



# Patch *it* RAPID DRYING REPAIR MORTAR

Ideal for repairing small cracks in walls and floors, concrete stair edges and for creating coves and ramps.

Classification: CT-C40-F4

## TECHNICAL DATASHEET

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- Slump free
- Rapid setting
- Maintains profile
- Smooth to trowel
- 1-20mm depth
- 10 minutes working time
- 30 minutes foot traffic
- Internal floors



### INFORMATION

UltraFloor Patch IT is a rapid drying, fast setting and hardening cementitious repair mortar for internal applications. Its slump free characteristics make it ideal for vertical and horizontal repairs. It is conveniently packaged in an outer plastic container to minimise potential damage in transit and also to maintain the reactivity rates of the cements once the bag is opened.

### USES

UltraFloor Patch IT is a highly versatile repair compound suitable for a wide variety of applications and its rapid curing profile minimises delays in project times. It has exceptional slump resistant characteristics enabling it to be used for repairs in floors and small cracks in walls, as well as for creating coves and ramps and for repairs to concrete stair edges.

UltraFloor Patch IT is the ideal product for overcoming unexpected problems on site such as damaged subfloors, spalled areas of screed, for the infill of areas around pipework, and also for making good damage caused by previous trades such as around windows and doors frames.

UltraFloor Patch IT is a high strength product suitable for use in domestic and commercial applications. When used in flooring situations UltraFloor Patch IT should be covered with an UltraFloor smoothing underlayment or must have a suitable floor covering applied. Any exposed areas should be primed after curing with UltraFloor Prime IT Multi-surface Primer.

Its protein free formulation means it is ideal for use in biologically sensitive areas. It can be used on a variety of subfloors, and is suitable for use where warm water underfloor heating is incorporated.

### SUBFLOOR PREPARATION

All subfloors should be protected from moisture from the subground by use of a damp proof membrane (DPM), please check older properties, which may not have a base DPM and consult UltraFloor for advice). Assess moisture levels in accordance with BS 8203, to achieve a hygrometer reading of 75% RH or less. Where this is not attained, a surface DPM should be used - the selection of which will be subject to the subfloor type (seek advice from UltraFloor) followed by the application of a suitable smoothing underlayment.

For repairs to worn or trafficked areas it is necessary to abrade the surface of the areas to remove contaminants including previous adhesive residues and any weak surface layers. Very dense non-absorbent surfaces should be lightly abraded to remove contaminants and provide a key.

A sound strong textured surface is required prior to any application of UltraFloor Patch IT.

**NOTE:** Where underfloor heating (UFH) systems are incorporated, they must have been

fully commissioned and brought up to their maximum temperature, and ideally switched off 48 hours before application. In the absence of other heat sources, the UFH may be set to 'cutback' position to achieve an air temperature of 15°C. Any expansion or movement joints must be carried through to the floor covering surface.

### PRIMING

**Absorbent Subfloors (concrete, sand & cement, brickwork etc):** Priming is not normally required. However, very absorbent surfaces should be lightly dampened with clean water or diluted UltraFloor Prime IT Multi-surface Primer (3 parts water to 1 part primer). Allow the surface to 'matt off' before applying UltraFloor Patch IT.

**Non-absorbent Subfloors (terrazzo/granolithic ceramic tiles and UltraFloor surface DPM etc):** All non-absorbent substrates must be primed with UltraFloor Prime IT Multi-surface Primer applied neat in a thin uniform application. Allow the primer to thoroughly dry before the application of UltraFloor Patch IT.

**Calcium Sulphate/Anhydrite Substrates:** Specific priming requirements should be in place, in conjunction with the substrate manufacturer's guidelines. As these are not cement based a barrier primer is needed. A surface DPM is not recommended if moisture exceeds 75% RH - therefore the screed must be below this.

### MIXING

It is important to only mix up the amount of product that can be applied within the working time of approx. 10 minutes. Do not try to reconstitute material which has begun to harden off in the mixing vessel. Discard and mix up fresh material. Always use a clean mixing bucket.

Add clean cold water to a suitable sized mixing vessel. Gradually add UltraFloor Patch IT to the water whilst continually mixing. Add sufficient powder to achieve lump free mortar. The mix ratios are approx. 3.5 parts powder to 1 part water when measured by volume. Assess the slump characteristics by lifting material with a steel trowel and holding at a 90 degree angle. Add more powder (whilst further mixing) if required for vertical applications.

