

Clean water structures

Intercrete® materials have an impressive history of providing durable, fully certified repair and protection systems for the clean water industry. Our materials are relied upon by water companies all around the world for structural protection.



With a product offer ranging from rapid-setting repair mortars and levelling coats to high performance cementitious coatings, Intercrete materials are approved under Regulation 31 of the Water Supply (Water Quality) Regulations 2016. They are also listed under the Water Regulations Advisory Scheme and are CE marked to BS EN 1504, the pan European standard for concrete repair.

The **Intercrete** range is ideal for containment in the clean water industry and is perfectly suited to both new build and refurbishment applications. Our materials can be reliably used to extend the design life of structures and reduce maintenance cycles, whilst also achieving significant cost savings.

Enhanced chemical protection

Intercrete products provide concrete and masonry with outstanding protection against typical problems encountered in the clean water industry, such as chemical attack, cracking, joint failure and surface

corrosion. Compared to normal concrete, they provide greatly enhanced protection from chemicals as well as soft or acidic moorland water. Once cured, **Intercrete** products are resistant to water under 10 bar hydrostatic pressure.

Waterborne and environmentally friendly

Intercrete products are also safe to apply and cause virtually no disruption, even when water facilities are still in operation. With water-based, low odour formulations, they contain ultra-low VOC levels, and help facilitate sustainability in the built environment. They are also exceptionally rapid curing, and can be applied to damp substrates and in confined spaces, so any downtime is kept to a minimum.

As **Intercrete** products are Portland cement-based, they are compatible with original concrete. Many are single pack and only need the addition of clean water on-site, making them extremely user-friendly and all equipment can be easily cleaned with water after use.

Clean water applications

Intercrete products are suitable for the repair and rehabilitation of a wide range of clean water installations, including:

- Service and impounding reservoirs
- Water towers
- Sand and gravity filters
- Contact, service and dosage tanks
- Bunds
- Aqueducts and pipelines
- Dams and spillways
- Roofs



Intercrete products extend durability and enable the structure's original design life to be achieved

Typical problems and challenges in the clean water industry



The versatility of Intercrete products makes them ideal for treating a range of common structural problems associated with clean water installations.

Repairing leaking structures

Problem: Failure of concrete tanking and the degradation of brick lined reservoirs can lead to loss of water or the ingress of ground water.



Solution: Internal repairs to concrete structures can be carried out using **Intercrete 4800**, a high build, hand applied mortar. For large scale repairs, **Intercrete 4800 (WS Grey)** is ideal and is applied using wet spray techniques. Elsewhere, defective pointing on brickwork can be reinstated using **Intercrete 4820**. The entire surface of both brick and concrete structures can then be overcoated with **Intercrete 4841**, in order to provide complete waterproofing and damp-proof protection.

Soft water attack

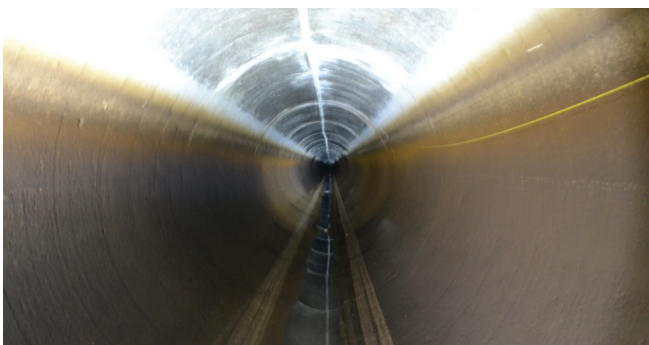
Problem: Soft or acidic moorland water attacks concrete readily, dissolving lime and leaving a weak, permeable substrate.



Solution: Once unsound concrete is removed, the substrate can be reinstated with **Intercrete 4820**, an engineering grade waterproof screed and fairing coat. For additional long term protection, **Intercrete 4841** can be brush or spray applied to all surfaces to provide superior chemical resistance. **Intercrete 4841** is approved for use in public water supplies and is reliably used by all leading water companies for its excellent waterproofing and protective properties.

Refurbishing aqueducts and pipelines

Problem: Water is transported many miles to major cities via aqueducts and pipelines which are under constant attack from aggressive elements.



Solution: Where limited time is available, **Intercrete 4802**, a rapid-setting, Portland cement-based repair mortar can be used to reinstate concrete or brick pipes and channels to provide a durable waterproof repair. Its water-based, ultra-low VOC formulation makes it ideal for use in confined spaces.

Roof waterproofing

Problem: Service reservoir roofs can show signs of cracking and deterioration of joints can lead to damaging ingress of water.



Solution: Live cracks can be sealed with a 2mm coat of **Intercrete 4842**. Over formed joints and details where differential movement is expected, **Intercrete 4842** can be reinforced with **Intercrete 4872**, an advanced, highly tear-resistant reinforcing tape which allows up to 600% elongation.

Approval certification

	Intercrete product code								
	4871	4841	4802	4820	4800	4800 (WS Grey)	4810	4807	4872
Approval for use in public water supplies	✓	✓	✓	✓	✓	✓			
WRAS Approval	✓	✓	✓	✓	✓	✓	✓	✓	✓

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