

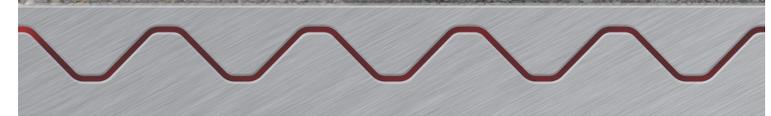
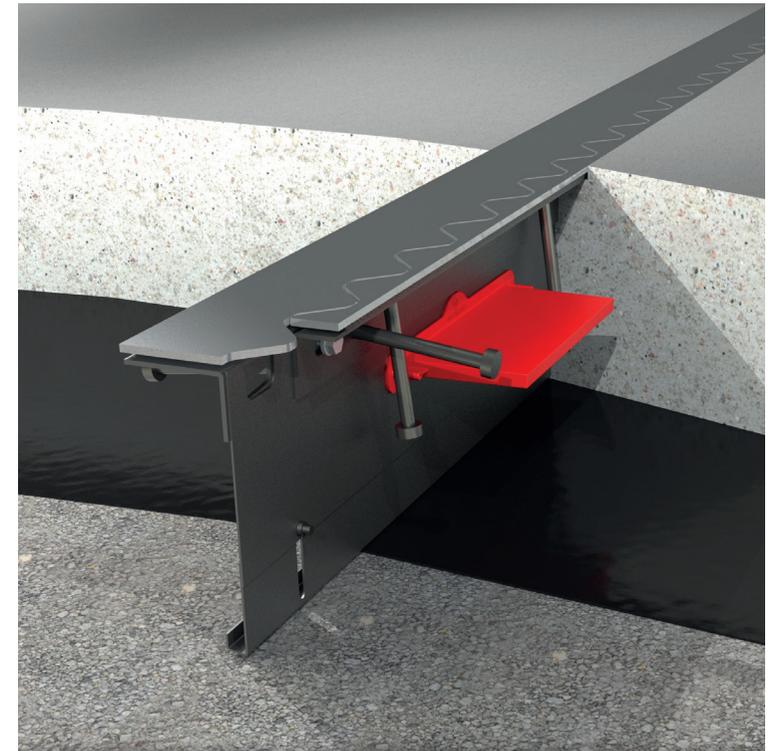
PACKAGING INFORMATION

SHIELDJOINT® WEIGHTS (kg per joint)			
	Joint size (mm)		
Type	150-200	200-250	250-300
Dowels 3 x 8mm	43	44	47
Dowels 3 x 12mm	45	46	49

SHIELDJOINT® QUANTITY PER PALLET			
	Joint size (mm)		
Type	150-200	200-250	250-300
ALL	27	27	27

SHIELDJOINT® WEIGHTS (kg per road freight pallet)			
	Joint size (mm)		
Type	150-200	200-250	250-300
Dowels 3 x 8mm	1243	1274	1353
Dowels 3 x 12mm	1300	1331	1410

SHIELDJOINT® WEIGHTS (kg per sea freight pallet)			
	Joint size (mm)		
Type	150-200	200-250	250-300
Dowels 3 x 8mm	1268	1299	1378
Dowels 3 x 12mm	1325	1356	1435



**TECHNICAL
DATA SHEET**

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Patents Pending

SHIELDJOINT® is an innovative, leave-in-place joint system designed specifically to meet the demanding needs of today's industrial concrete floors. **SHIELDJOINT**® surpasses the requirements of TR34 4th Edition.

SHIELDJOINT® is a 'zero-impact' and 'sealant-free' joint system.

SHIELDJOINT® offers superior performance through innovative design.

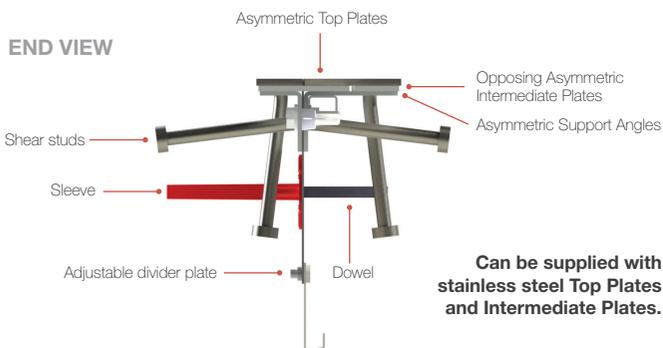
PRODUCT DIMENSIONS AND FEATURES

SHIELDJOINT® is supplied in 1.95m lengths.

