

Method statement for BC Fiber Mesh-150

1. Purpose

The purpose of this method statement is to provide clear, step-by-step guidelines for the safe and efficient installation of **BC-150 fiber mesh** to ensure that the reinforced surfaces meet quality, durability, and safety standards.

2. Scope of Work

The scope includes:

- Preparing the substrate or surface.
- Cutting and positioning fiber mesh.
- Fixing and embedding the mesh in the specified material (concrete, plaster, or render).
- Ensuring the fiber mesh is securely placed for maximum reinforcement.
- Finishing and curing procedures.

3. Materials

- **BC-150 Fiber Mesh:** As per project specification.
- **Adhesive:** Suitable bonding agent for embedding mesh.
- **Base Coat or Plaster:** Cement-based or polymer-based base coats as required.
- **Mechanical Fasteners:** Plugs, anchors, or screws (if required for attachment).
- **Primer:** For enhancing adhesion (if required).
- **Finish Coat:** Render or plaster finishes (if required).
- **Safety Equipment:** Gloves, goggles, dust mask, and safety shoes.

4. Equipment and Tools

- **Measuring Tape:** For accurate dimensions and cuts.
- **Spirit Level:** To ensure proper leveling of the mesh and surface.
- **Trowels and Notched Trowels:** For applying adhesive, base coat, or plaster.
- **Cutting Tools:** Scissors or utility knives for cutting fiber mesh.
- **Screws/Drills:** For mechanical fixing (if applicable).
- **Float:** For smoothing and finishing the applied base coat.
- **Ladders/Scaffolding:** For working at height (if necessary).
- **Protective Gear:** PPE, including gloves, goggles, face shields, dust mask, and safety shoes.

5. Safety Considerations

- **PPE:** Ensure all workers are equipped with **PPE**, including gloves, safety goggles, face masks, and safety shoes.
- **Handling:** Handle BC-150 fiber mesh carefully to avoid tearing or damage. Mesh should be handled with caution, especially if the material is sharp (glass fiber).
- **Work Area:** Secure the work area to prevent unauthorized access. If working at height, use **ladders** or **scaffolding** with safety rails.
- **Ventilation:** Ensure adequate ventilation when applying adhesives, base coats, or renders to avoid inhaling fumes or dust.
- **First Aid:** Keep a **first aid kit** readily available and ensure all personnel are aware of emergency procedures.

6. Methodology

6.1. Surface Preparation

1. **Clean the Substrate:** Ensure that the surface where the fiber mesh will be applied is clean, dry, and free from dust, grease, oil, or any other contaminants. For concrete or plaster surfaces, ensure they are sound and structurally stable.
2. **Check for Irregularities:** If necessary, level the surface using a **spirit level** to ensure it is flat and free of significant cracks or defects that could affect the mesh application.
3. **Apply Primer (if required):** If the manufacturer's instructions specify, apply a **primer** to the surface to improve the adhesion of the mesh or base coat.

6.2. Cutting and Preparing Fiber Mesh

1. **Measure and Cut Mesh:** Measure the area where the mesh will be installed and cut the **fiber mesh** to the required size. Ensure that the mesh is cut accurately to fit the surface, allowing for adequate overlap at seams (typically **50 mm**).
2. **Overlap Mesh at Joints:** When applying the mesh, ensure that adjacent pieces overlap by at least **50 mm** to avoid gaps in reinforcement.

6.3. Fixing and Embedding the Fiber Mesh

1. **Apply Adhesive/Base Coat:**
 - Apply a thin layer of **adhesive** or **base coat** to the surface where the mesh will be installed. Use a **notched trowel** to spread the adhesive or base coat evenly across the surface.
2. **Position the Mesh:**

- Place the **fiber mesh** onto the wet adhesive or base coat. Start from one corner of the surface and gradually move across, ensuring that the mesh is fully embedded in the adhesive or base coat.
 - Press the mesh gently into the adhesive using a **float** or **spatula** to ensure it is firmly embedded and there are no air pockets.
3. **Secure the Mesh** (if necessary):
- If required by the project specifications or if mechanical fixing is needed (in the case of vertical surfaces), install mechanical fixings such as **anchors, screws, or plugs**. Fix the mesh at regular intervals, ensuring the mesh stays in place.
 - Ensure that the mechanical fixings do not damage the fiber mesh.

6.4. Apply a Second Coat

1. **Apply Additional Base Coat:**
 - Once the mesh is embedded and secured, apply a second layer of the **base coat** over the fiber mesh, covering it completely. Use a **notched trowel** or **float** to ensure a uniform thickness.
 - Smooth the surface using the float to remove any imperfections or rough patches.
2. **Level the Surface:** Ensure that the surface is smooth and level after applying the second layer of base coat.

6.5. Finishing

1. **Final Render/Plaster Coat:** If specified, apply a **final finish coat** (render or plaster) to the surface to provide the desired texture, color, or protection.
2. **Curing:** Allow the applied layers to cure properly as per the manufacturer's instructions. Curing time will vary based on the material used (adhesive, base coat, render, etc.).

6.6. Final Inspection and Cleaning

1. **Inspection:** Inspect the finished installation for uniformity, alignment, and overall quality. Ensure that there are no visible gaps, air pockets, or surface defects.
2. **Cleaning:** Clean the work area and remove any excess material (adhesive, plaster, etc.). Dispose of waste materials in accordance with environmental regulations.

7. Quality Control

- **Adherence to Specifications:** Ensure that the mesh is installed as per the manufacturer's specifications for thickness, overlap, and surface coverage.
- **Inspection:** Periodically inspect the installation to ensure the mesh is fully embedded in the base coat and that there are no air pockets or exposed areas.

- **Tensile Strength:** Verify that the fiber mesh meets the required tensile strength for the application.
- **Surface Quality:** Check the smoothness and evenness of the surface after the base coat and finish are applied.

8. Handover and Acceptance

Upon completion, the work area will be inspected by the project supervisor or quality control personnel. Once the installation meets the required specifications and passes quality control, the work will be handed over for the next phase or final acceptance.

9. References

- Manufacturer's technical data sheets for fiber mesh, adhesives, base coats, and renders.
- Project specifications and drawings.
- BS EN 14148: Glass fiber reinforcement for mortar.
- Health and safety regulations for construction.