

Method of Statement

BC UCRETE HF 60 RT

Heavy-Duty Polyurethane Flooring System



1. Purpose

This Method Statement covers the procedures for the surface preparation, mixing, application, and curing of **BC UCRETE HF 60 RT** polyurethane screed flooring system to ensure quality, performance, and durability.

2. Scope of Work

Application of BC UCRETE HF polyurethane cement screed in the designated flooring areas, such as:

- Production areas
- Steel delivery zones
- Loading bays
- Chemical handling areas

3. Reference Standards

- ASTM C109 (Compressive Strength)
- ASTM D7234 (Pull-Off Adhesion)
- BS 8204-6 (Synthetic Resin Flooring)
- Manufacturer's Product Data Sheet & Safety Data Sheet (SDS)

4. Materials

Product	Description
BC UCRETE HF Resin	Polyurethane resin component
BC UCRETE HF Hardener	Isocyanate-based curing agent
BC UCRETE HF Aggregate	Specially graded aggregates & fillers
BC UCRETE Primer SC	Moisture-tolerant epoxy/PU primer

5. Tools & Equipment

- Vacuum-assisted shot blasting or scarifying machine
- Mixing drill with paddle
- Notched trowel or screed box
- Spiked roller
- Measuring tools
- PPE: Gloves, goggles, respirators

6. Safety & PPE

- Use gloves, safety goggles, and protective clothing.
- Ensure adequate ventilation during mixing and application.
- Refer to SDS of each product for additional precautions.

7. Surface Preparation

1. **Inspection:** Ensure the substrate is sound, dry, clean, and free from oil, grease, and laitance.
2. **Mechanical Preparation:**
 - Shot blasting, scarifying, or diamond grinding to achieve CSP 4–6 (Concrete Surface Profile).
3. **Moisture Testing:** Substrate moisture content should be below 5% (unless moisture-tolerant primer used).
4. **Repairs:** Fill cracks, holes, and weak points using compatible repair materials.
5. **Cleaning:** Vacuum all dust and debris thoroughly.

8. Priming

1. Apply **BC UCRETE Primer** by roller or brush to the prepared substrate.
2. Allow the primer to become tacky (but not fully dry).
3. If the primer becomes dry before application, re-prime.

9. Mixing Procedure

1. Pre-mix **resin** and **hardener** (Parts A & B) thoroughly using a low-speed mixer (~300 rpm).
2. Gradually add **aggregate** (Part C) into the resin-hardener mix while continuously mixing.
3. Mix for at least 3–5 minutes until a uniform, lump-free mixture is achieved.

⚠ **Note:** Do not mix more material than can be applied within its pot life (~15 minutes, varies by temperature).

10. Application Procedure

1. Pour mixed BC UCRETE HF material onto the primed substrate.
2. Spread using a **screed box, rake, or trowel** to the required thickness (typically **6 mm to 9 mm**).
3. Use a **spiked roller** immediately after application to de-aerate and level the surface.

4. Finish the surface using a steel trowel to achieve the desired texture (smooth or slip-resistant).
5. Apply broadcast aggregate or topcoat if specified.

11. Curing

Stage	Time (@20°C)
Light Foot Traffic	12–16 hours
Full Mechanical Load	48–72 hours
Full Chemical Resistance	7 days

Protect the floor from water, dust, and chemical exposure during the curing period.

12. Quality Control Checks

- Check floor flatness, thickness, and bond.
- Perform adhesion tests if needed (ASTM D7234).
- Ensure uniform color and texture.

13. Cleaning of Tools

Clean tools and equipment immediately after use with appropriate solvents (check product datasheet).