

## About Permaban

At Permaban, we understand concrete floors. All around the world, for more than 30 years, concrete floors have been constructed using our joint systems and the floor surface enhanced with our dry-shake toppings, surface sealers and joint sealers.

Our true strengths lie in our technical knowledge and product design. We're known for providing design guidance, support and advice to specifiers, clients and contractors alike. When a special product is required for an application, our engineering and design team has the expertise to help, under the disciplines of our ISO9001 accreditation.

A truly international company, we have strong alliances worldwide and an extensive distribution network.

We're proud to list many of the leading logistics, manufacturing, retail and commercial companies in the world as our clients.

B&Q WICKES TESCO ROYAL MAIL PROLOGIS  
GOODMAN GAZELEY FOCUS CASTORAMA  
GOLDBECK HOMEBASE SELCO BIG YELLOW SELF  
STORAGE ALDI ALLIED BAKERIES LIDL IKEA  
MORRISONS SAINSBURY'S PNK RUSSIA  
RADIUS GROUP RUSSIA

Please contact us for further technical information, health & safety guidance, installation instructions and specification advice.



Mill Close, Lee Mill Industrial Estate  
Ivybridge, Devon PL21 9GL

Tel: +44 1752 895288 Fax: +44 1752 690535  
Email: [sales@permaban.com](mailto:sales@permaban.com)  
[www.permaban.com](http://www.permaban.com)



ISO 9001  
FM 532835

## The benefits of using armoured joints

Our armoured joints (properly called "leave-in-place joint systems") offer four important benefits:

- They act as a permanent formwork, creating a secure boundary or day joint during the concrete pour.
- They allow the concrete slab to contract in a controlled way, to prevent random cracks occurring.
- They protect the construction joint from impact damage once the building is in use, saving the expense of repair.
- They allow efficient load transfer between concrete slabs, for a stable and durable floor.

### How armoured joints work

Armoured joints are used to create a boundary in which to contain a day's concrete pour. As the concrete sets and contracts, the two sides of the joint (held together with frangible rivet connectors) are gradually pulled apart horizontally. Dowels fixed through the centre stop the slabs moving vertically and allow for load transfer between the two sections of the floor. Once the floor has contracted, the gap between the two sides can simply be filled with a suitable joint sealant.



Signature in situ



### The value-engineered approach

Traditional-style armoured joints only account for about 5% of the material cost of the floor slab. Joints are a small part of the overall cost - but can make an enormous difference to the floor's lifetime performance.

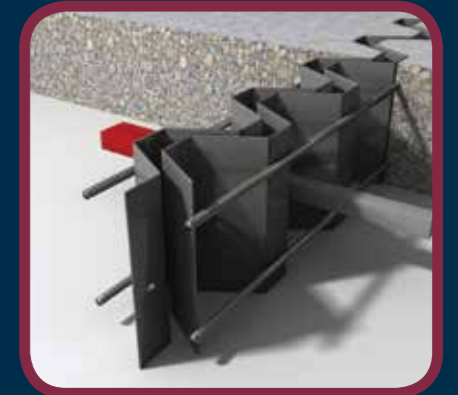
By using a combination of Permaban's armoured joints you can create an optimum specification without a significant cost increase.

For example, using Signature and Eclipse together in a specification will provide superior joint protection, but with a less than 1% increase in material cost. Using Signature alone means only a 3% increase in material cost. But remember that any additional up-front costs will be more than recouped over the life of the building, due to reduced floor and vehicle maintenance costs. The building's versatility, and saleability, can also be improved.

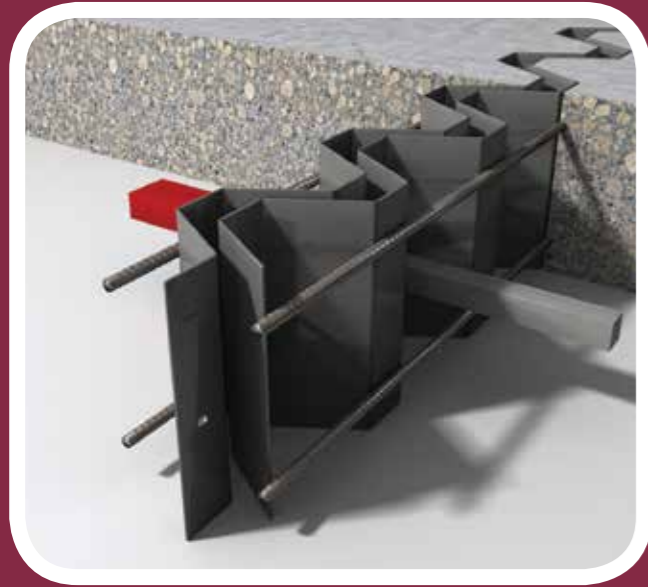
Speak to our technical advisers for further guidance on value engineering using Permaban joints.



armoured joints quick guide



## permaban *Signature*®



Permaban Signature® is an armoured joint like no other. The clever half-hexagon shape prevents the wheels of materials handling vehicles from dropping into the gap between the two edges of the joint. Because there's no impact, there's no damage to either the joint or the truck. Winner of Most Innovative New Product, UK Concrete Show 2012.

