	
TD6 85.6 53.4 TD8 85.6 87.2 TD10 85.6 124.7 TD6 86.9 53.4 TD8 86.9 87.2 TD8 86.9 87.2 TD10 86.9 124.7 TD10 86.9 124.7 TD10 86.9 124.7 TD10 82.1 53.4 TD10 87.2	250	TD8	72.6	87.2	
275 TD8 85.6 87.2 TD10 85.6 124.7 TD6 86.9 53.4 TD8 86.9 87.2 TD10 86.9 124.7 TD6 82.1 53.4 325 TD8 82.1 87.2		TD10	72.6	124.7	
TD10 85.6 124.7 TD6 86.9 53.4 TD8 86.9 87.2 TD10 86.9 124.7 TD6 82.1 53.4 325 TD8 82.1 87.2		TD6	85.6	53.4	
TD6 86.9 53.4 TD8 86.9 87.2 TD10 86.9 124.7 TD6 82.1 53.4 TD8 82.1 87.2	275	TD8	85.6	87.2	
300 TD8 86.9 87.2 TD10 86.9 124.7 TD6 82.1 53.4 325 TD8 82.1 87.2		TD10	85.6	124.7	
TD10 86.9 124.7 TD6 82.1 53.4 325 TD8 82.1 87.2		TD6	86.9	53.4	
TD6 82.1 53.4 325 TD8 82.1 87.2	300	TD8	86.9	87.2	
325 TD8 82.1 87.2		TD10	86.9	124.7	
		TD6	82.1	53.4	
TD10 82.1 124.7	325	TD8	82.1	87.2	
		TD10	82.1	124.7	









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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 structual engineer.