PLAN VIEW



END VIEW

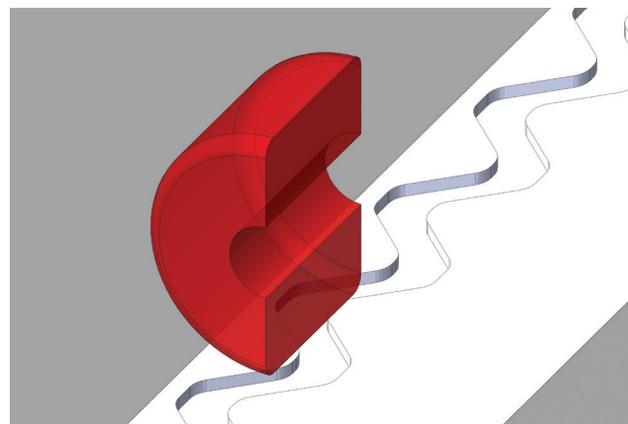


SLAB PANEL EDGE PROTECTION

Traditional joint systems utilise straight steel top strips to reinforce the edges of slab panels. Once the slab panels have cured and shrinkage has taken place, there is a gap between the steel strips. At building handover the gap should be filled with a pliable joint sealant that will accommodate further slab shrinkage. At this stage the purpose of the joint sealant is to prevent detritus from entering the joint. This sealant should then be replaced with a harder sealant once the majority of shrinkage has taken place. The harder joint sealant still prevents detritus from entering the joint but also reduces the impact load that occurs as mechanical handling equipment (MHE) traverses the joint. A traditional joint system will require maintenance of the sealant and possibly minor repairs to the concrete behind the joint during the life of the floor. This approach to slab panel edge protection has been

a successful and common method for many years. Isedio's innovative **SHIELDJOINT**® changes the game by eliminating the need for any joint sealer whatsoever and prevents any impact loads from occurring when the joint is traversed. A truly 'fit and forget' solution.

SECTIONAL VIEW OF WHEEL TRAVERSING SHIELDJOINT®
Bottom dead centre of wheel in simultaneous contact with both sides of joint.



SHIELDJOINT® is anchored into the concrete with shear studs. The shear studs are welded to the joint and each and every shear stud weld is factory tested to ensure its integrity. **SHIELDJOINT**® comprises 'Asymmetric Top Plates' fitted to 'Opposing Asymmetric Intermediate Plates' and 'Asymmetric Support Angles'. This sandwich of steel layers provides load transfer at the surface of the joint thus ensuring the joint remains completely flat across its top surface. This innovation also provides a 'sealed joint' at all times, so sealant is never required. **SHIELDJOINT**® therefore eliminates costly joint sealant, reduces expensive facility down time otherwise required for joint sealant repairs or ongoing re-sealing, and improves pest control by virtue of a 'sealed joint'. **SHIELDJOINT**'S'® 'Asymmetric Top Plates' feature a specifically designed trapezoidal split line, with a wave-length suitable for the narrowest of MHE wheel widths such that even when the joint has achieved 25mm maximum perpendicular joint opening, the MHE wheel is in contact with both sides of the top plates. This design eliminates impact loads as the joint is traversed. No impact loads on the floor, no impact loads on the MHE.

SHIELDJOINT® negates the need for joint sealant and eliminates any impact loads!

DOWEL DESIGN

SHIELDJOINT® uses the same proven 'Asymmetric Plate Dowel' design as **ARMOURJOINT**®. Other traditional joint systems have an inherent design weakness such that the dowel is positioned centrally across the closed joint. From the moment the joint

opens, dowel engagement on the free side reduces, thus moving away from a condition of equal dowel engagement on both sides of the joint. Ultimately, with large joint openings there is a risk of the dowel becoming totally disengaged on the free side and the complete loss of load transfer across the joint. **SHIELDJOINT**® works differently since the dowel is offset 90mm on the sleeve side and 60mm on the fixed side of the joint. As the joint opens, **SHIELDJOINT**® moves towards a condition of equal dowel engagement. Even at a maximum joint opening of 25mm, each side of the joint has a class leading minimum 60mm of dowel engagement in each slab panel. **SHIELDJOINT**® dowels are made from a high grade S355 steel (355 N/mm² yield strength).

SHIELDJOINT® is offered with 3 dowels per 1.95m length (650mm dowel, spacing).

SLEEVE DESIGN

The sleeve forms a barrier between the steel dowel and the concrete slab and allows the concrete to release in two horizontal planes (longitudinal and perpendicular to the joint) on the free side of the joint. Vertical displacement between adjacent slab panels is undesirable as this can lead to a reduction in floor and joint life.

SHIELDJOINT® sleeves are designed to facilitate up to +/- 20mm of longitudinal movement. Other joint systems do not cater for sufficient longitudinal movement between slab panels, thus causing slab lock up, internal stresses and ultimately leading to cracking.

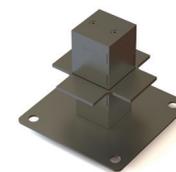
The long term performance of a concrete floor is highly dependent upon the quality and performance of the joint system.

Specify the best, **SHIELDJOINT**® - 'the name says it all'.

ACCESSORIES

One simple Intersection Post is all that is required to create a corner, tee or 4 way intersection.

INTERSECTION POST



ARMOURFIX INSTALLATION JACK



ARMOURFIX installation jacks can be used to set up **SHIELDJOINT**® with the addition of a specific **SHIELDFIX** adaptor.