### Ideal for:

- General warehousing/distribution centres
- Waste transfer stations
- Cold stores
- Production facilities
- Heavy and light industry

### Specific areas of use:

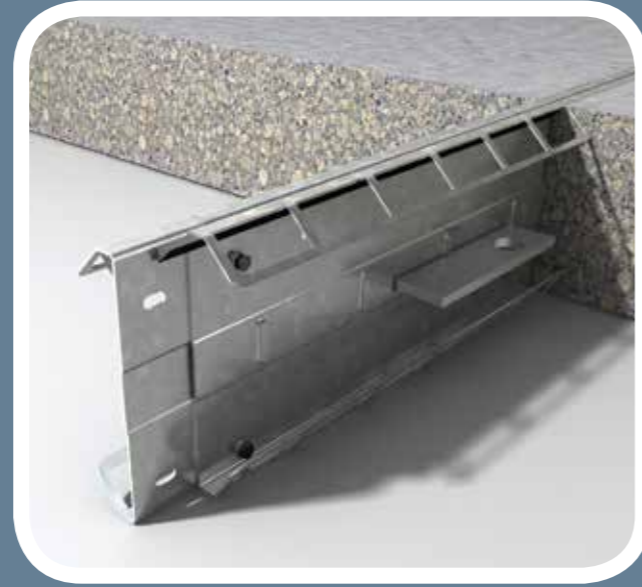
- Defined movement areas
- Transfer aisles, where vehicles pass over joints at 90°
- Dock levellers
- Doorway protection
- Post-tensioned slabs
- Jointless floors

### 'Duty' / wheel type:

- Very heavy duty (small, hard wheels, i.e. motorised pallet trucks)
- Heavy duty (small, hard wheels)



## permaban Eclipse®



Eclipse is a tough, hard-working armoured joint for heavy-duty applications. A high-tensile steel triangular section reinforces the top edge of the joint, so it can withstand heavy and persistent traffic. The full-height divider plate adds to its strength and rigidity, making Eclipse a versatile and economical alternative to a traditional-style joint. Galvanised as standard for internal and external use.

### Ideal for:

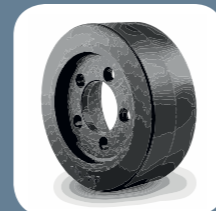
- General warehousing
- Distribution centres
- Production facilities
- Retail developments
- Heavy and light industry

### Specific areas of use:

- Free movement areas
- Transfer aisles
- Doorway protection
- Jointless floors

### 'Duty' / wheel type:

- Heavy duty (small, hard wheels)



## AlphaJoint® Classic 4010



AlphaJoint is probably the best known armoured joint system available, proven in projects around the world for many years. It set the standard for joint armouring in the 1990s, and remains a popular choice for many projects today due to its versatility.

### Ideal for:

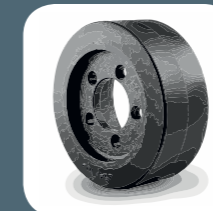
- General warehousing
- Distribution centres
- Production facilities
- Heavy and light industry

### Specific areas of use:

- Free movement areas
- Transfer aisles
- Doorway protection
- Jointless floors

### 'Duty' / wheel type:

- Heavy duty (small, hard wheels)



## BetaJoint®



Tough and sturdy, yet remarkably light – the BetaJoint range offers medium-duty construction joint protection in concrete floors and pavements. Continuous concrete ties ensure firm anchoring into the concrete along its entire length. Choose BetaExpansion (pictured above) for external slabs; and BetaEdge if using traditional removable timber or steel formwork.

### Ideal for:

- Light industry
- Pedestrian traffic areas

### Specific areas of use:

- Jointless floors
- Pedestrian traffic areas
- As a leave-in-place screed rail
- Free movement areas
- External yards (BetaExpansion)

### 'Duty' / wheel type:

- Medium duty (pneumatic tyres)

