

Sikafloor®-Resiplot

Epoxy/Glass-fibre Mechanical Floor Fixing System

Product Description

Sikafloor Resiplot is a patented system for treating internal cementitious floors where conventional surface preparation is not viable. The system comprises of a mechanical anchored epoxy/glass-fibre mesh layer which provides a sound base for subsequent layers of synthetic resins or bonded tiled, timber finishes.

Uses

- Food Factories
- Workshops
- Production Areas
- Walkways
- Corridors
- New or Old Floors
- Supermarkets

Characteristics / Advantages

- Mechanical preparation can be avoided
- Reduced noise and vibration during installation
- Reduced dust compared to mechanical techniques
- Overlaying certain finishes is possible
- Overlaying sheet flooring or tiles
- Substrates with light contamination can be overcoated
- Can accommodate most floor finishes
- Rapid Installation
- Uses Solvent Free Epoxy Resins
- Waterproof

Product Data

Form

Appearance /Colours	Mesh:	white, fibreglass
	Anchor :	white, plastic

Packaging	Mesh:	roll 50m ²
	Anchor:	bag with 350 anchors

Storage

Storage Conditions/ Shelf-Life	60 months from date of production if stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +5°C and +30°C.
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Construction



Technical Data

Mesh Details

Form	Fibreglass
Weight	175g/m ²
Grid Size	4mm x 4mm
Thickness	0.8mm
Elongation at break	3%

Anchor Details

Form	Plastic
Shaft Length	40mm
Shaft Diameter	12mm
Head Diameter	30mm

Mechanical / Physical Properties

Failure	In concrete substrate >2N/mm ²
Elastic Modulus	1400-2600 N/mm ²
Breaking Load	25 N/mm ²
Compressive Strength	According to the chosen finish and flooding resin
Inter-coat Times	According to the chosen finish and flooding resin

Resistance

Thermal Resistance

Exposure*	Dry heat
Permanent	+50°C
Short-term max. 7 d	+80°C
Short-term max. 12 h	+100°C

Short-term moist/wet heat* up to +80°C where exposure is only occasional (steam cleaning etc.).

*No simultaneous chemical and mechanical exposure.

System Information

System Structure

1. Clean the floor.
2. Roll out Sikafloor Resiplot mesh.
3. Drill and fix Sikafloor Resiplot anchors.
4. Fill anchor holes with Sikafloor 156 or Sikafloor 161.
5. Cover mesh with Sikafloor 156 or Sikafloor 161 (min 1.2 kg/m²)
6. For finishes requiring a mechanical key, apply a second coat of Sikafloor 156 or Sikafloor 161 (0.4 kg/m²). Fully blind with sand.
7. Apply finish covering:
 - Cementious underlay (Sikafloor Level)
 - Resin coating
 - Bonded tiles
 - Bonded PVC or carpet
 - Bonded timber

Application Details

Substrate Preparation

The cementitious substrate should have a minimum thickness of 100mm and contain at least 300 kg/m³ of cement. Tensile strength (25mm depth from top surface) must be >1 N/mm² and compressive strength >25 N/mm². If the substrate is not of this strength consult Sika Limited for additional advice.

Grease spots or stains are permissible however the substrate should not be impregnated with substances preventing the chemical sealing of the bolts (ie cutting oils or silicones). The substrate can have a coating of (for example) a synthetic resin, tiles (on a sound substrate) or plastic tiles or sheets glued into place. The Sikafloor Resiplot system is a thin covering and will not correct unevenness within the floor, without additional layers.

It is not a final finish in its own right. The system relies upon a grid of 12 mm diameter holes, 50 mm deep at 400 mm centres being drilled.

It is the installers responsibility to check that cables, pipes, reinforcement, conduits or buried services will not be affected. The surfaces must be clean, dry and free of particles, dust or other non-adherent items. A suitable cleaning method involving washing, degreasing or vacuum cleaning may be required. Pre-treat any undulations if required using a Sikafloor 156 or Sikafloor 161 scraping mortar.

Application (Mesh and Fixings)

Unroll the Sika Resiplot mesh onto the floor and turn over to prevent mesh curling. Cut the material to suit the shape of the floor overlapping all joints by 100 mm.

Drill through the mesh at 400 mm centres, a series of 12 mm \varnothing 50 mm depth holes. Remove dust from bolt holes using the drill vacuum dust extraction system or separate extraction unit.

Place the Sika Resiplot anchors into the holes, through the mesh.

Ensure the mesh remains flat and without creases.

Provide additional anchors at all corners, angles and edges where the normal anchors are not within 50 mm of the edge/angle/corner.

Application (Resin)

Mix the Sikafloor 156 or Sikafloor 161 in accordance with the technical datasheet. Pour mixed Sikafloor 156 or Sikafloor 161 into the anchor holes and ensure that they are full before applying the remainder of the Sikafloor 156 or Sikafloor 161 evenly to the entire floor area by squeegee.

Ensure the anchors and mesh are fully covered. Consumption will vary according to the profile of the substrate. Allow at least 1.2 kg/m² of Sikafloor 156 or Sikafloor 161. Porous or irregular surfaces will require more Sikafloor 156 or Sikafloor 161. Allow to cure.

If the subsequent floor finish requires a broadcast/sand finish as a mechanical key, apply a second coat of Sikafloor 156 or Sikafloor 161 once the first coat is cured and fully blind with quartz sand 0.3-0.8mm or larger.

Application Conditions / Limitations

Substrate Temperature	+10°C min. / +30°C max.
Ambient Temperature	+10°C min. / +30°C max.
Substrate Moisture Content	< 4% pbw moisture content for Sikafloor 156 or < 6% pbw moisture content for Sikafloor 161 Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).
Relative Air Humidity	80% r.h. max.
Dew Point	Beware of condensation! The substrate and uncured floor must be at least 3°C above dew point to reduce the risk of condensation or blooming on the floor finish. Note: Low temperatures and high humidity conditions increase the probability of blooming.
Cleaning of Tools	Clean all tools and application equipment with Thinner C immediately after use. Hardened and/or cured material can only be removed mechanically.
Notes on Application / Limitations	Not intended for use over bituminous substrate or substrate where deformation can occur. Heavy contamination will require pre-treatment, if in doubt conduct trial. Don't apply Sikafloor Resiplot to substrates where significant vapour pressure may occur. Sikafloor Resiplot can't make good substrates of very low quality and strengths. Only use in conjunction with Sikafloor 156 or Sikafloor 161 as the mesh/bolt binder. Can be overlaid with most floor coverings.
Value Base	All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
Local Restrictions	Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.
Health and Safety Information	For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.
Legal Notes	The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.



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