

Isedio EsseJoint Fixed

Isedio EsseJoint Fixed is a leave-in-place formwork, load transfer and edge protection joint system suitable for heavy duty industrial concrete floors.

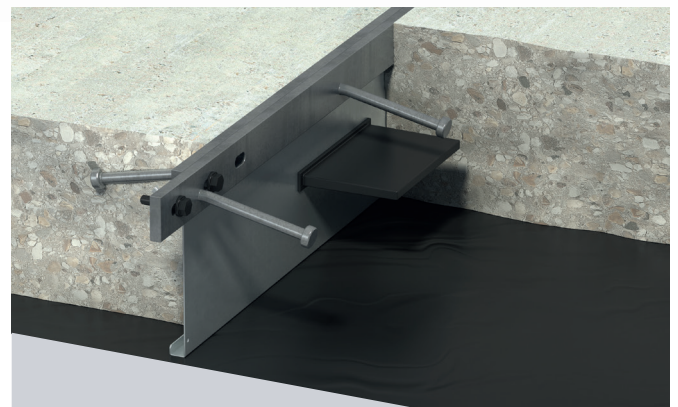
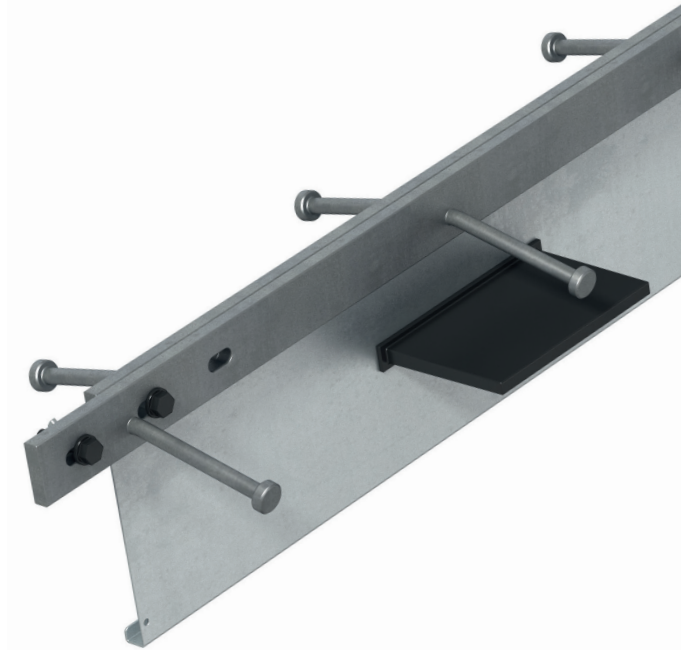
The joint system comprises of a fixed divider plate, load transfer plate dowels and sleeves. The joint is designed such that once cast in-situ, as the two slab panels either side of the joint begin to cure and shrink, the joint separates with one slab panel housing the sleeve and top strip and the other housing the top strip, 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 top strip edge protection and load transfer plate dowels.

Slab arris protection is provided by way of hot rolled steel top strips with shear studs that anchor the top strips in the concrete.

The special Isedio stud welding machine tests the quality of each stud weld to ensure the relevant specifications are met.

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. Intersections for corners, tees and 4 ways are available.



Easy
Installation



Based on
TR34.4



Load Transfer
Through Plate
Dowels



Engineering
Support



Safe
Installation



Minimise Joint
Maintenance Costs



Arris
Protection



Ise dio EsseJoint Fixed

Material specification

Component	Material
Top Strips	10mm×40mm (nominal) bars to S235 TO BS 10025:2019 (can be supplied in hot dip galvanised)
Frangible Fastener	Nylon
Divider Plate	Steel DC01 to BS EN 10130:2006
Load Transfer Dowel Plate	S275 Steel to BS EN 10025-2:2004
Sleeve	Polypropylene - Black

Technical data

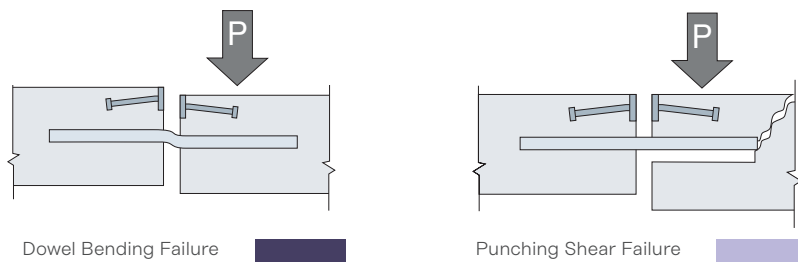
Description	Dimensions & Tolerances
Joint Length	3.000mm +/- 2.0mm
Straightness	+/-2mm in 1000mm
General Dimensional Tolerances	Dimensions < 12mm +/-0.5mm Dimensions > 12mm +/-2.0mm

Packaging information

5 x 6mm Dowels (600mm centres)			
Joint (mm)	Quantity and metres of joint per bundle	Approx. bundle weight inc. packaging (kg)	Max. no. of bundles, weight and metres per truck
130mm	49 off - 147m	1,618kg	14 bundles - 22,650kg - 2,058m
140mm	49 off - 147m	1,635kg	14 bundles - 22,891kg - 2,058m
150mm	49 off - 147m	1,652kg	14 bundles - 23,134kg - 2,058m
160mm	42 off - 126m	1,452kg	16 bundles - 23,229kg - 2,016m
170mm	42 off - 126m	1,467kg	16 bundles - 23,466kg - 2,016m
180mm	42 off - 126m	1,481kg	16 bundles - 23,703kg - 2,016m
190mm	42 off - 126m	1,496kg	16 bundles - 23,940kg - 2,016m

Design capacities

The table below provides the ultimate limit state (ULS) design capacity for 6mm plate dowels with 600mm spacing in C32/40 concrete. Dowel position is considered at the mid height of the slab.



Design shear capacity of Ise dio EsseJoint Fixed in C32/40 concrete with a dowel spacing of 600mm (kN/m)

Dowel Size (mm)	Joint Opening (mm)	Joint Height (mm)					
		130	140	150	160	170	190
135 x 150 x 6	10	22.0	24.9	28.0	31.3	34.7	42.0
	20	22.0	24.9	28.0	31.3	34.7	42.0
	30	21.9	24.8	27.9	30.1	30.1	30.1

Ise dio EsseJoint Fixed is available in sizes less than 130mm and greater than 190mm, details available upon request.