



# Classification: CT-C7-F3

# **TECHNICAL DATASHEET**

- · Rapid setting
- Adhesion without a primer
- · Compatible with underfloor heating
- 3mm feather edge
- 10-15 minutes working time
- 30 minutes foot traffic
- Internal floors



# INFORMATION

UltraFloor Feather IT is a rapid drying, very fine particle, high polymer cementitious compound. It offers excellent adhesion characteristics and is suitable for application to a wide variety of substrates. It is conveniently supplied in an outer plastic container to minimise potential damage in transit and also to maintain the reactivity rates of the cements once the bag has been opened.

## USES

UltraFloor Feather IT has been developed to enable subfloors to be further 'improved' prior to laying decorative floor coverings including resilient floor coverings (sheet and tile), textiles, timber as well as stone products such as ceramic, porcelain and mosaic tiles. The very fine particle formulation enables it to be applied from 3mm down to a true 'feather edge'. It is ideal for taking out defects and ridges in smoothing compound applications caused by trowel marks, for filling in gouges or depressions, for repairing damages caused by premature trafficking such as footprints and for general filling and patching of isolated areas, as well as where fine feather finishing is required such as at door thresholds.

UltraFloor Feather IT can be used between boards and to smooth over screwheads on mechanically fixed flooring grade plywood installations. It is ideal for use over existing cementitious subfloors including sand/cement screeds, rough concrete and existing smoothing underlayments. It is not recommended for use directly to calcium sulphate screeds.

UltraFloor Feather IT is suitable for use in domestic and commercial projects and must always be covered with a decorative floor covering.

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. UltraFloor Feather IT is not recommended as a smoothing compound to be used over a surface DPM. The subfloor should be clean, dry and sound. If adhesive residues are present then it is recommended that a suitable 3mm smoothing compound be applied. However, in domestic applications where floor coverings are being loose laid then UltraFloor Feather IT may be used over non-moisture sensitive firmly bonded adhesive residues. All areas should be dust free prior to any application of UltraFloor Feather IT.

NOTE: Where underfloor heating (UFH) systems are incorporated, they must have been fully commissioned and bought 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

Pirming is not required when using UltraFloor Feather IT.

### MIXING

UltraFloor Feather IT should be mixed with clean cold water in a clean container. A powder to water ratio of 2:1 by volume is recommended. Powder should be added to the water and mixed to ensure a lump free no slump material is attained. The product should not be free flowing. As the product has a high coverage rate it is important to only mix the amount of product that can be applied within the working time (typically 15 minutes at good ambient conditions).

# APPLICATION

UltraFloor Feather IT should be applied using a steel trowel to attain a smooth surface. Typical application depth is 1mm or less although depths of up to 3mm can be achieved. For applications of 3mm and upwards it is recommended that a smoothing underlayment be utilised, however, for small isolated areas UltraFloor Feather IT may be used, applied in layers not exceeding 3mm each.

Do NOT spike roller after application as this will create a surface texture. Once cured, the product will provide a smooth surface ready for application of floor coverings. Sanding down or priming should not be required.



Feather BRAPID DRYING

Ideal for removing defects and ridges in smoothing compound applications e.g. trowel marks and for filling in gouges or depressions.

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# SUBSTRATES

**Tamped or Pan Floated Concrete:** Remove any weak friable materials and any contaminants to leave a dust free surface. UltraFloor Feather IT should be applied to the concrete using a steel trowel to achieve a smooth compacted surface texture. Firm compression of the material is recommended.

**Power Floated Concrete:** Should be treated as non-porous and require the application of a minimum 3mm smoothing underlayment to ensure an aborbent medium is achieved. UltraFloor Feather IT should only be used to improve the surface profile of the applied smoothing underlayment and NOT the power floated concrete (see below).

**Sand/Cement Screeds:** These should be strong enough for the flooring application. Weak, friable or damaged screed should be uplifted and repaired. UltraFloor Feather IT should be applied to the screed using a steel trowel to achieve a smooth compacted surface texture. Firm compression of the material is recommended. UltraFloor Feather 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 apply UltraFloor Feather IT ensuring it is firmly compacted into the joint.

