

ULTRACRETE

Description

Ultracrete is a rapid curing, resin rich, three pack Epoxy Screed with exceptional resistance to aggressive acids, solvents and alcohols e.g. 96% Sulphuric acid, Methyl Ethyl Ketone, and Methanol. Ultracrete is typically applied at thicknesses of between 4mm and 9mm depending upon service conditions and performance requirements. Greater thicknesses may be applied in conditions of exceptional severity (in terms of aggressive chemicals and temperature). Ultracrete is usually applied in conjunction with a separate primer, Ultraprime.

Typical uses

Chemical bund linings .
Heavy duty, chemical resistant flooring e.g. chemical and printing works, dye-works, pharmaceutical production, etc.

Advantages

- * Outstanding chemical resistance
- * Tough, durable, non-slip finish
- * Abrasion and impact resistant
- * Very rapid cure even at low temperatures

Typical Properties

Colour: Grey, Red
Pot life @ 20C 35 minutes
Pot life @ 10C: 65 minutes
Walk on time @ 20C: 6 hours
Full traffic time @ 10C: 14 hours
Full chemical resistance: 4 days @ 20C
Temperature range during application: 2C to 35C
Temperature range during service: -20C to 80C
Compressive strength: 75N/Sq.m.
Chemical resistance guide: available on request.

PROCEDURE

1. Surface Preparation

a) Concrete shall be a minimum of 21 days old and/or the residual moisture content shall be below 6%.

Ensure that the concrete is clean and free from dust, laitance, grease, oil, curing compound, existing paint finishes, etc. Blow holes and defective concrete shall be made good using a proprietary repair compound e.g. Floorpatch or EPA Epoxy Mortars.

Suitable mechanical treatment, such as vacuum grit-blasting, is the preferred treatment prior to application, as this ensures a mechanical "key" for the coating.

b) Steel surfaces shall be shot blasted or grit blasted to a nominal Sa 2.5 Swedish standard. All dust and grease shall be removed prior to coating application.

If a delay is likely to occur between blasting and application then it is recommended that a coat of Steelprime shall be applied as holding primer to obviate flash rusting.

2. Priming

Apply a coat of Ultraprime at a nominal rate of 0.25Kg /Sq.m. and broadcast a fine Silica Sand at a nominal rate of 1 Kg/Sq.m..

Allow to cure for a minimum of 4 hours @ 20C or up to a maximum of 24 hours @ 20C.

Sweep off excess sand prior to application of Ultracrete.

3. Mixing

Ultracrete is supplied as a three pack material consisting of the resin BASE component, the CURING agent component and the AGGREGATE component.

The contents of the CURING AGENT container should be emptied into the BASE component, and the two liquids mixed thoroughly, preferably by mechanical means.

The mixed BASE and CURING AGENT components should then be poured into a mixing vessel e.g. Creteangle type, and the AGGREGATE added whilst stirring, mixing thoroughly for 2 - 3 minutes.

4. Application

Apply the mixed material using screeding bars or screed box, ensuring good compaction , and finish with stainless steel or chemical resistant- plastic float.

NOTE: See limitations.

5. Equipment Cleaning

Clean all equipment immediately after use, with Toolclean.

6. Curing

Ultracrete should be allowed to cure for a minimum of 6 hours @ 20C prior to light foot trafficking, and for a minimum of 14 hours @ 20C prior to full trafficking.

Allow a minimum cure period of 96 hours @ 20C prior to exposure to chemicals.

Curing will be slower at lower temperatures and faster at higher temperatures.

7. Packaging.

Ultracrete is supplied in 25Kg packs.

8. Coverage

2.0 Sq.m. per pack @ 6mm thickness;

3.0 Sq.m. per pack @ 4mm thickness.

9. Storage and Shelf Life

Store in dry conditions at temperatures between 10C and 25C.

Ultracrete has a minimum shelf life of 12 months when stored in original, unopened containers in accordance with the manufacturers instructions.

10. Limitations

Do not apply to wet, uncured, or contaminated surfaces.

Do not apply at temperatures below 2C

Ultracrete is primarily a functional product, and slight residual trowel marks may remain in the finished surface.

Discolouration/bleaching of the screed can occur on contact with certain aggressive chemicals, thus leading to contamination/discolouration of the chemical itself.

11. Health and Safety.

Avoid contact of uncured materials with the skin and eyes.

Wear appropriate protective clothing during handling and application. Refer to Material Safety Data Sheet for full information.

Ultracrete shall be applied strictly in accordance with the manufacturers instructions.