The joint is the problem… so why replace a joint with a joint?

The joint is only a problem because it is a straight joint. Signature AR is different. Because of its shape, MHE can move across the joint in any direction, without causing impact on the joint or the vehicle. It’s as though there is no joint at all.

If you have a damaged straight joint, Signature AR is actually an opportunity to upgrade your joint to something better, and solve the problems you’ve experienced once and for all!

Why is this better than other repair joints on the market?

Signature AR is a development based on Permaban Signature, our industry-changing ‘disruptive face’ armoured joint. Permaban Signature offers superior, long-term joint protection in new buildings by preventing impact damage occurring – and Signature AR brings the same benefits to joint repairs.

In terms of its installation, unlike some other repair systems Signature AR does not need to be attached to the existing slab – it sits entirely within the site of the repair. It’s also very easy to install and is highly versatile too, as it is both non-corrosive and non-conductive.
Why spend out for more than a basic mortar repair?

A basic mortar repair may be cheap and quick, but it’s fairly certain you’ll be repairing that floor section again before too long…

Signature AR is a one-time professional repair. So although it takes longer and costs more than a DIY repair, in the long run you will save money, because it will stop the damage from recurring or getting worse.

What’s it made out of?

The material is glass reinforced nylon (GRN). This is an advanced composite, and is very strong. It’s used for manufacturing many hard and durable articles, including automotive engine parts; airbag modules; knife handles; barbecues; marine plumbing components; industrial pulley idlers and bearings; chairs; wheelchair wheels; hard hats; and motorcycle helmets!

Will it be strong enough?

The material is at least as strong, and possibly stronger than the nylon wheels on forklift trucks! But remember that because of its shape the joint is not load bearing, and it does not need to withstand the impact of wheels. It only needs to be strong enough to withhold the pressure of the repair mortar on its sides during installation, and for that it is perfectly strong enough.

Will it need maintenance?

No. Once Signature AR is installed it’s maintenance-free – and hence it’s a highly cost-effective, one-time repair. Unlike a straight joint or saw-cut joint, Signature AR doesn’t usually need to have a joint sealant applied (except for instances where there is a risk of substances seeping into the ground through the joint) – so you won’t even need to worry about checking that the joint sealant is intact.

How does using Signature AR affect warehouse staff?

Upgrading existing floors with Signature AR enables employers to eliminate joint impact, one of the major causes of noise and whole body vibration that MHE operators are subjected to. This can greatly assist in compliance to Control of Noise at Work Regulations 2005 under the Noise at Work Directive 2003/10/EC and Control of Vibration at Work Regulations 2005 under the European Physical Agents (Vibration) Directive (2002/44/EC), in addition to maintaining MHE speeds and reducing back injuries to operators.
Why is the half-hexagon smaller than on conventional Signature?

On Signature for new floors, the shape has been carefully calculated to take into account how wide the joint might open as the large expanse of fresh concrete cures – and the half-hexagon is proven to work with joint widths up to 40mm. The repair situation is different, as the joint will not have to open as far, so the angles for Signature AR have been adjusted accordingly.

Is it environmentally-friendly?

At the end of the building’s life, the joint can be removed and recycled. It is also possible to use a proportion of recycled material in the joint's construction.

Can it be cut to the right length?

Yes, the Signature AR joint can be cut with a hacksaw if necessary – although it is unlikely in practice that this will be needed. The fixing holes run along the entire length of the product to allow it to be cut.

Signature AR is supplied in 1080mm lengths, and it is easy to clip several lengths together to make a longer repair if needed.

What other products are used in the repair?

The mortars and bonding agents used in the repair are all manufactured by RCR Flooring Products. They are professional-grade products used worldwide in the construction of new industrial and commercial concrete floors. The products used are a blend of resins and dry materials, but the exact products chosen will depend on the nature of each repair.

Is it suitable for a coloured concrete floor?

Yes. If your floor is coloured we can ensure the repair is finished with a coloured resin coating, or a dry-shake surface hardener. Note, the colour of a dry-shake finish may not match the existing floor initially, as dry-shake colours deepen over time.

Is it suitable for freezer stores?

Yes – the GRN material remains stable at all temperatures, so it's fine for freezer stores and indeed for warm environments too. Please discuss it with us if you have a particular application in mind.
Can it be used externally and across doorways?

Yes. The joint material is UV stable and is non-rusting, so is suitable for places where it might get wet. Discuss this with the contractor in advance, so they can ensure all the products used in your repair will be suitable for the application.

Can it be used in areas where there is a risk of chemical spillage?

Yes – the joint has excellent resistance to chemicals and hydrocarbons.

Can it be used in electronics and anti-static environments?

Yes – the joint material is non-conductile, so can be used to repair floors where this is a priority.

Why can this only be installed by an approved contractor?

There are lots of components to this repair, which are often used in floor construction – this is much more than just installing a joint in the floor. To get a guaranteed, professional repair that will stand the test of time requires the expertise of an experienced, approved installer.

How long will the repair take?

This depends on the size of the repair and the type of floor finish required. In many cases straightforward repairs can be carried out in one working day. The process involves cutting away the damaged section of the joint, correctly placing Signature AR, and filling the repair area with mortar. If you require a specialist or coloured finish, then this may require additional time. Remember, this is a once-and-for-all repair, so it's worth allowing that time to have it repaired properly.

Who are the installers in my country?

Any of the RCR Flooring Applications companies worldwide will be able to provide you with a repair service – they can be found on the website, [www.rcrindustrialflooring.com](http://www.rcrindustrialflooring.com). Where there is not an RCR Applications company listed for your country, please contact the Permaban office and we will tell you who is approved to carry out the repair.