UCRETE WR

Heavy duty polyurethane render for vertical surfaces

Description

UCRETE WR is a three-part polyurethane render for covering vertical surfaces. It is designed for application by trowel at thicknesses of 3mm and above. UCRETE WR should always be applied onto PRIMER GC or PRIMER TC, a solvent-free, two-component tack primer.

Uses

UCRETE WR is used to form coves and skirtings and to protect plinths, drains, tank bases, sumps, effluent storage pits and other vertical surfaces.

Benefits

- Expert installation
- Installed only by fully-trained applicators.
- Fast application
- Can be laid on 7-day-old concrete / 3-day-old polymer screed.
- Short curing times.
- Hygienic and safe
- Non-tainting
- Monolithic – minimises joints
- Easy to clean
- Non-dusting
- Long life
- Resistant to almost all chemicals
- Excellent wear and impact resistance
- Resistant to temperatures -40°C to +120°C
- Proven track record
- 25 years of project references

Packaging

UCRETE WR is supplied as a 15.3kg multi-component:

Part 1 : 1.01kg net weight.
Part 2 : 1.09kg net weight.
Part 3 : 12.8kg net weight.

Colour Pack: 400 grams

Total pack size 15.3kg.

PRIMER TC is supplied as two factory-batched components.

Colours

UCRETE WR is available in six standard colours:
Cream, Green, Grey, Orange, Red, Yellow

Other colours may be available to meet special requirements but will be subject to minimum order quantities and may require extended lead times.

Typical physical properties* (a)

* Properties listed are only for guidance and are not a guarantee of performance.

Density (BS 6319 Part 5)	2100kg/m³
Compressive strength (BS 6319 Part 2)	45N/mm²
Tensile strength (ISO R527)	7N/mm²
Flexural strength (ISO 178)	10N/mm²
Dynamic elastic modulus (ASTM C597-83)	18000N/mm²
Adhesive strength to concrete (BS 6319 : Part 4)	concrete failure
Co-efficient of thermal expansion (ASTM C531 Part 4.05)	2.4 x 10-5°C-1
Thermal conductivity (BS 874)	1.1W/m°C
Water absorption (CP.BM 2/67/2)	0ml
Surface spread of flame (BS 476 : Part 7)	Class 2

(a) samples cured for 28 days at 20°C

Application

- Substrate quality:
- Substrate will normally be concrete or polymer-modified screeds. Other substrates may be suitable, consult your specialist applicator or Degussa Construction Chemicals office for advice.
- All substrates must be clean and free from dust and loose particles. Concrete and other cementitious substrates must be visibly dry and have a minimum tensile (pull-off) strength of 1.5 N/mm². UCRETE WR 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, should be removed.
- Preparation of substrate:
- As with all surface coatings, proper surface preparation is vital to ensure the successful application and performance of UCRETE WR.
- For practical reasons, coves are generally prepared by wire-brushing or grinding, whilst vertical surfaces may require abrasive blasting followed by vacuum cleaning to remove loose particles.
- Mixing and application:
- Full details of correct mixing and application procedures for both PRIMER TC and UCRETE WR are given in the UCRETE Application Manual which is available to licensed and specialist applicators only.
- Curing:
- The following table should be used as a guide at 15 to 25°C:
- Operational 8 hours
- Full traffic and chemical resistance 48 hours

Coverage

Coverage is influenced by substrate roughness, porosity and temperature.

Chemical resistance

- UCRETE WR will resist spillages of:
- dilute and concentrated acids: hydrochloric, nitric, phosphoric and sulphuric
- dilute and concentrated alkalis, including sodium hydroxide to 50% concentration
- most dilute and concentrated organic acids
- fats, oils and sugars
- mineral oils, kerosene, gasoline and brake fluids
- most organic solvents
- In many cases resistance is maintained to elevated temperatures even under thermal shock conditions. Temperature resistance is, however, dependent on thickness.
- At 3mm a maximum service temperature of 60°C should be observed. This rises to 120°C at a thickness of 9mm.
- Detailed information on chemical resistance is available from Degussa Construction Chemicals.

Cleaning

- Cleaning of plant and equipment should be undertaken well away from the application area. Xylene may be used to clean equipment, tools and spillages. In the case of spillages, excess material must first be absorbed onto sawdust or other disposable absorbent medium. Use correct handling procedures with solvents and take care to avoid any accidental spillage or splashes onto coated surfaces.
- Part 2 containers may contain small amounts of unreacted diisocyanates (MDI). Therefore they must be

decontaminated with a 5% solution of soda ash (sodium carbonate or washing soda) prior to disposal as building waste.

Maintenance

- Regular cleaning and maintenance will prolong the life of all resin floors, enhance the appearance and reduce the tendency to retain dirt.
- Specialised floor cleaning equipment and chemicals are ideally available and the suppliers are able to offer advice on appropriate cleaning regimes. Consult your specialist applicator or Degussa Construction Chemicals office for advice.

Storage

- All parts of PRIMER TC and UCRETE WR should be stored under cover and free off the ground. Storage conditions should be dry, above 5°C and below 30°C. Part 1 of UCRETE WR must not be allowed to freeze.

Health and safety

- Appropriate health and safety advice can be found in the Material Safety Data Sheets.
- Users are advised to wear gloves and eye protection when mixing and applying PRIMER TC and UCRETE WR.

Safety precautions

- As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which can also be tainted with vapour until products is fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use.

Note

- Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local Degussa representative.
- Degussa reserves the right to have the true cause of any difficulty determined by accepted test methods.

Quality

- All products produced by Degussa certified manufacturing facilities, are produced to conform to systems designed to meet internationally recognised quality standards.

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