



lpha Joint Cla

Specification Sheet

Issue 6.2

01/08/2023

10mm wide cold drawn, square edge 10mm x 100mm shear steel* provides joint arris armouring studs anchor AlphaJoint to concrete Frangible fixing system AlphaJoint® Classic 4010 Plate dowel sleeve to **Plate dowel provides load debond dowel transfer across joint Sheet steel formwork Universal Extension *Also available in electro-galvanised steel and stainless steel to suit slab depths 150 - 200 **Dowels available in thicknesses of 6mm, 8mm and 10mm









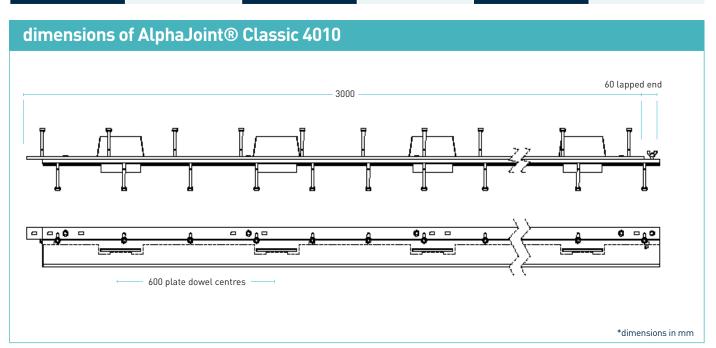


AlphaJoint® Classic 4010

Specification Sheet Issue 6.2 01/08/2023

manufacturing tolerances

Length±2.0mmHeight±1mmStraightness±0.5mm/600mm



dimensions and weight of AlphaJoint® Classic 4010

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 - 200	140 - 190				32	42	1469
225	200	151 x 120 x 8	600	3000	33	35	1280
250	225				34	35	1315

Typical height and length values shown only. Weight values shown are based on AlphaJoint® Classic 4010 including TD8 dowels and are approximate.

materials						
Component	Material					
Joint arris armouring (4010)	EN 10277-1:2018 S235JRC					
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					











AlphaJoint® Classic 4010

Specification Sheet Issue 6.2 01/08/2023

theoretical calculated ultimate loads at failure of dowel or concrete

(For typical slabs, 40N/mm2 concre	ete and 20mm joint opening)	Unreinforced Slab		
Slab Depth (mm)	Dowel Type	Bursting (kN/m)	Bending (kN/m)	
	TD6	35.7	53.4	
Universal Divider Plate to Suit 150 - 200	TD8	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	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	82.1	124.7	









AlphaJoint® Classic 4010

Specification Sheet Issue 6.2 01/08/2023



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 structual engineer.

