

# Level playing subfloor



*Selecting the correct levelling compounds is a key issue for flooring contractors:*

**Ardex UK** teamed up with flooring contractor NO Flaw of North Tyneside in a project at Middlesbrough College new sports hall. NO Flaw pump-applied 65 tonnes of Ardex K 15-B, a rapid drying pumpable subfloor smoothing compound base mix, designed for thicker levelling applications from 7mm to 35mm.

The product incorporates Ardex Rapidry Formula technology, said to produce a subfloor hard enough to walk on two hours after application and ready to accept floorcoverings within 24 hours.

[www.ardex.co.uk](http://www.ardex.co.uk)

**Instarmac** has introduced Ultra Floor Level IT Super 30, reported to be capable of being laid and overlaid in a day. The product is described as a blend of specially graded fillers, fine cements and polymers that create an ultra rapid setting premium smoothing and levelling compound for internal and irregular surfaces. It is said to be suitable as a base for the application of tiles or other floorcoverings.

Ultra Floor Level IT Super 30 is said

to set in 30 minutes; capable of being overlaid in three hours; can be laid up to 25mm deep; and for use on most common building substrates. It is part of a range of Instarmac's range of rapid drying levelling compounds. Ultra Floor offers next day delivery using its own tail-lift fleet.

[www.instarmac.co.uk](http://www.instarmac.co.uk)

**Laybond**, part of Bostik, supplies ScreedMaster 2 Original with its blend of cement and specially graded aggregates. When mixed with its pre-gauged low ammonia natural rubber liquid, it is said to give a smoothing compound with exceptional adhesion properties and extended working time. Trowel applied and able to



**ABOVE: Ultra Floor Level IT Super 30 levelling compound from Instarmac**  
**BELOW: One of the concourses at Wolves FC Molineux Stadium where Resdev two tier coating system was applied**  
**RIGHT: Latex Pro, a new 'bag and bottle' levelling compound from PCI, part of BASF Construction Chemicals**

be rubbed down the following day if required, the product is suitable for use over most substrates and adhesive residues.

Where high compressive strength, fast cure, extreme low-odour and a totally protein and casein-free formulation are required, ScreedMaster 2 Ultimate with

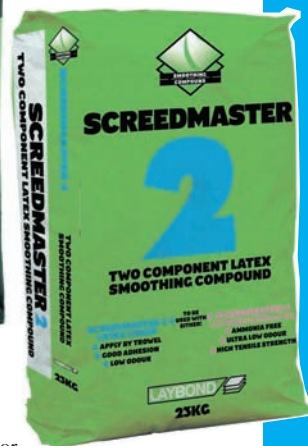
its special synthetic latex properties is designed for biologically sensitive and occupied areas. Its formulation enables it to be used for pre-smoothing a floor prior to the application of a ScreedMaster epoxy surface DPM, according to Laybond.

Both ScreedMaster 2 Original and Ultimate are available as a 23kg powder with a 5L liquid and offer coverage rate of up to 6sq m at 3mm thickness.

**PCI**, part of BASF Construction Chemicals (UK), has launched Latex Pro, a rapid-curing levelling compound for fast-track results, claimed to produce smooth, level surfaces on a variety of substrates. It is walkable after two hours, coverable after 12 hours and has the added advantage of eliminating



**LEFT and BELOW: Laybond ScreedMaster 2 Ultimate and Original smoothing compound**



or resilient floors, parquet or laminate are to be bonded.

It is said to be suitable for application to cementitious, anhydrite and magnesite substrates, mastic asphalt screeds and non-absorbent surfaces and can be applied at thicknesses of 0.5-10mm; for bonding parquet or laminate flooring at 2-10mm. It can be used on underfloor heating and is designed for exposure to chair castors at a depth of 1mm, says PCI.

Low emission PCI Latex Pro is reportedly also low in chromates and being casein free it is appropriate for hygienic applications. [www.pci.uk.com](http://www.pci.uk.com)

**Resdev** supplied its epoxy two tier coating system for the existing concrete floors on the six concourses in the Jack Harris and Billy Wright stands at Wolverhampton Wanderers Football Club's Molineux Stadium.

