

M12 RESIN FLOORING

To be read with Preliminaries/ General Conditions

TYPE(S) OF FLOORING

110A RESIN FLOORING

- Project:
- Location:
- Substrate:
- Preparation:
- Resin flooring system:
- Manufacturer: Ecoflor Ltd, Regus House, Malthouse Avenue, Cardiff Gate Business Park, Cardiff. CF23 8RU
- Primer reference: ECO Primer EP
- Resin flooring reference: **Ecoflor MT - concrete effect topping**
- Application: **3mm** Nominal thickness
- Colour: **TBA**
- Surface finish: In strict accordance with manufacturer's instructions.
- Flatness/Surface regularity:
 - Sudden irregularities: Not permitted.
 - Classification of surface regularity to BS 8204-6: Not required.
- Other requirements: **Please refer to Technical Data sheet in association with this specification.**

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): **75% R.H.**

210A SURFACE APPLIED DAMP PROOF MEMBRANE

- Manufacturer and reference: **ECO Primer DPM epoxy surface damp proof membrane by Ecoflor effective up to 97% R.H.**
- Apply in accordance with manufacturer's instructions.
In the event of underfloor heating please consult Ecoflor Technical for conditions of use.

220 SURFACE HARDNESS OF SUBSTRATES

- General: Substrates must restrain stresses that occur during setting and hardening of resin and in service.
- Test for surface hardness: To BS EN 12504-2 using a rebound hammer to ensure that a minimum strength of **26 N/mm²** is achieved. Surface tensile strength **>1.5N/mm²**.
- Areas of non-compliance: Submit remedial proposals for repair or cut out and replacement.

230A 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.
- Texture of surface: Suitable to accept resin flooring and achieve a full bond over the complete area.
- All live movement / crack induced joints should be brought through the resin and infilled with colour matched **Ecoflor Expand**.

230A SUBSTRATES TYPES AND PREPARATION

- **Concrete / Sand & Cement Modified Screed:** Dust enclosed diamond floor Grinder.
- **Timber Surface – RBP – Stable system only:** Remove all contamination and using vacuum controlled recovery sanding machine. (Seek Ecoflor’s advice for recommended construction detail and specification)
- **Metal Surface – Mild Steel:** Shot blast ensuring full removal of oil, grease, dirt, rust, paint coatings and any other foreign matter / surface contaminant. (Paragraph 260 refers).
- **Metal Surface – Galvanised Mild Steel:** Remove any surface contaminant and thoroughly clean and degrease before applying a proprietary etch primer in accordance with manufacturer’s instructions.

Other suitable substrates include: Granolithic, Stone, Terrazzo and Brick. Please consult Ecoflor Technical Services for compatibility and preparation requirements.

NB: In the event of underfloor heating please consult Ecoflor for further guidance.

After preparation surfaces should be free from laitance, friable materials and contamination. The area should be thoroughly vacuumed to remove any remaining dust or debris. Surface texture: Suitable to accept resin flooring and achieve a full bond over the complete area. Please note thinner resin floorings (coatings) will reflect the surface preparation in the finish.

240 EXISTING SUBSTRATES

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

250 EXISTING TILE/ SHEET FLOOR COVERINGS

- Preparation: Remove coverings, residual adhesive, bedding, grouting and pointing.

260 METAL SUBSTRATES

- Cleaning: Shot blast to BS EN ISO 8501-1, grade Sa2.5.
 - Treated surfaces: Clean. Free from visible oil, grease and dirt, mill scale, rust, paint coatings and foreign matter.

LAYING FLOORING

310A WORKMANSHIP

- Operatives: Trained/ Experienced in the application of resin floorings.
 - Evidence of training/ experience: on request.
- Appearance: Consistent.
- Curing: Allow appropriate periods between coats, before surface treatments, and before trafficking/use in accordance to manufacturer’s instructions.
- Health & Safety: Refer to MSDS’s.

320 CONTROL SAMPLES

- Complete areas of finished work in the following locations:

320A SAMPLES

- General: Ensure that representative samples are provided (available from Ecoflor) to the nominated sub-contractor in order to avoid any uncertainty over the expected finish.

357A TROWEL APPLIED SCREEDED RESIN FLOORING

Apply **Ecoflor MT Base** at nominal thickness of **1.5mm** to primed surface using a stainless-steel trowel taking care to compact and close the surface evenly, ensuring that

trowel marks are kept to a minimum. Allow to cure for maximum of 24 hours prior to sanding for MT Fine application. Use plastic floats for light colours to avoid metal transfer.

357B TROWEL APPLIED SCREEDED RESIN FLOORING

Sand the cured Base surface and thoroughly vacuum clean. Apply **Ecoflor MT Fine** at nominal thickness of **1mm** to sanded surface using a stainless-steel trowel taking care to compact and close the surface evenly, ensuring that trowel marks are kept to a minimum. Allow to cure for maximum of 24 hours prior to sanding for MT Fine application. Use plastic floats for light colours to avoid metal transfer.

