

» Master Builders Solutions Technical Bulletin Ucrete Primer FS – recommended application.



Ucrete Primer FS (three component fast setting heavy duty polyurethane slurry coat primer) is intended for use under all grades of the Ucrete product range and is especially suited for applications where a short overcoat time is required, such as hotel kitchen refurbishment, food and beverage production areas where down time is very limited and a fast turnaround is required from shutdown.

The advantages of using the Ucrete Primer FS is that it reduces the inter-coating time between the Ucrete Primer FS and the subsequent Ucrete Systems. This enables a quick turnaround from any shutdown and reduces the clients production down time.

Another advantage is that the Ucrete Primer FS greatly reduces the risk of bubbles and blisters. These can happen with the other Ucrete Primers if they are not fully cured as per the required curing time on the Method Statement, which needs to be followed strictly.

The Master Builders Solutions Technical Bulletins are informative documents that present application recommendations and other technical details to better understand the use of construction chemicals products, often from BASF's portfolio.

This is the Technical Services Bulletin No. 03.



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Concrete substrate preparation

Ucrete Primer FS should not be applied onto:

Wet substrates – Concrete and other cementitious substrates must be visibly dry.

Weak substrates - The average pull-off strength shall be 1.5 N/mm² (1.5 MPa).

Application to substrates of lower strength may affect the of the applied Ucrete System. This is particularly relevant in areas subject to heavy use, be it thermal or mechanical.



Surface laitance must be removed by mechanical action; suitable equipment includes captive shot blasting equipment (e.g. Blastrac), concrete planers (e.g. Von-arx) and diamond grinding (for edge work, etc.).

Anchor / Termination grooves to be cut into the substrate where not already present as below in detailing. BASF Construction Chemicals recommends the Hilti DC - SE20 double bladed groove cutter / slitting machine for cutting the anchor grooves.

The working life is approximately 10 minutes. Multiple units may be mixed, but **Do Not** mix more material than can be applied in 10 minutes.



Packaging

Part 1 – 2.83 kg (red Cap)
Part 2 – 2.86 kg (blue Cap)
Part 3 – 7 kg (bag)
Total – 12.69 kg Unit



Preparation

At the time of installation of the Ucrete MF the substrate concrete must be more than 7 days old and the surface should be visibly dry.

Detailing

Anchor / Termination grooves must be present in the surface of the concrete within 75 mm of all 'free edges'. These may be cast into the surface or cut subsequently. 'Free Edges' include all joints, column bases, perimeter walls, drainage channels, door thresholds, etc.

Joints are also required wherever movement is expected including adjacent to stainless steel channels, machine bases, around columns and at any construction joint in the substrate and should be cut every 4 metres maximum in any direction across the floor. Anchor / Termination grooves are nominally square in section with each side twice as deep as the proposed thickness of the flooring system.

Anchor / Termination grooves are cut into the concrete substrate to control the stresses during the curing of the material. At soft joints subject to traffic and at channels, the anchor grooves should abut the joint, to provide extra protection to the arris against impact and to prevent the ingress of liquids under the floor in the event of sealant failure.

NB: Refer to BASF detailed Sketches Anchor and Termination grooves.

Storage

Prior to installation, materials should be stored under cover, out of direct sunlight. Part 3 must be raised off the floor and kept dry.

Part 1 and Part 2 must be protected from temperature extremes and ideally all components should be stored in an air conditioned store

NB: Ideal storage temperature: +15°C to 22°C.

The substrate concrete should be installed to the tolerances required of the finished floor. Any repairs to the substrate or correction of levels, etc. should be done in good time prior to the application of the Ucrete Primer FS.



Mixing

Pour the contents of the Part 1 (red cap – 2.83 kg) and the Part 2 (blue cap – 2.86 kg) into a 20 litre polyethylene mixing pail and mix using a spiral mixing paddle in an electric drill operated at 1,500-2,000 rpm for 20 seconds.

Add the Part 3 bag (7 kg) and continue mixing for a further 2 minutes or until the mix becomes homogeneous. The working life is approximately 10 minutes. Multiple units may be mixed, but **Do Not** mix more material than can be applied in 10 minutes.



Application

The Ucrete Primer FS is applied by Roller or Steel Trowel from: 0.6 kg/m² (0.38 mm) to 1.6 kg/m² (1 mm).

NB: Maximum 3 kg/m² can be applied - 1.85 mm.

NB: Above coverage rate will depend on substrate profile and does not include any wastage.

NB: Mixed material should be poured out immediately onto the floor, or it will exotherm very quickly and set.



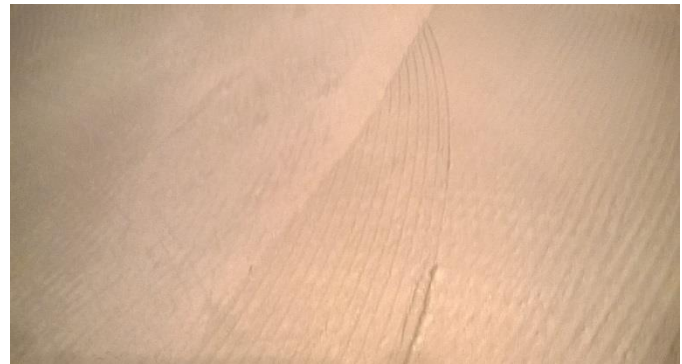
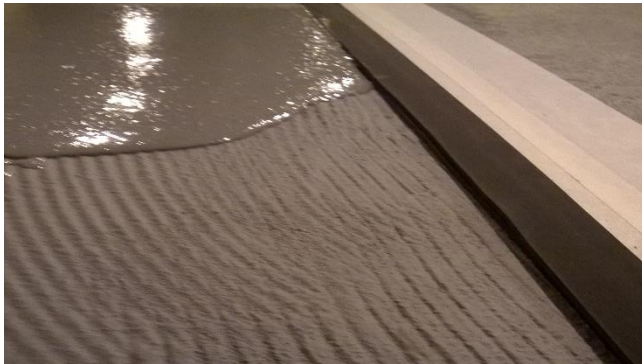
Anchor grooves of 8 mm x 8 mm (maximum) can be filled out with the Ucrete Primer FS. Larger anchor grooves must be brushed out and filled with the subsequent Ucrete System.

The subsequent over-coating / application can be carried out when the Ucrete Primer FS is tack free, typically as follows.

- (1) 4 Hours at 10°C - 15° C
- (2) 3 Hours at 20° C
- (3) 2 Hours at 30° C

Ensure that Ucrete Primer FS has been correctly applied and cured. The use of Ucrete Primer FS is recommended to ensure the best surface finish and to aid application by reducing resin absorption into the concrete. At low temperatures and low humidity these times may be extended. The surface must be dry to the touch before overlaying.

Applied Ucrete MF over the Ucrete Primer FS



Master Builders Solutions Technical Services Bulletins

- No. 01. Grouting on an industrial scale
- No. 02. Fast Track Screed - Doing it Right
- No. 03. Ucrete Primer FS – recommended application
- No. 04. Watertight Construction Systems - Hot air welding
- No. 05. Trouble-Free watertight substructure

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NOTE

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