

# Floors and trafficked areas

Fast-track construction is critical during many of today's projects and installation of the waterproofing membrane and flooring system is often one of the highest priorities in order that other trades can progress.



**Floor spaces in areas such as airports, railway stations and bus stations cannot be taken out of service for long periods of time, so it important that downtime is kept to an absolute minimum, whilst waterproof, durable floor protection is reinstated.**

Elsewhere, surfaces such as industrial floors, loading bays, car parks and runways can be subject to very heavy trafficking and are all highly vulnerable to damage. Years of trafficking and exposure to freeze-thaw cycles can result in mechanical damage not only to the concrete deck but also degradation of the existing waterproofing system. Edges of concrete slabs are particularly prone to damage and will rapidly deteriorate unless remedial action is taken.

## **Durable, rapid reinstatement**

**Intercrete®** flooring systems are designed to speed up the construction process and bring schedules back on track. **Intercrete** products are fast-curing and can

be applied to damp or green concrete, making them ideal for use in new build developments.

Our fast setting repair mortars allow for the rapid reinstatement of vehicular and foot traffic, whilst our high performance thin-film cementitious coatings are impervious to water and offer outstanding chemical and skid resistance.

## **Thin-film cementitious coatings**

The **Intercrete** range of hard-wearing epoxy and cementitious floor coating systems have been specially formulated to provide years of effective waterproof. They provide abrasion protection in even the most demanding situations, and offer excellent freeze-thaw resistance, thereby preventing any spalling of the concrete surface.

In many instances, **Intercrete** products are used as flooring finishes in their own right, but they can also be used as a fast-drying levelling layer or overlaid with other flooring materials such as vinyl, resin finishes or carpet.

## **Class-leading results**

**Intercrete flooring products are used in many diverse and demanding locations:**

- Internal & external concrete floors / slabs
- Heavy duty loading bays & industrial floors
- Below water table cellars & basements
- Ground floor slabs with ineffective DPM
- Aircraft taxiways & hard-standings
- Balconies & pedestrian walkways
- Manufacturing & storage areas
- Kitchens & food preparation areas



The Intercrete range offers a complete one-stop shop for high performance flooring solutions

# Typical problems and challenges facing floors and trafficked areas



Intercrete products offer outstanding performance and durability and are ideal for both new build and refurbishment flooring projects:

## Fast-track construction

**Problem:** Sealing of green or fresh concrete to enable installation of impervious floor coatings or coverings, or to allow finishing trades to operate whilst work continues.

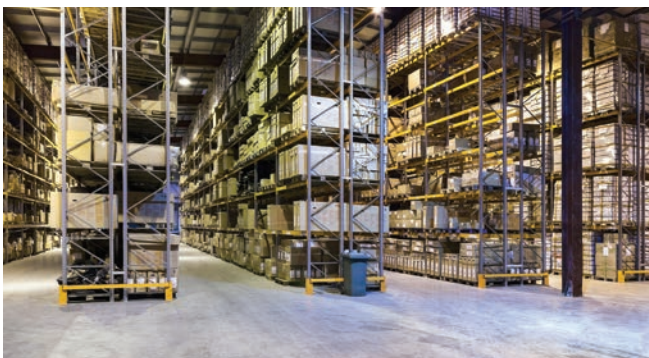


Intercrete 4851 is compatible with resin systems, vinyl, wood laminate & carpet

**Solution:** A 2mm coat of **Intercrete 4851** will cure rapidly, without the risk of osmotic blistering, to provide a totally waterproof coating. A fine quartz sand can be broadcast into the surface of the freshly laid material to aid curing and enhance adhesion, and any subsequent coverings can be installed after just 48 hours. If concrete floors have extremely uneven surfaces, **Intercrete 4853** is ideal for use as a flowing, levelling screed prior to the application of the **Intercrete 4851** flooring system.

## Repairs in trafficked areas

**Problem:** Deterioration of the surface of concrete slabs and reduction in slip resistance due to the effects of freeze-thaw and trafficking exposure.



After being spread using a skid leveller, spike rolling helps remove trapped air

**Solution:** All potholes and damaged areas can be rapidly reinstated with **Intercrete 4802** or, where speed is not critical, **Intercrete 4801** can be used. **Intercrete 4852** is spread to a minimum depth of 3-6mm and, whilst the surface is still wet, coloured quartz sand can be broadcast into the surface to provide a slip resistant, decorative finish and to aid curing. A proprietary sealing coat can be applied to the finished surface to enhance longevity.

## Water infiltration

**Problem:** Prevention of water penetration via substrate concrete, either where the damp proof membrane has failed, or to stop water infiltration between floors.



Intercrete 4851 can be safely used in facilities without the risk of contamination

**Solution:** Active water infiltration must first be arrested using **Intercrete 4809**, a Portland cement-based mortar which sets in 2 minutes. **Intercrete 4851**, a high performance, cement and epoxy modified polymer coating, can then be applied at a thickness of 2mm. The complete system is solvent-free and odourless, and can withstand up to 10 bar hydrostatic pressure. **Intercrete 4854** can be broadcast into the surface to aid curing and provide a durable slip and abrasion resistant finish.

## Enhanced abrasion resistance

**Problem:** Concrete industrial floors can erode due to rigorous cleaning regimes and extensive exposure to heavy trafficking such as steel-wheeled trolleys.



Intercrete 4851 can be easily applied using pumping or pouring techniques

**Solution:** Following priming with **Intercrete 4850**, a 2mm layer of **Intercrete 4851** can be applied to the concrete surface to impart high resistance to both impact and abrasion. It is also unaffected by many common chemicals and is totally waterproof. For additional hard wearing properties, aluminium oxide aggregate can be cast into the surface, and the non-slip finish can be locked in place using a proprietary sealing coat.