BUILDING TRUST

M12 Specification

Suggested Sika M12 Specification for:

Our Reference:

Date:

SIKA LIMITED

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M12 RESIN FLOORING

To be read with preliminaries / general conditions and the Sika Limited project specific specification.

The details contained within this proposal are based on information available at the time of writing. It covers the installation of Sika Limited materials and the preparation work necessary to provide a suitable substrate. Sika Limited cannot be held responsible for unknown site conditions or for the performance of materials within the system other than Sika Limited products or Sika Limited branded products.

A detailed method of work statement and programme of works should be agreed with the Sika Limited Registered Contractor before the commencement of the works.

The requirements of all relevant British Standards and Industry Codes of Practice should be complied with at all times. A bibliography is available upon request.

TYPES OF FLOORING

110 RESIN FLOORING

- Substrate: Concrete or cement screeds with normal up to medium heavy wear
- Preparation: Strictly in accordance with Manufacturers recommendation
- Resin flooring System: Sikafloor 235 ESD
- Manufacturer: Sika Limited Web: www.sika.co.uk Tel: 01707 394444
- Levelling if required: Sikafloor Levelling compound: Sikafloor 161 scratch coat.
- Build up: Sikafloor 161/156 Primer
- Sikafloor Earthing Kit
- Sikafloor 220W Conductive Primer
- Sikafloor 235 ESD filled with Sikafloor Filler 1 / quartz sand F34 / Extender T
- Application: Self smoothening flooring resin trowel applied 1mm – 1.5mm
- Spike roller to remove air
- Colour: To be selected by client from RAL colour scheme
- Surface Finish/Treatment: As per manufacturer's recommendation
- Flatness/Surface Regularity:
- Sudden irregularities: Not permitted
- Classification of surface regularity to BS 8204-6:
- Slip resistance: Pendulum test value to BS 7976-2 or in accordance with BS 8204-6, Annex B:

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120 RESIN FLOORING

- Substrate: Concrete/Cement Screed
- Preparation: Strictly in accordance with Manufacturers recommendation
- Resin flooring system:
- Manufacturer: Sika Limited
- 2-part epoxy electrostatic, dissipative and tough elastic self-smoothing system
- Type: Epoxy Resin
- Durability:
- Activities / Trafficking: Good mechanical and chemical resistance, contact manufacturers for further information
- Processes: Typical applications include industries that process, assemble, install, package, test or transport, such as clean room, pharmaceutical, automotive industries etc.
- Compressive Strength:
  Resin: ~ 44 N/mm² (28 days / +23°C) (EN 196-1)
  Flexural Strength**:** Resin: ~ 20 N/mm² (28 days / +23°C) (EN 196-1)
  Bond strength**:** 1.5 N/mm² (failure in concrete) (ISO 4624)
  Shore D Hardness**:** 58 (7 days / +23°C) (DIN 53 505)
- Abrasion Resistance: 60 mg (CS 10/1000/1000) (28 days / +23°C) (DIN 53109 Taber Abrader Test)
- Electrostatic Behaviour: Resistance to ground: Rg < 10^9 Ω (IEC 61340-4-1) In accordance with IEC 61340-5-1 and ANSI/ESD S20.20.
- Typical average resistance to ground: Rg < 10^6 Ω (DIN EN 1081) Readings may vary, depending on ambient conditions (i.e. temperature, humidity) and measurement equipment.
- Body voltage generation: < 100 V (IEC 61340-4-5) Readings may vary, depending on ambient conditions (i.e. temperature, humidity) and measurement equipment.
- System Resistance (Person/Floor/Shoe): < MΩ (IEC 61340-4-5). Or < 10^9 Ω + body voltage generation of <100 V, in case of readings >35 M Ω

PREPARATION OF SUBSTRATES

210 TESTING MOISTURE CONTENT OF SUBSTRATES

- Drying aids: Remove minimum four days prior to test
- Test: To BS 8203, Annex A using an accurately calibrated hygrometer
- Location of readings: Corners, along edges, and at various points over the test area
- Relative humidity before laying resin flooring (maximum): 80%

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220 SURFACE HARDNESS OF SUBSTRATES

- General: Substrates must restrain stresses that occur during setting and hardening of resin.
- Test for surface hardness: To BS EN 12504-2 using a rebound hammer, minimum compressive strength of 25 N mm^2
- Minimum pull of strength of 1.5 N mm^2
- Test results: Submit.
- Areas of noncompliance: Submit remedial proposals.

230 PREPARATION OF SUBSTRATES GENERALLY

- Chases/ Saw cuts: Cut/ break out at skirtings, free edges, movement joints, etc. for termination of resin flooring
- Blow holes, cavities, cracks, etc: Fill with repair product recommended by resin flooring manufacturer
- Cleanliness: Remove surface contaminants, debris, dirt and dust
- Surface texture: Suitable to accept resin flooring and achieve a full bond over the complete area

240 EXISTING SUBSTRATES

- Preparation: Remove surface imperfections, ingrained contaminants, coatings and residues
- Contaminated areas: Submit proposals for removal and repair

LAYING FLOORING

310 WORKMANSHIP

- Operatives:
  - Trained/ Experienced in the application of resin floorings.
  - Evidence of training/ experience: Submit on request.
- Fillers and incorporated aggregates: Thoroughly mix in to ensure wetting. Avoid over-vigorous mixing resulting in excessive air entrainment.
- Appearance: Consistent.
- Curing: Allow appropriate periods between coats and before surface treatments and trafficking/ use.

320 CONTROL SAMPLES

- Approval of appearance: Obtain before proceeding.

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350 COATED RESIN FLOORING

- Application: Even, of uniform thickness, surface finish and colour.

355 FLOW APPLIED COATED RESIN FLOORING

- Application: Even, of uniform thickness, surface finish and colour.
- Trapped air: Roll to release.

400 BOND STRENGTH OF RESIN FLOORING

- Contact surfaces: Substrate and fully cured resin flooring.
- Bond: In accordance with manufacturer's performance data.
- Test: To BS 8204-6, clause 11.4 and BS EN 1542

410 RESIN SKIRTINGS/ UPSTANDS

- Seamless coving transition strictly in accordance with Manufacturers standard details

420 FREE EDGES OF RESIN FLOORING

- Transition to abutting floor finishes: Straight and smooth.
- Retention of resin edges:

430 SEALANT MOVEMENT JOINTS

- Location: Centre over movement joints in substrate.
- Joint Width: As per design.
- Joint brought through to surface and sealed with appropriate Sika joint sealant.