### APPLICATION

For application thicknesses in excess of 20mm it is recommended that the product is 'bulked out' using graded aggregate of nominal 5-10mm at a volume of 1 part aggregate to 1 part powder. The aggregate should be added to the mixed UltraFloor Patch IT and further mixed to attain a uniform product.

For repair applications apply the mixed material using a steel trowel. Push firmly into the crack, hole or recess and smooth over with the trowel. NOTE: UltraFloor Patch IT should wet out onto the substrate. If the product 'rolls' off under troweling this indicates that the



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substrate will need to be dampened and/or that the mortar has been mixed too dry. Where clean neat edges are required it is recommended to apply the product to leave slightly proud of the surface and then trim off any excess using a wet trowel. This can normally be carried out after approximately 10-15 minutes. A further improvement can be made by further smoothing the surface with a lightly dampened trowel or sponge float.

If an overall smoothing compound application is to take place after the repairs then follow the manufacturers guidelines with regard to priming. Normally an application of UltraFloor Prime IT Multi-surface Primer, diluted 3 parts water to 1 part primer will suffice. Allow to dry.

For smoothing, ramping, resurfacing or coving applications apply the mixed UltraFloor Patch IT to the surface at the required depth. The area that can be applied will depend on thickness and working time of the mixed product so ensure not too large an area is attempted and enough time is allocated. Allow to firm up to resist finger pressure before finishing off by using a wet trowel or wet sponge (for curved areas). Where larger areas are being carried out it is recommended that a temporary framework be created and removed once the product has gone through its initial set. Adjacent areas can then be carried out. Always lightly dampen exposed edges to ensure a good wetting out occurs on subsequent applications.

Do NOT attempt to smooth out using a spiked roller as this will leave a textured profile.

## SUBSTRATES

**Tamped or Pan Floated Concrete:** Remove any weak friable materials and any contaminants to leave a dust free surface. UltraFloor Patch IT can be used to repair or to smooth and resurface. Treat as absorbent substrate.

**Power Floated Concrete:** UltraFloor Patch IT can be used to repair cracks and holes in power floated concrete and for creating ramped areas. It is not recommended for overall smoothing or resurfacing, use an UltraFloor cementitious smoothing underlayment for such applications. Treat as non-absorbent substrate.

**Sand/Cement Screeds:** Ensure the screed is sound and strong. Lightly abrade to ensure any weak friable material is removed. UltraFloor Patch IT can be used to repair and make good damaged screed. If requiring an overall resurfacing or smoothing it is recommended to use an UltraFloor smoothing underlayment of comparable strength. Treat as an absorbent substrate.

UltraFloor Patch IT may also be used to consolidate day joints on stable, dry sand/cements screeds. Rake out any detritus and contamination in the joint, make dust free and infill with UltraFloor Patch IT ensuring it is firmly compacted into the joint.

**Brickwork and Renders:** UltraFloor Patch IT is suitable for use as a crack repair or resurface on small areas of render and brickwork (for large areas plaster or new render is recommended). Rake out any dust, debris or detritus from cracks and holes. Lightly abrade exposed surfaces to remove any weak friable materials and any contamination. Ensure a sound strong base is achieved. Treat as an absorbent substrate. Priming is recommended for all resurfacing brickwork and render applications.

**Terrazzo/Granolithic Ceramic Tiles:** UltraFloor Patch IT can be used to infill areas of floor where tiles have cracked or lifted. Remove unbonded tiles and lightly abrade to remove any weak, friable tile adhesive residues. UltraFloor Patch IT can then be applied to bring smooth to adjacent tiles. Treat the tile adhesive as an absorbent substrate.

**Calcium Sulphate/Anhydrite/Hemihydrate Screeds:** UltraFloor Patch IT can be used to repair cracks and hollows in screed of this nature provided they are fully dry (below 75%RH when tested with a surface hygrometer in accordance with BS 8203). All exposed areas of the screed must be primed with a two coat application of UltraFloor Prime IT Multi-surface Primer. The first coat should be applied at a dilution of 3 parts water to 1 part primer, allow to dry and then apply at a dilution of 1 part water to 1 part primer and allow to thoroughly dry before applying UltraFloor Patch IT. Do not use UltraFloor Patch IT for an overall resurfacer on calcium sulphate screeds.

