BCI BUILDING CHEMISTRY INDUSTRY

Method statement for installation of BC GRP Matt (Glass Reinforced Plastic) matting.

Introduction

This method statement describes installation of BC GRP Mat (Glass Reinforced Plastic) matting.

This process is typically used in waterproofing, lining, or coating applications. It focuses on ensuring the correct installation for durability and long-term performance.

Scope of Work

This method statement outlines the procedures and steps for installing BC GRP Matt , ensuring water-tightness and structural protection. The procedure covers surface preparation, matting application, and curing.

2. Materials & Equipment

BC GRP Matt (Chopped Strand Mat or Woven Roving)
Iso phthalic Polyester resin
Catalyst/Hardener (e.g., MEKP for polyester resin)
Gel coat (optional, for surface finishing)
Tools & Equipment:
Rollers (metal and lambswool rollers for air removal)
Brushes
Scissors or matting cutter
Measuring tape
Personal protective equipment (PPE) including gloves, goggles, and masks
Acetone (for cleaning tools)
Mixing containers
Grinder (for surface preparation)

Sandpaper

Safety Precautions

Ensure the working area is well-ventilated.
Use PPE including gloves, goggles, and a respirator when handling resin and catalyst.
Ensure fire extinguishers are readily available, as GRP materials are highly flammable.

Surface Preparation

Cleaning: Remove dust, dirt, oils, and any loose materials from the surface. A clean, dry surface is essential for proper adhesion.

Roughening: Use a grinder or sandpaper to roughen the surface, enhancing the bond between the substrate and the GRP.

Crack Repair: Fill any cracks or voids with an appropriate filler and allow it to cure.

Priming: In some cases, a primer may be required to improve adhesion. Apply as per the manufacturer's instructions if necessary.

Matting Installation Procedure

Step 1: Resin Mixing

Prepare the resin by mixing it with the required amount of catalyst/hardener as per manufacturer's instructions. Mix thoroughly in a clean container.

Step 2: Application of Resin Layer

Apply the first layer of resin using a brush or roller to the prepared surface. This acts as a bonding layer for the matting.

Step 3: Laying the GRP Matting

Cut the GRP matting to the required size before resin application. Make sure all pieces fit well, especially around corners or edges.

Lay the matting onto the wet resin. Use metal rollers to remove air bubbles and ensure complete saturation of the matting with resin.

Step 4: Additional Resin Application

Apply additional resin over the matting to fully impregnate it, ensuring all fibers are wetted out. Use rollers and brushes to distribute the resin evenly and remove any trapped air.

Overlap matting joints by about 50mm to ensure continuity.

Step 5: Curing

Allow the applied GRP matting to cure for the time specified by the resin manufacturer, typically between 24-48 hours. Curing time may vary depending on temperature and humidity.

Step 6: Sanding (if needed)

Once cured, sand the surface lightly to remove any imperfections or sharp edges.

6. Final Coating (Optional)

For additional protection, a gel coat or topcoat may be applied over the cured GRP. Apply as per manufacturer instructions and allow for curing.

7. Quality Control

Ensure that there are no air pockets, bubbles, or dry spots in the matting.

Verify full saturation of the matting with resin.

Check for proper adhesion to the substrate.

8. Cleaning of Tools

Clean all tools with acetone immediately after use to prevent resin buildup.

9. Waste Management

Dispose of any waste materials in compliance with local regulations.

10. Completion

After the installation and curing, conduct a final inspection to ensure the surface is fully sealed, smooth, and free from defects.

Let me know if you'd like to tailor the method statement to a specific application!