## 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
- Resin flooring reference: **Altro Seal gloss single pack (clear) – FERFA Type 1**
- Application: **120 - 180 microns** Nominal thickness
- Colour: **Clear Gloss**
- 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): 7**5% 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 Solo 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.**

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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$^2$** is achieved. Surface tensile strength **>1.5N/mm$^2$**.
- 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 a suitable proprietary clear sealant.

230B 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 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.

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

**<u>NB: In the event of underfloor heating please consult Altro for further guidance.</u>**

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.
- Fillers and incorporated aggregates: Thoroughly mix in to ensure wetting. Avoid over-vigorous mixing resulting in excessive air entrainment.
- 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:

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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

- Roller apply coat of **Altro Seal gloss single pack (clear)** at rate to satisfy porosity of subfloor using a short nap synthetic roller and leave to cure. Apply second coat of **Altro Seal gloss single pack (clear)** to leave even closed film across floor surface observing the coverage guide on the Technical Data Sheet. Intercoat period: 6 – 24hrs @ 20$^{o}$C. Ensure good airflow and ventilation to assist with cure.

Curing

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|---|---|
| Light foot traffic | 16 hours @ +20$^{o}$C |
| Full chemical cure | 4 - 7 days @ +20$^{o}$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: **Suitable proprietary clear sealant.**
  - 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.

450 PROTECTION TO HANDOVER

- Whilst of an extremely durable nature these floor systems must by 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 above 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.