



ISEDIO GUARDJOINT ADJUSTABLE

Technical Datasheet

Isedio GuardJoint Adjustable is a zero impact arris protection, leave-in-place formwork and load transfer joint system, suitable for heavy duty industrial concrete floors.

Isedio GuardJoint eliminates impact across the joint from Mechanical Handling Equipment (MHE) such as forklift trucks. The shape of the wave is engineered such that even the smallest wheeled pallet trucks do not cause an impact.

GuardJoint is an excellent solution for high traffic areas such as loading docks, doorways or VNA aisles (non-wireguided) where a transitionless floor is required. It is capable of a maximum joint opening of 25mm. By installing GuardJoint, a floor can be future-proofed for other end uses.

If a sealant free/sealed floor is required, please refer to Isedio ShieldJoint system.

The joint system comprises two horizontal top wave plates with a wave geometry to eliminate impact when driven over. Beneath the wave top plates are load transfer plate dowels and sleeves. The joint is designed such that once cast in-situ, as the two slab panels either side of the joint begin to cure and shrink, the joint separates with one slab panel housing the sleeve and one half top wave assembly and the other panel housing the other half top wave assembly, divider plate and dowel. The dowel bridges across the joint and is embedded in both slab panels.

Formwork for casting a concrete slab is achieved by the vertical divider plate which supports the wave plates and load transfer plate dowels.

Slab arris protection is provided by way of the top wave plates which create a seamless floor thus eliminating impact loads when traversed. The top wave plates are anchored to the concrete by perforated angled wings.









LOAD TRANSFER MECHANISM

Load transfer across the joint is achieved by asymmetric plate dowels and sleeves. The plate dowels are attached to the vertical divider plate and the sleeves are held in place under friction and are detachable as the joint opens up. Using Isedio GuardJoint Adjustable ensures that shear loads are safely transferred across the joint through the plate dowels.

MATERIAL SPECIFICATION

Component	Material	
Top Plate	Hot Rolled (can be supplied in stainless steel or hot dip galvanised)	
Frangible Fastener	Nylon	
Divider Plate	Steel DC01 to BS EN 10130:2006	
Load Transfer Dowel Plate	6mm - S275 steel, 8mm &12mm - S355 steel to BS EN 10025-2:2004	
Sleeve	6mm, 8mm & 12mm - PP	

TECHNICAL INFORMATION

Description	Dimension & Tolerance	
Joint Length	2,800mm +/- 2.0mm	
Max. Joint Opening	25mm	
Straightness	+/- 0.5mm in 600mm	
General Dimensional Tolerance	Dimensions < 12mm +/- 0.5mm Dimensions > 12mm +/- 2.0mm	

The Isedio load transfer system complies with TR34, 4th edition, and information on the design capacities are available in the Isedio Load Transfer Information sheet.







5 x 6mm Dowels (560mm Centres)				
Joint (mm)	Quantity and metres of joint per bundle	Approx. bundle weight including packaging (kg)	Max. no. of bundles, weight and metres per truck	
100 - 130mm	55 off – 158.1m	1,726kg	14 Bundles – 2,213.7m	
130 - 150mm	55 off – 158.1m	1,782kg	13 Bundles – 2,055.6m	
150 - 200mm	44 off – 126.5m	1,475kg	16 Bundles – 2,024m	
200 - 250mm	33 off – 94.9m	1,187kg	16 Bundles – 1,518m	
250 - 300mm	33 off – 94.9m	1,336kg	16 Bundles – 1,518m	

5 x 8mm Dowels (560mm Centres)				
Joint (mm)	Quantity and metres of joint per bundle	Approx. bundle weight including packaging (kg)	Max. no. of bundles, weight and metres per truck	
100 - 130mm	55 off – 158.1m	1,822kg	13 Bundles – 2,055.6m	
130 - 150mm	55 off – 158.1m	1,878kg	12 Bundles – 1,897.5m	
150 - 200mm	44 off – 126.5m	1,552kg	15 Bundles – 1,897.5m	
200 - 250mm	33 off – 94.9m	1,245kg	16 Bundles – 1,518m	
250 - 300mm	33 off – 94.9m	1,394kg	16 Bundles – 1,518m	

5 x 12mm Dowels (560mm Centres)			
Joint (mm)	Quantity and metres of joint per bundle	Approx. bundle weight including packaging (kg)	Max. no. of bundles, weight and metres per truck
100 - 130mm	55 off – 158.1m	2,014kg	12 Bundles – 1,897.5m
130 - 150mm	55 off – 158.1m	2,070kg	11 Bundles - 1,739.4m
150 - 200mm	44 off – 126.5m	1,706kg	14 Bundles - 1,771m
200 - 250mm	33 off – 94.9m	1,360kg	16 Bundles – 1,518m
250 - 300mm	33 off – 94.9m	1,509kg	16 Bundles – 1,518m

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