

Description

Resbuild Ultracrete is a rapid curing, resin rich, three pack Epoxy Screed with exceptional resistance to aggressive acids, solvents and alcohols e.g. 96-99% Sulphuric acid, Methyl Ethyl Ketone and Methanol. Resbuild 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). Resbuild Ultracrete is usually applied in conjunction with a separate primer, Resbuild 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 (other colours on request)
Density: 2.1kg/litre
Pot Life: 35 minutes @ 20°C
Compressive strength: 75 MPa
Flexural strength: 24 MPa
Temperature range during application: 2°C to 35°C
Temperature range during service: -20°C to 80°C
Chemical resistance: Excellent resistance to a wide range of industrial chemicals.
Chemical resistance guide available on request.

Packaging

Resbuild Ultracrete is supplied in 25kg packs.

Procedure

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. Resbuild Floorpatch or Resbuild EPA Mortars. Suitable mechanical treatment such as vacuum gritblasting, 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.
- c)

Priming

Apply a coat of Resbuild Ultraprime at a nominal rate of 0.25kg/m² and broadcast fine Silica sand at a nominal rate of 1kg/m².

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

Sweep off excess sand prior to application of Resbuild Ultracrete.

Mixing

Pour the contents of the Curing Agent container into the Base container and mix thoroughly by spatula or low speed drill/stirrer. The mixed resins shall be poured into a forced action mixing vessel, (Creteangle bucket or similar), and the Aggregate added steadily whilst the mixer is in motion. Mix for 2-3 minutes until a uniform material is achieved.

Application

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

As a resin rich screed, Resbuild Ultracrete is slightly sticky during trowel application. Occasional wiping of the trowel with a cloth impregnated with Resbuild Toolclean will facilitate application.

Equipment Cleaning

Clean equipment with Resbuild Toolclean prior to curing of the coating.

Curing

Allow to cure for a minimum of 6hours @ 20°C prior to light foot trafficking and 14 hours @ 20° prior to vehicular traffic. Allow a minimum cure period of 96 hours @ 20°C prior to exposure to chemicals. Curing will be slower at lower temperatures.

Storage and Shelf Life

Store in dry conditions at temperatures between 10°C and 25°C. Avoid low temperature storage prior to use of the material. Do not expose to freezing conditions.

Resbuild Ultracrete has a minimum shelf life of 12 months when stored in original, unopened containers in accordance with manufacturer's instructions.

Coverage

1.95m² per pack @ 6mm thickness

2.90m² per pack @ 4mm thickness

Limitations

Do not apply to wet, uncured or contaminated surfaces.

Do not apply at temperatures of 2°C or less.

Resbuild 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. This will not affect the protective properties provided by the product.

Health and Safety

Wear gloves and goggles.

Wash off splashes immediately with soap and water.

Please refer to Material Safety Data Sheet for additional information.

Resbuild Ultracrete shall be applied strictly in accordance with the manufacturer's instructions.

For specific advice regarding any aspect this product, please consult our Technical section.

The information provided in this Product Data Sheet is intended for general guidance only and is given in good faith based on Resin Building Products Limited current knowledge and experience. No warranty in respect of fitness for a purpose, or any other liability whatsoever can be inferred from the information contained within this data sheet. Users should determine the suitability of the materials for their particular application and should always refer to the most recent issue of the Product Data Sheet for the product concerned. All materials are supplied in accordance with our standard terms and conditions of sale (available upon request).