**Newly Laid Smoothing Compounds:** Ensure the smoothing compound is of suitable nature and strength for the substrate and floor covering being used and that it has dried and cured sufficiently to receive the floor covering. Lightly sand to remove any surface laitance and contamination and make dust free. UltraFloor Feather IT should be applied to the screed using a steel trowel to achieve a smooth compacted surface texture. Firm compression of the material is recommended.

**Existing Smoothing Compounds:** If floor coverings have previously been adhered, it is necessary to mechanically remove remaining adhesive residues. The exception is when loose laid floor coverings are to be applied in domestic applications and the adhesive residue is a thin firmly bonded, non-moisture sensitive residue. Lightly sand to remove any contamination and make dust free. UltraFloor Feather IT should be applied to the screed using a steel trowel to achieve a smooth compacted surface texture. Firm compression of the material is recommended.

**Plywood Subfloors:** The plywood should be mechanically fixed using screws and should be set out in a staggered pattern. Plywood should be of flooring grade and a minimum 6mm nominal thickness. The underside of the plywood must be sealed to prevent moisture ingress from voids and/ or rooms beneath. UltraFloor Feather IT can be utilised to cover screw heads to give a smooth continuous surface and may also be used across board joints. It is recommended to apply the product to a minimum of 150mm either side of any joints by feathering down. UltraFloor Feather IT should be applied to the plywood using a steel trowel to achieve a smooth compacted surface texture. Firm compression of the material is recommended particulary at joints.

**Terrazzo/Granolithic Ceramic Tiles:** If a floor covering is to be bonded it is advisable to apply a 3mm cementitious smoothing underlayment. If a loose lay or unbonded flooring system is to be used the UltraFloor Feather IT may be utilised to smooth over the grout joints between tiles to give a smooth continuous surface. Grout lines must be cleaned and any weak material removed. Make dust free. UltraFloor Feather IT should be applied using a steel trowel. Firm compression is required. **Calcium Sulphate/Anhydrite/Hemihydrate Screeds:** UltraFloor Feather IT is not recommended for use over calcium sulphate or anhydrite screeds.

For any other scenarios please call UltraFloor for advice.

TECHNICAL DATA	
Specification	BS EN 13813:2002
Classification	CT-C7-F3
Working time at 20°C	10-15 mins
Walk on hardness time at 20°C	30 mins
Ready to receive floor coverings	15 mins to 1 hour
Compressive Strength (N/mm²): (to BS EN 13892-2)	1 Day: 3.5 7 Days: 4.5 28 Days: 7.0
Flexural Strength (N/mm <sup>2</sup> ): (to BS EN 13892-2)	1 Day: 1.5 7 Days: 1.8 28 Days: 3.0
Packaging:	5kg 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**

Drying times are subject to thickness applications and ambient conditions. A walk on time based on a 1mm application thickness of less than 30 minutes will be achieved when using fresh material. Floor coverings may be applied as soon as UltraFloor Feather IT has cured sufficiently to enable a serrated tooth adhesive trowel to be used without damaging the surface. This can be in as little as 15 minutes after application if a feather edge has been applied but will be longer for thicker applications.

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 pool airflow, will prolong curing and drying times. Avoid strong drafts and direct sunlight during curing which can 'force dry' the products and can compromise adhesion strength.

COVERAGE RATES	
Applied Thickness	Coverage Per Unit
feather edge/scratch coat	22m <sup>2</sup>
1mm	6m <sup>2</sup>

Coverage is for guidance only based on a smooth, non-absorbent subfloor. Product requirement will vary based on whether an overall application or a patch coat is required. Substrate texture and absorbency can affect consumption variations. 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.

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Please ensure that this is the current and relevant product technical datasheet by referring to our company website, instarmac.co.uk. Product development and improvement is an ongoing process.





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### STORAGE AND SHELF LIFE

Store in a dry place between  $5^{\circ}$ C  $-30^{\circ}$ 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.

#### 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.

### 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 OHSAS 18001. 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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