

Resiflow *FC* Technical Data

DESCRIPTION

Resiflow FC is a two component self smoothing system, that is highly abrasion and chemical resistant. It is laid at a thickness of between 0.5 and 1.5mm.

APPLICATION PROCEDURE

Ambient temperature should be between 5⁰C and 35⁰C during application and cure.

Surface Preparation

CONCRETE

Concrete substrates must be at least 28 days old and be clean, dry, sound and free of laitence, oil, grease and any other surface contamination, which could impair adhesion.

Existing floor areas will require mechanical abrasion to reveal clean concrete. Enclosed vacuum blasting equipment or vonarx type scabblers should be used.

Any areas which have been contaminated with oil or grease should be treated with hot compressed air blasting equipment. This will drive out any deep seated contamination. Any areas of damaged concrete should be broken out and reinstated.

For small areas of thin section repairs - less than 10mm in depth - an epoxy resin repair mortar should be used. For larger area thicker section repairs a polymer reinforced cementitious repair mortar should be used. These larger repairs will need to cure for some 5-7 days before Resiflow FC may be applied.

Any existing floor coatings must be removed prior to the application of Resiflow FC.

For newly laid concrete, which has been allowed to cure for the minimum 28 days, a light pass with enclosed vacuum blasting equipment is required. This will lightly texture the substrate and ensure that all laitence and the remnants of any curing membranes are removed. Older, more contaminated substrates will require a heavier pass with enclosed vacuum blasting equipment.

Areas not accessible to blasting equipment should be prepared by a combination of vonarx scabblers, hand held diamond grinders and needle guns.

All dust and deleterious matter should be removed by vacuuming prior to the application of the primer.

Any flexible joints within the concrete should be protected with masking tape and brought up through the new surfacing. The perimeter of the area being treated along with any drains etc. should be protected with masking tape.

Priming

The substrate must be thoroughly sealed with an application of Resitech Primer CS, a two component moisture tolerant solvent free epoxy resin priming system.

Resitech Primer CS is supplied in pre-weighed packages, and it is essential that all of the curing agent, pack A, is added to all of the resin component, pack B, and mixed thoroughly for 60 seconds.

The fully mixed primer should be applied immediately to the prepared substrate by brush or roller. The coverage rate will vary dependent upon the texture and porosity of the substrate, but should fall in the range of 4-6m²/litre.

Very porous substrates may require a double primer application in order to fully seal the surface.

Resitech Primer CS must be allowed to cure tack-free prior to the application of Resiflow FC, this will take approximately 8 hours at 20°C.

Resitech Primer CS must not be allowed to cure for longer than 24 hours before application of Resiflow FC. If this happens then the existing primer will need to be lightly abraded followed by a second application of the primer.

Mixing and Application

Resiflow FC is a two component system supplied in pre-weighed packages.

It is essential that all of the curing agent, pack A, is added to all of the resin component, pack B, and mixed thoroughly with a slow speed high torque drill and mixing paddle for 60 seconds.

The graded fillers, component C, are then gradually added whilst mixing continues for an additional three minutes until a smooth and homogeneous mix is obtained.

The fully blended system is applied by steel trowel at the specified coverage rate and allowed to self smooth.

Resiflow FC is immediately and thoroughly rolled with a porcupine roller to aid the release of air and improve the surface finish.

At an ambient temperature of 20°C, Resiflow FC may be lightly trafficked after 24 hours, with a cure time of 48 hours being required prior to heavier trafficking.

COVERAGE & CURE

A 20.5kg unit of Resiflow FC will cover approximately 8m² at a thickness of 1mm.

- Primary Cure (20°C) - 12 hours
- Full cure (20°C) - 7 days
- Pot Life (20°C) - 30 minutes

Please note that cure times increase considerably at lower temperatures.

TECHNICAL PROPERTIES

- Tensile Strength: (BS 2782 pt 10) - 16N/mm²
- Compressive Strength: (BS 6319 pt 2) - 42N/mm²
- Flexural Strength: (BS 2782 pt 10) - 45N/mm²

CHEMICAL RESISTANCE

Resiflow FC exhibits excellent resistance to a wide range of chemicals, and is fully resistant to the following:

- 10% Sulphuric Acid
- 10% Hydrochloric Acid
- Xylene
- Methyl Ethyl Ketane
- Petrol
- 20% Sodium Hydroxide
- Ethylene Glycol
- Trichlorethylene

For resistance to other chemicals please contact Optus.

CLEANING

Tools should be cleaned with a hydrocarbon solvent such as xylene before the initial cure has occurred.

HEALTH AND SAFETY

It is recommended that barrier cream, gloves and overalls be worn when using Resiflow FC. For full details please refer to the appropriate health and safety data sheets.



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