

# Ucrete<sup>®</sup> FL

## Heavy Duty Polyurethane Underlayment for Ucrete Flooring Systems

### DESCRIPTION

**Ucrete FL** is a solvent free underlayment screed applied by trowel or screed bar at a thickness of 12 to 100mm.

**Ucrete FL** is not a finished floor and must be overlaid with the appropriate Ucrete floor finish

### TYPICAL APPLICATIONS

**Ucrete FL** screed provides a fast and efficient means of repairing damaged floor slabs and also to create falls on a floor slab where insufficient time is available to use normal concrete or polymer floor screeds.

### ADVANTAGES

- Expert installation by fully trained licensed applicators
- Suitable for application on to 7 day old concrete and 3 day old polymer screeds
- Solvent free and non-tainting from the end of mixing, as tested by the Campden Technology Ltd.
- Allows application of suitable Ucrete flooring systems after approximately 16 hours
- Can be bulked out for economy in thick sections

### PACKAGING

**Ucrete FL** is supplied in 49.59kg working packs.

### AIR QUALITY

Ucrete has been awarded the Indoor Air Comfort Gold Label following extensive VOC emission chamber testing and auditing of quality management and production control procedures.

This demonstrates that Ucrete is an extremely clean product without any volatile compounds that might taint foodstuff or affect the well-being of personnel.

All Ucrete grades give very low emissions and conform to all the emissions requirements for indoor flooring systems in Europe including AgBB in Germany, Afsset in France, where they are rated A+ for VOC emissions (the cleanest rating), and M1 in Finland.

For further information please contact your local Master Builders Solutions representative.

### APPLICATION GUIDELINES

#### SUBSTRATE QUALITY

Substrates will normally be concrete, or polymer modified screeds. Other substrates may be suitable; consult your specialist applicator or local Master Builders Solutions Construction Chemicals office for advice.

Concrete and other cementitious substrates must be visibly dry and have average tensile (pull-off) strength of 1.5MPa. **Ucrete FL** may be applied to substrates of lower strength but the long-term performance of the floor may be affected. All traces of contaminants, such as oils, fats, greases, paint residues, chemicals, algae and laitance must be removed.

#### PREPARATION OF SUBSTRATE

As with all surface coatings, proper surface preparation is vital to ensure the successful application and performance of **Ucrete FL**.

Prepare the surface by vacuum shot blasting, concrete surface planer, grit blasting or surface grinding to produce a clean sound substrate with good profile suitable to receive a resin finish.

Cut anchor grooves around all free edges as detailed in the Design and Preparation of Substrates brochure.

Priming is not normally necessary

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## TYPICAL PROPERTIES\*

Density	2310 kg/m <sup>3</sup>
Compressive strength (EN13892-2)	50 - 55 MPa
Tensile strength (BS6319 Part 7)	5 MPa
Flexural strength (EN13892-2)	11 MPa

**Note:** Samples cured for 28 days at 20°C

### MIXING AND APPLICATION

For best results, the site and material temperatures should be in the range 15-25°C. Minimum substrate temperature 5°C.

Do not apply when atmospheric condensation is occurring or likely to occur before overlaying, i.e., when the dew point is reached or when the ambient or substrate temperature is within 3°C of the dew point.

Mix in a forced action mixer. Mixing should be continuous to maintain a wet edge. Spread the mixed mortar evenly over the substrate (with rake, trowel or screed bar) and close with a steel trowel. Do not create a resin rich surface.

### BULKING OUT FOR THICK SECTIONS

For sections of minimum 60mm thickness.

Add 20kg of clean dry 10-20mm rounded aggregate per 49.59kg unit together with the Part 3 components into the forced action mixer.

Build-up in layers wet in wet maintaining a wet edge. Ensure good compaction throughout. Close with a steel trowel

On porous substrates apply an initial layer of 6-10mm of **Ucrete FL** without the additional aggregate to act as a primer layer and continue then wet in wet with the bulked out material.

On large areas greater than 70 mm thick the inclusion of concrete reinforcing mesh may be required.

### CURING

Prior to application of a subsequent coat, check that the surface is hard and tack-free. The recoating time is dependent upon humidity and temperature, but under normal conditions a second coat can be applied after 16 hours.

If the time between coats exceeds 48 hours, or if condensation or water impacts the surface, fully abrade the surface prior to overlaying.

### COVERAGE

#### Ucrete PRIMER FS:

Coverage is greatly influenced by substrate texture and porosity as well as temperature and mixer efficiency.

Typical coverage rates are:

0.6-1.6kg/m<sup>2</sup> or 8-20m<sup>2</sup>/unit

Maximum 3kg/m<sup>2</sup> can be applied

Typically 0.6kg/m<sup>2</sup> where otherwise a rollcoat primer might be used

Typically 1-1.5kg/m<sup>2</sup> where otherwise a scratchcoat primer is required

#### Ucrete FL:

*For thickness 12-60mm*

Approx. 2.3kg / m<sup>2</sup> / 1mm thickness

Yield: 21 litres / 49.59kg unit

*For thickness 60-100mm*

Approx. 2.48kg / m<sup>2</sup> / 1mm thickness

Yield: 28 litres / 49.59kg unit + 20kg of 10-20mm rounded aggregate

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## CLEANING

Tools may be cleaned immediately after use using a suitable thinner (Xylene / MEK / Acetone).

## STORAGE

In covered warehouse conditions, above 5°C and below 30°C and out of direct sunlight. Materials must be raised off the floor and kept dry. Liquid components must be protected from frost.

## DISPOSAL

Part 2 containers should be decontaminated with 5% sodium carbonate (washing soda) solution after use and disposed of as building waste in accordance with local regulations.

## HEALTH AND SAFETY

In its cured state Ucrete is physiologically non-hazardous.

For normal flooring applications Ucrete does not require the use of respiratory protective equipment during installation.

Operatives should consult the CoSHH risk assessment and their work instructions.

\* Properties listed are based on laboratory controlled tests.

® = Registered trademark of the MBCC Group in many countries.



When **Ucrete FL** is used as an infill layer underneath other Ucrete products the floor system conforms to the relevant CE marks.

Please refer to the relevant Declaration of Performance and the product and system data sheets.



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## STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

## NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.

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