Curing:

Light Foot Traffic	24 hours@ +20°C
Medium Traffic	48 hours @ +20°C
Full Chemical Cure	7 days @ +20°C

380 SURFACE SEALER

After thorough de-nibbing and vacuuming of cured MT Fine surface apply coat of **MT standard seal coat** with a short nap micro-fibre roller to leave a uniform and even surface. Ensure that the sealer is applied from a paint scuttle or tray and that the sealer is not poured out on to the floor. This will ensure an even thickness during seal coat application. MT seal coat is applied at a rate of around 150g/m². Do not apply too thinly as this will inhibit the self-levelling properties of the coating. Allow to cure for not longer than 24 hours. Mix and roller apply a tight finishing **MT standard seal coat** to leave an even closed film across the floor. **NB:** Failure to remove excess may affect the slip resistance and appearance of the finished system. DO NOT flood seal, as this can cause staining and discolouration.

390 SLIP RESISTANCE TESTING OF FINISHED RESIN FLOORING

- Standard: To BS 7976-2.
- Timing: Give notice.
 - Notice period (minimum):
- Results: Submit pendulum test values (PTV's), for both wet and dry states.

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/UPSTAND

- Quality: **Corestone screed 3mm. To include surface sealer to match floor finish applied in accordance with manufacturer's instructions.**
- Colour: As flooring.
- Profile: Radius cove.
- Top edge: Retain with a stop bead.
- Transition with resin flooring: _____

410A SUBSTRATE

To be a sound, stable structure incorporating a satisfactory damp proof membrane in accordance with the Code of Practice BS8000 where applicable. The type of construction suitable to receive Ecoflor resin cove detail being either: flush jointed brickwork / blockwork, cement/polymer rendered brickwork / blockwork, 18mm R.B.P. (Resin Bonded Ply – fixed securely to a stable background) or insulated sandwich partition with stainless expamet mechanically fixed at cove detail.

410B MOISTURE CONTENT

Where applicable the moisture content of the substrate construction should not exceed 75% R.H. or 5% moisture content by weight.

410C SURFACE PREPARATION

Prepare existing wall surface as necessary to remove loose or friable material and leave clean, stable keyed surface.

410E PRIMING

Apply a coat of Ecoflor Primer EP to leave an even closed surface. Re-prime area applying Ecoflor Primer EP and apply to provide a uniform liberal coating to the pre-primed area then lightly seed with Corestone aggregate and leave to cure.

410F COVING INSTALLATION

Whilst the modified primer is still tacky apply **Ecoflor EP Mortar** to form coved skirting with a 38mm radius and at height set by special fixing. Top edge tucked into the angle bead with the bottom edge finished to match floor thickness detail and leave to cure. Finish with Ecoflor MT concrete effect topping seamlessly with floor finish throughout.

410G JOINTS

All vertical joints to be transferred through the cove detail and in-filled with **Ecoflor Expand vertical**. (**Ecoflor Primer EP** contact surfaces)

420 FREE EDGES OF RESIN FLOORING

Transition to abutting floor finishes: Straight and smooth. Surfaces should be primed using **Ecoflor Primer EP**. Where applicable suitable transition strip may be used between different surfaces. Recommendations available upon request

Retention of exposed resin edges: Chamfer edges to a depth of 1.5 times the nominal thickness of the system being installed to allow for toeing in.

430 SEALANT MOVEMENT JOINTS

Location: Centre over movement joints in substrate.

Preparation and application: Method: Cut required chases mechanically and pack out the cut groove with flexible packer (flooring contractor's choice) before applying sealant.

- Joint width and depth to be agreed before installation.
- Sealant: **Ecoflor Expand**. (**Ecoflor Primer EP** contact surfaces)
- Colour: Matched to resin).

440 STRIP MOVEMENT JOINTS

- Location: Centre over movement joints in substrate.
- Retention of resin edges: _____
Joint width: _____
- **Strip:**
 - Manufacturer:
 - Product reference: _____
 - Insert type: _____
 - Colour: _____
 - Fixing: To exact finished level of resin flooring.

445 CLEANING & MAINTENANCE

The frequency and procedure of cleaning and maintenance associated with this flooring system should be established with the Client/End User and carried out in accordance with the Ecoflor Resin Flooring Cleaning and Maintenance Recommendations which are available upon request.

SMALL / LIGHTLY SOILED AREAS

Scrub with a hand held deck scrubber.

LARGE / HEAVILY SOILED AREAS

Mechanical scrubbing machine (using brushes).

450 PROTECTION TO HANDOVER

Whilst of an extremely durable nature these floor systems must be thoroughly protected from the rigours and abuse that exist during the ongoing contractual works. Sufficient cure must take place before the protection is placed. The use of untreated felt paper or plain cardboard where light access is required should be considered. Where heavier access is required then a more suitable medium to take the loadings should be considered, such as shuttering ply or Correx by Cordek placed on top of the felt paper. All protection

medium joints should be taped, and all accidental spillages should be recovered immediately by removal and reinstatement of the protection. Damage will occur to the system if the guidance is not followed.

455 SITE CONDITIONS

It is imperative that the correct site conditions prevail to ensure that the installing Contractor can maximise the opportunity of installing the Ecoflor resin flooring system to a high standard. The correct lighting and temperature, together with the absence of all other trades for the duration and cure of the product will ensure its specified performance value will meet the Client's expectations.