

UCRETE TZ

A 9mm or 12mm heavy duty terrazzo-finish polyurethane concrete flooring

Unique HD polyurethane resin technology with exceptional resistance to aggressive chemicals and thermal shocks

Description

UCRETE TZ is a four-part polyurethane concrete. It is designed for application by trowel at thicknesses of 9mm and 12mm, followed by grinding and polishing to a terrazzo finish. A grout, UCRETE TZ Grout is used in the grinding and polishing operations.

Uses

UCRETE TZ floors are used most widely in the pharmaceutical industry. They combine the visual appeal of a terrazzo finish with maximum clean ability and hygiene. For areas where dry powders and solvents are handled, an anti-static version is available.

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
 - Will not support bacterial growth
 - Monolithic – minimises joints
 - Easy to clean
 - Slip-resistant
 - Non-dusting
- Aesthetic
 - Attractive terrazzo finish
- 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® TZ is available in:

	Mixed Weight
UCRETE PRIMER SC 3 Components	2.905kg
UCRETE PRIMER TC 2 Components	2.41kg
UCRETE TZ 4 Components	30.53kg
UCRETE TZ Coving 4 Components	13.10kg
UCRETE TZ Grout 3 Components	6.155kg
UCRETE LOCKCOAT PU	6kg

Coverage

Primer	UCRETE PRIMER SC	0.2-0.4kg/m ²
Cove Primer	UCRETE PRIMER TC	0.2-0.3kg/m ²
9mm	UCRETE TZ	20-22kg/m ²
12mm	UCRETE TZ	24-26kg/m ²
Pore Filler	UCRETE TZ GROUT	0.2-0.3kg/m ²
Coving	UCRETE TZ COVING (excluding Cove Radius)	12-14kg/m ²
Sealer 1 st coat	UCRETE LOCKCOAT PU	0.18-0.21kg/m ²
Sealer 2 nd coat	UCRETE LOCKCOAT PU	0.14-0.16kg/m ²

UCRETE TZ

Colours

UCRETE TZ 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.

UCRETE TZ Grout is supplied in white only.

Typical physical properties (*)

Density (BS 6319 Part 5)	2090kg/m ³
Compressive strength (BS 6319 Part 2)	55N/mm ²
Tensile strength (ISO R527)	6N/mm ²
Flexural strength (ISO 178)	14N/mm ²
Dynamic elastic modulus (ASTM C597-83)	20000N/mm ²
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
Thermal conductivity (BS 874) W/m	1.1°C
Water absorption (CP.BM 2/67/2)	0ml
Surface spread of flame (BS 476 : Part 7)	Class 2

(*) samples cured for 28 days at 20°C

Specification

The floor finish shall be UCRETE® TZ from BASF Construction Chemicals (UK), of 19 Broad Ground Road, Redditch, Worcestershire, B98 8YPB, installed at 9/12* mm in accordance with the manufacturers' instructions.

*A 9 mm UCRETE® TZ floor is fully resistant to high temperature spillage and discharge up to 120°C and is fully steam cleanable

*A 12 mm UCRETE® TZ floor is fully resistant to high temperature spillage and discharge up to 130°C and occasional spillage up to 150°C and is fully steam cleanable.

In extreme thermal shock environments a well designed substrate of good quality concrete is essential.

Application

Substrate quality:

Substrate will normally be concrete or polymer-modified screeds. Other substrates may be suitable, consult your specialist applicator or BASF 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 minimum tensile (pull-off) strength of 1.5N/mm². UCRETE TZ 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.

Substrate preparation:

As with all surface coatings, proper surface preparation is vital to ensure the successful application and performance of UCRETE TZ.

The preferred method of surface preparation is vacuum shot-blasting. Other methods, such as air impact hammer (scabblers) provided that the substrate is not damaged, concrete surface planer, grit blasting, wire brush scarifier, surface grinder, drum sander and flame spaller, can be satisfactory. Chemical methods, such as acid etching, are not reliable and not recommended.

Mixing and application:

Full details of correct mixing and application procedures are given in the UCRETE Application Manual which is available to licenced and specialist applicators only.

UCRETE TZ

Curing:

The following table should be used as a guide at 15 to 25°C:

Foot traffic	8 hours
Light traffic	24 hours
Full traffic and chemical resistance	48 hours

Chemical resistance

UCRETE TZ will resist spillages of:

- Dilute and concentrated mineral 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. A maximum service temperature of 120°C should be observed.

Detailed information on chemical resistance is available from BASF Construction Chemicals.

Clean and spillages

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.

Storage

All parts of UCRETE TZ and UCRETE TZ Grout should be stored under cover and free of the ground. Storage conditions should be dry, above 5°C and below 30°C. Parts 1 must not be allowed to freeze.

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 BASF representative.

BASF reserves the right to have the true cause of any difficulty determined by accepted test methods.

Quality statement

All products manufactured in BASF's Dubai, UAE facility or imported from BASF affiliate companies world-wide, are manufactured to procedures certified to conform with the quality management systems described in the ISO 9000 series. The Management System at the Dubai plant is also certified to conform to the environmental standard ISO 14001.

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