

Silfloor UL6 is a high strength self-smoothing epoxy which provides a economical method of leveling floor prior to laying epoxy screed, toppings or coatings such as Silffloor SFC and Silffloor SS Series. Silffloor UL6 consists of special resins and graded aggregates formulated to withstand chemical attack and impact shock. The product is supplied as a 3 component system comprising resin base, resin hardener and fillers. When correctly laid Silffloor UL6 will provide a surface ready to receive applications of other Silkon flooring systems.

Product usages and advantages

- Cost effective
- High strength
- Quick and easy to lay
- Seamless
- Durable

Description

Silffloor UL6 is designed for application in the range of 1.5-6 mm. Substrates should be surface dry and not suffer, or be likely to suffer, from rising dampness. If necessary, suitable damp-proof membranes should be installed to prevent this. Substrates should not have a moisture content greater than 5% at any time during the installation.

The epoxy underlay shall achieve a minimum compressive strength of 60 N/mm². Flexural strength of 20 N/mm² and Tensile strength of 10N/mm² @ 7 days. The underlay shall have nil water absorption when tested as per BS1881 Part 122-1983. The adhesion strength of the epoxy underlay shall be greater than the tensile strength of concrete.

Technical Support

Silkon provides a comprehensive range of high performance, high quality flooring, jointing and repair products for both new and existing floor surfaces. In addition, the company offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance in locations all over the world.

Properties

The values given below are typical figures achieved in laboratory tests. Actual values obtained on-site may show minor variations from those quoted.

Physical properties @ 35°C

Pot life : 70 minutes
Mixed density : 1.80 - 1.85 g/cc

Compressive strength
(BS 6319 part 2, 1983) : 65 N/mm² @ 7 days

Tensile strength
(BS 6319 part 7, 1983) : 12 N/mm² @ 7 days

Flexural strength

(BS 6319 part 3, 1983) : 26 N/mm² @ 7 days

Water absorption
(BS 1881 Part 122, 1983) : Nil

Curing characteristics @ 35°C
Initial hardness : 16 hours
Full cure : 7 days

Adhesion : Greater than the tensile strength of concrete

Application Methodology

Surface Preparation

It is essential that Silkon UL6 is applied to sound, clean and dry surfaces in order that maximum bond strength is achieved between the substrate and the flooring system. All dust and debris should be removed prior to application of the product.

New concrete floors

Should be at least 21 days old with a maximum moisture content not exceeding 5%. Laitance deposits on new concrete floors are best removed by light grit blasting, mechanical scabbling or grinding.

Old concrete floors

Mechanical cleaning methods are strongly recommended on old concrete floors particularly where heavy contamination by oil and grease has occurred or existing coatings are present. These may well have been absorbed several millimetres into the concrete. To ensure adhesion, all contamination should be removed by the use of a proprietary chemical degreaser.

Priming

Priming is not normally required provided the substrate is sound, untreated, dry and good quality concrete. If any doubts exist of the quality of the concrete, contact the local Silkon office for advice.

For highly absorbant concrete substrate, Silffloor Primer shall be used to seal the pores.

Mixing

It is important that Silffloor UL6 is mixed correctly. Suitable mixing equipment must be used, such equipment being defined as either a heavy duty variable speed drill and Mixing Paddle, similar. Empty the entire contents of the resin hardener component into the can containing the resin base component and mix until homogeneous. Place the mixed resin components into the mixing vessel and while mixing slowly add the fillers. Mixing of all components shall continue for a further 3-5 minutes, until such time that a homogenous mix is achieved.

Application

The mixed Silffloor UL6 should be spread to uniform thickness on the prepared surface using either a squeegee or a notched trowel. The subsequent use of a spiked roller, eliminates air

entrainment. The material must be applied within the pot life after mixing (see "Properties"). After this time unused material should be discarded.

Overcoating

Overcoating of the Silfloor with any other Silkon floor system should not start until the Silfloor UL6 is at least 18 hours old, but not later than 48 hours.

Expansion joints

Expansion joints in the existing substrate should be continued through the Silfloor UL6 and any subsequent topping, and filled to the required level with a suitable sealant - contact the local Silkon office for further details.

Cleaning

All tools and equipment should be cleaned immediately after use with Silfloor Solvent.

Pack size and coverage

Supply

Silfloor UL6 : 15 & 68 litres pack

Silfloor Solvent : 5 & 20 litre packs

Silfloor Primer : 1, 4 & 30 kg Pack

Coverage

Silfloor UL6 : 7.5 M² & 34 M²/pack @ 2mm
Thickness

Silfloor Primer : 6.5 - 7.5 M²/Kgs

Precautions

Health and safety

Silfloor UL6 and Silfloor Solvent should not come in contact with skin and eyes or be swallowed. Avoid prolonged inhalation of solvent vapours. Some people are sensitive to epoxy resins, hardeners and solvents. Gloves, goggles and a barrier cream should be used. Ensure adequate ventilation and if working in enclosed areas use suitable breathing apparatus. If mixed resin comes into contact with the skin, it must be removed before it hardens with a resin removing cream followed by washing with soap and water. Do not use solvent. Silfloor Solvent should be washed from the skin immediately with soap and water.

Should accidental eye contamination occur with any of the above products, wash well with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately. Do not induce vomiting.

Fire

Silfloor Solvent, is flammable. Do not expose to naked flames or other sources of ignition. No smoking during use. Containers should be tightly sealed when not in use. In the event of a fire, extinguish with a CO₂ or foam type extinguisher.

Flash points

Silfloor Solvent : 33°C

Also refer to the Material Safety Data Sheet.

Shelf life

Silfloor UL6 has a shelf life of 12 months when stored in a dry place below 35°C in its original, unopened packs. If stored at high temperature, the shelf will be reduced.

* Away from the sources of heat & naked flames.