The contractor Impact Flooring recommended an epoxy two tier coating system developed and manufactured by Resdev.

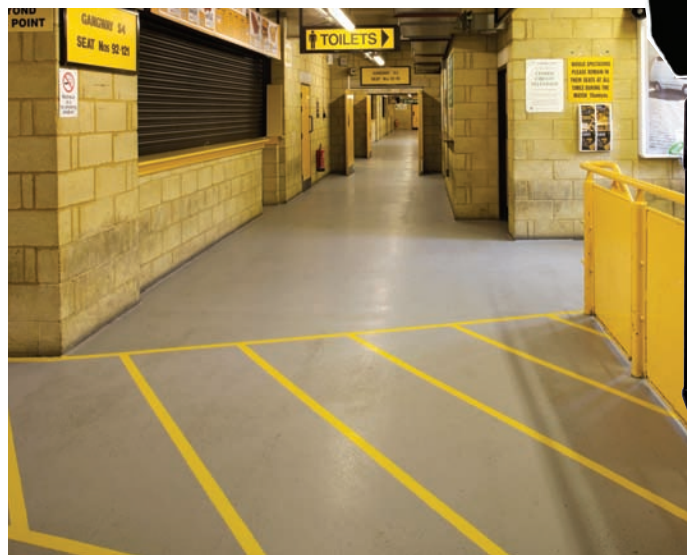
The system combines Pumashield, an epoxy resin flooring combining abrasion resistant fillers to create a tough and durable solution, together with a top coat of Pumacoat, an epoxy resin floor seal available in many colours. This seamless, hygienic and cleanable flooring finish guarantees good



trowel marks that often affect other levellers, according to PCI.

The two-component latex levelling compound is free flowing and is described by PCI's David Foster as 'the bag and bottle system that thinks it's a self-leveller. Although PCI Latex Pro acts like a water mix, it gives as hard a finish as an acrylic.'

The product is said to be suitable for levelling and smoothing where textile



## Smoothing compounds

resistance to foot traffic and light wheeled vehicles, according to Resdev. [www.resdev.co.uk](http://www.resdev.co.uk)

**Ronacrete** supplied a 'funky, hard-edged' polished concrete floor in a new bar in Glasgow called Bunker. Flooring contractor Veitchi (Scotland), a CFA member, laid Ronascreed DB FastFloor fast curing, self-smoothing floor screed, and coated it with two coats of Ronadeck PU, a hard film clear polyurethane floor coating to protect against staining from foot traffic and spills of food and drink.

Design consultant Iain Wright said, 'We created an interior incorporating industrial materials you wouldn't normally expect in a bar. Even the bar counter is concrete. The floor resembles the concrete effect desired.'

Brian Denholm,

sales manager from Veitchi (Scotland), comments: 'We laid a nominal 15mm to allow us to accommodate a special channel for lighting. After application, the floor could be foot trafficked after three hours.'

Ronadeck PU, said to be a tough, hard wearing coating, is available in different colours as well as the clear finish used on this project. It is

suitable for screed and

**LEFT: Treadfast Sx-1 Unispec levelling compound from Tremco Illbruck**

**BELOW: The application of Weber maxit floor screed at the Next store at Victoria Shopping Centre in Southend**



**Ronascreed DB Fast Floor fast curing self-smoothing floor screed from Ronacrete, coated with Ronadeck PU, polyurethane floor coating, at Bunker, a new bar in Glasgow**

concrete as well as surfaces prone to dusting, staining or chemical attack, according to Ronacrete. It is also used with a special clear aggregate to enhance slip resistance.

[www.ronacrete.co.uk](http://www.ronacrete.co.uk)

**Tremco Illbruck** has launched Treadfast Unispec Sx-1, a fast setting low odour latex smoothing compound, following the merger of ACM and Tremco illbruck's flooring division. The product is based on ACM's Sx-1 smoothing compound, reported to have been laid over 3m sq m, since the product was originally launched. It is said to have outstanding flow and smoothing properties, has a rapid walk on time and is very low odour – containing no casein, ammonia or protein.