**UltraFloor Surface DPM:** Applications should be carried out within 36 hours of DPM application (see UltraFloor DPM IT datasheet). The DPM must then be primed with UltraFloor Prime IT Multi-surface Primer neat in a thin uniform coating, allowing it to dry fully (usually 1-2 hours). UltraFloor Patch IT can be used to infill depressions, cracks and hollows and for creating ramped areas. For overall smoothing applications use a cementitious UltraFloor smoothing underlayment.

UltraFloor Patch IT is not recommended for repairs to timber substrates and is only recommended for use in internal applications.

For any other scenarios please call UltraFloor for advice.

TECHNICAL DATA	
Specification	BS EN 13813:2002
Classification	CT-C40-F4
Working time at 20°C	10 mins
Walk on hardness time at 20°C	30 mins
Ready to receive floor coverings	90 mins
Compressive Strength (N/mm <sup>2</sup> ): (to BS EN 13892-2)	1 Day: 25.0 7 Days: 35.0 28 Days: 40.0
Flexural Strength (N/mm <sup>2</sup> ): (to BS EN 13892-2)	1 Day: 3.0 7 Days: 4.0 28 Days: 4.5
Packaging:	10kg bag in oversized protective bucket

References to BS EN13813:2002 confirms the minimum compressive and flexural strengths that the product will attain when tested to the standard.

## CURING AND DRYING

Curing and drying times will be subject to ambient conditions as well as the thickness of product application. Normally UltraFloor Patch IT will begin to harden within 10-15 minutes and will take foot traffic after approximately 30 minutes. Floor coverings may be applied after as little as 90 minutes for applications up to 3mm thick deep.

All times are based on good site conditions (i.e. air temperature of 20°C, air humidity of 65% and good ventilation). Cold, humid or damp sites, or those with poor airflow, will prolong curing and drying times. Avoid strong drafts and direct sunlight during curing which can 'force dry' the product and result in excess tension and cracking.

COVERAGE RATES	
Applied Thickness	Coverage Per Unit
6.5mm	1m <sup>2</sup>
2mm	3.2m <sup>2</sup>
10mm	bulked out with graded aggregate at a ratio of 1:1 by volume will cover approx. 1m <sup>2</sup>

Coverage is for guidance only based on a smooth, non-absorbent subfloor. Product requirement will vary based on thickness applied, regularity of the surface and whether material is bulked out. Substrate texture and absorbency can affect consumption variations. All figures above are based on tests carried out under quality controlled environments. Actual results attained will be subject to site conditions and allowances should be made accordingly. As with all raw materials, colour variation may occur. Please note that this does not affect the consistency or characteristics of the product.

## CLEANING

Tools should be thoroughly cleaned in water to remove excess materials immediately after use.

## STORAGE AND SHELF LIFE

Store in a dry place between 5°C -30°C. When stored correctly and used within 8 months of the date shown on the bucket, the reducing agent activity will be maintained and the product will contain, when mixed with water, no more than 0.0002% (2ppm) soluble chromium (VI) of the total dry weight of the cement.

**NOTE:** the use of this product after the declared storage period may increase risk of an allergic reaction.



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## HEALTH, SAFETY AND ENVIRONMENTAL

Please ensure that appropriate PPE is used when preparing, mixing and applying products. Always wash hands before consuming food and make sure that materials are kept safely out of reach of children and animals. Please dispose of packaging and waste responsibly and in accordance with local authority requirements. A full material safety data sheet relating to this product is available from [instarmac.co.uk](http://instarmac.co.uk).

## QUALITY ASSURANCE

All products are manufactured in a plant whose quality management system is certified / registered as being in conformity with BS EN ISO 9001, ISO 14001 and ISO 45001. Our products are guaranteed against defective materials and manufacture and will be replaced or money refunded if the goods do not comply with our promotional literature. We cannot however accept responsibility arising from the application or use of our products because we have no direct or continuous control over where and how projects are used. All products are sold subject to our conditions of sales, copies of which may be obtained upon request.

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