

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: ALTRO RESIN SYSTEMS, Unit 3, Station Road Industrial Estate, Maiden Newton, Dorchester, Dorset, DT2 OAE
- Primer reference: **None or Altro Prime standard dependant on substrate**
- Resin flooring reference: **Altro Grip 1mm slip-resistant – FERFA Type 4**
- Application: **1mm** Nominal thickness
- Colour: TBA **(Single-colour)**
- Accessories:
- Resin skirting's / upstands:
- Surface finish: In strict accordance with manufacturer's instructions.
- Flatness/Surface regularity:
- Sudden irregularities: Not permitted.
- Classification of surface regularity to BS 8204-6:
 - o SR1 - High
 - o SR2 - Normal
- Other requirements: **Please refer to Technical Data sheet in association with this specification.**

110B RESIN FLOORING

- Project:Location:
- Substrate:
- Preparation:
- Resin flooring system:
- Manufacturer: ALTRO RESIN SYSTEMS, Unit 3, Station Road Industrial Estate, Maiden Newton, Dorchester, Dorset, DT2 OAE
- Primer reference: **None or Altro Prime standard dependant on substrate**
- Resin flooring reference: **Altro Grip 1.25mm slip-resistant – FERFA Type 4**
- Application: **1.25mm** Nominal thickness
- Colour: TBA **(Single-colour)**
- Accessories:
- Resin skirting's / upstands:
- Surface finish: In strict accordance with manufacturer's instructions.
- Flatness/Surface regularity:
- Sudden irregularities: Not permitted.
- Classification of surface regularity to BS 8204-6:
 - o SR1 - High
 - o SR2 - Normal
- Other requirements: **Please refer to Technical Data sheet in association with this specification.**

110C RESIN FLOORING

- Project:Location:
- Substrate:
- Preparation:
- Resin flooring system:
- Manufacturer: ALTRO RESIN SYSTEMS, Unit 3, Station Road Industrial Estate, Maiden Newton, Dorchester, Dorset, DT2 OAE

- Primer reference: **None or Altro Prime standard dependant on substrate**
- Resin flooring reference: **Altro Grip 1.25mm slip-resistant- FERFA Type 4**
- Application: **1.25mm** Nominal thickness
- Colour: TBA (**Multi-colour**)
- Surface finish: In strict accordance with manufacturer's instructions.
- Flatness/Surface regularity:
- Sudden irregularities: Not permitted.
- Classification of surface regularity to BS 8204-6:
 - o SR1 - High
 - o SR2 - Normal
- Other requirements: **Please refer to Technical Data sheet in association with this specification.**

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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: **Altro Proof standard, epoxy surface damp proof membrane by Altro Floors effective up to 97% R.H.**
NB: Please note Altro Proof fast-track variant is also available where floor coverings are to be laid same day. Conditions apply.
- Apply in accordance with manufacturer's instructions.
In the event of underfloor heating please consult Altro 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/mm.sq** 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 **Altro Expand**. (**Altro Prime standard** contact surfaces)

230B SUBSTRATES TYPES AND PREPARATION

- **Concrete:** Prepare the subfloor by lightly encapsulated bead blasting with vacuum dust recovery (grade to be established by installer) alternatively a high speed diamond grinding machine with vacuum recovery may be used.

- **Sand & Cement Modified Screed:** Prepare by means of rotary grinding m/c fitted with silicon carbide pads or tct discs fitted with vacuum recovery system to expose clean aggregate.
- **Timber Surface – RBP – Stable System Only:** Remove all contamination and using vacuum controlled recovery sanding machine. (Seek Altro 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.

Others include: Terrazzo. Please consult Altro Technical Services for compatibility and preparation requirements.

NB: In the event of underfloor heating please consult Altro 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.
- Scattered aggregates: (where appropriate) Broadcast onto wet surface of resin.
- 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. FERFA publication: Guide to PPE for use with in Situ Resin Floors and Surface Preparation.

320 CONTROL SAMPLES

- Complete areas of finished work in the following locations:

320A SAMPLES

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

350A COATED RESIN FLOORING – **1mm slip-resistant single colour**
(Where substrate is porous a primer (**Altro Prime standard**) may be necessary).
After thorough de-nibbing and vacuuming of the apply a coat of **Altro Tect standard** using a dense polypropylene foam squeegee, working the seal into the surface, ensuring that porous areas of screed are fully satisfied. Roll to leave an even film across the floor.

Whilst still tacky, fully blind with **Altro Grip aggregate C52**. Leave to cure not more than 24 hours. Vacuum off all excess aggregate. Mix and squeegee apply a first coat of **Altro Tect standard coloured**, working into the surface and roll to leave an even closed film across the floor. Allow to cure for not more than 24hours. Mix and roller apply a final tight seal coat of **Altro Tect standard coloured**. **NB:** Failure to remove excess may affect the slip resistance and appearance of the finished system.

350B COATED RESIN FLOORING – **1.25mm slip-resistant single colour**
(Where substrate is porous a primer (**Altro Prime standard**) may be necessary).
After thorough de-nibbing and vacuuming of the apply a coat of **Altro Tect standard** using a dense polypropylene foam squeegee, working the seal into the surface, ensuring that porous areas of screed are fully satisfied. Roll to leave an even film across the floor.

Whilst still tacky, fully blind with **Altro Grip single colour quartz (0.4-0.8mm)** aggregate. Leave to cure not more than 24 hours. Vacuum off all excess aggregate. Mix and squeegee apply a first coat of **Altro Tect standard coloured**, working into the surface and roll to leave an even closed film across the floor. Allow to cure for not more than 24hours. Mix and roller apply a final tight seal coat of **Altro Tect standard coloured**. **NB:** Failure to remove excess may affect the slip resistance and appearance of the finished system.

350C COATED RESIN FLOORING – **1.25mm slip-resistant multi colour**
(Where substrate is porous a primer (**Altro Prime standard**) may be necessary).
After thorough de-nibbing and vacuuming of the cured quartz screed apply a coat of **Altro Tect standard** using dense polypropylene foam squeegee, working the seal into the surface, ensuring that porous areas of screed are fully satisfied. Roll to leave an even film across the floor.

Whilst still tacky fully blind with **Altro Grip multi-colour quartz (0.4-0.8mm)** aggregate. Leave to cure not more than 24 hours. Vacuum off all excess aggregate. Mix and squeegee apply a first coat of **Altro Tect standard clear**, working into the surface and roll to leave an even closed film across the floor. Allow to cure for not more than 24hours. Mix and roller apply a final tight seal coat of **Altro Tect standard clear**. **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.

Resin Skirting/Up stands

Note - When coving detail is required refer to **Altro Screed 3mm standard** epoxy cove.

CURE/TRAFFICKING:

Light foot traffic	24 hours @ +20°C
Full chemical cure	7 days @ +20°C

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.

430 SEALANT MOVEMENT JOINTS

- Location: Centre over movement joints in substrate.
- Preparation and application: Method: Saw cut 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: **Altro Expand (Altro Prime standard** contact surfaces)
- Colour: Matched to resin.
 - Drawing reference RF1 refers.

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 Altro 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 Altro 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.