With 25 N/sq mm compressive strength, Treadfast Unispec Sx-1 is claimed to be strong enough for use in high traffic environments yet easy to rub down and with sufficient resilience and stability to bond to difficult substrates.

[www.tremco-illbruck.co.uk](http://www.tremco-illbruck.co.uk)

**Weber maxit** floor 4490 Alpha pumped floor screed was used in the new double-level Next store at Victoria Shopping Centre in Southend, Essex.

Flooring contractor Neonclass, a CFA member, first laid polystyrene insulation substrate, up to 120mm in some places, to eliminate main level deficiencies before pouring the Weber floor screed for an average thickness of 50mm over the 850sq m upper floor area.

The Neonclass silo and pumping system installed 26 tonnes of the

screed each day, although the system has double this capacity. The dry screed material is delivered daily from Rotterdam in Holland.

The finished level of the screed allowed for the adhesive and floor tiles to give a final floor level in line with the common walkway areas outside the store.

Weber maxit floor 4490 Alpha self-levelling floor screed is pumpable and based on calcium sulphate. It is supplied as a pre-blended dry powder for on-site mixing with water and is designed for thicknesses from 25-50mm.

It is a hemi-hydrate product with reduced drying time to allow foot traffic the day following application. The product is claimed to dry to a smooth finish, requiring no surface grinding, allowing tiles, parquet, cork or carpet to be laid quickly.

[www.netweber.co.uk](http://www.netweber.co.uk) **CFJ**

### BUYERS' GUIDE

For further information on any of the products mentioned, contact the suppliers directly. And please remember to tell them that you read about their companies in **CFJ**:

Ardex	01440 714939
F Ball and Co	01538 361633
Instarmac	01827 872244
Laybond	01785 272727
PCI	0161 794 7411
Resdev	01422 379131
Ronacrete	01279 638700
Tremco Illbruck	01942 251400
Weber	01525 722169

## Uneven subfloors can spell failure for timber flooring



**Stephen Boulton, technical service manager at F Ball and Co, outlines some principles on the selection of smoothing underlayments:**

LAYING wood floors onto uneven subfloors will result in points of weakness which will reduce bond strength due to poor adhesive transfer to the back of the timber.

Potentially this can cause floor failure. It is essential, therefore, that wood floors are installed onto smooth surfaces, writes Stephen Boulton of F Ball and Co.

Moisture is the other aspect of subfloor condition. It is, in fact, the biggest cause of failure of wood floor installations. So before detailing the type of smoothing underlayments suitable for wood floor installation, we must deal with moisture.

Check substrates for moisture to ensure an adequate damp proof membrane is in place. Take readings with a hygrometer; we recommend a RH (relative humidity) reading of 65% or less for wood floor installation. Consult wood suppliers as product requirements differ.

Where moisture readings are over 65% RH a waterproof surface membranes (WSM) should be used before applying a smoothing compound. They come in one- and two-coat versions suitable for various levels of subfloor moisture. Moisture control of the subfloor is so important that some contractors apply WSMs as a matter of course.

Their usage has become easier by the introduction of a floor smoothing compound specially formulated for use under liquid-applied WSMs. The smoothing compound allows them to have a dimensionally smooth, stable base in order to achieve their optimum performance. It is

especially useful for overcoming problems presented by tamped concrete, ensuring a uniform application of the WSM.

After applying the WSM, apply a floor smoothing underlayment. Selection of the correct underlayment is very important. A strong surface is required to support any movement within the wood floor during its lifetime. Alternatively, where time constraints exist and the WSM surface is sufficiently smooth, some adhesives can be adhered direct.

High performance products combining heavy duty usage with rapid drying are recommended; a range of special-purpose underlayments is available.

Their rapid, early gain of strength coupled with the fast drying properties, ensure that from day-one the subfloor can cope with extreme stresses imposed by the wood flooring. **CFJ**