BCI BUILDING CHEMISTRY INDUSTRY

Method Statement for Cementitious Water Stop- BC Water Plug

1. Introduction:

This method statement outlines the steps and procedures required to install BCI cementitious water stop , BC Water plug to prevent water ingress through concrete joints.

The water stop is commonly used in construction joints, expansion joints, and at areas prone to water seepage, such as basements, tunnels, and water retaining structures.

2. Scope of Work:

The scope of this method includes the following:

Surface preparation of the concrete joint.
Application of the cementitious water stop -BC Water stop
Inspection and testing of the water stop application.

3. Materials:

Cementitious water stop , Building chemistry Industry branded BC Water stop
Clean potable water.
Curing compound or moist cloths for curing.

4. Tools and Equipment:

Hand tools (brushes, trowels, sponges).
Mixing containers.
Measuring cups.
PPE (personal protective equipment such as gloves, goggles, etc.).

5. Methodology:

5.1 Preparation of Substrate:

Ensure the surface where the water stop will be applied is clean, dry, and free of any loose materials, grease, oil, or contaminants.

Remove any laitance or weak concrete using a wire brush, chisel, or abrasive tools.

Dampen the area with clean water, but ensure that no standing water is present.

If a bonding agent is required (as per the manufacturer’s instructions), apply it to the surface and allow it to become tacky before proceeding.

5.2 Mixing the Cementitious Water Stop: BC Water stop

Follow the manufacturer's guidelines for mixing the cementitious water stop material.

Mix only the quantity that can be applied within the working time.

For powder-based products, mix the water stop compound with clean potable water in the ratio specified by the manufacturer.

Ensure the mix is homogeneous, lump-free, and has the correct consistency for application (usually a stiff mortar or paste).

5.3 Application of the Cementitious Water Stop: BC Water stop

For construction joints:

Apply the mixed water stop compound directly into the joint using a trowel or hand tools. Press it firmly to ensure good adhesion.

For expansion joints:

Apply the material following the project's expansion joint detail or as specified by the manufacturer.

Build the material to the desired thickness (typically 10-20 mm), ensuring complete coverage of the joint area.

Smooth the surface of the water stop to remove any air pockets or voids.

If using a pre-mixed product in cartridges, apply the material with an application gun, ensuring uniform coverage.

The water stop should be continuous and without gaps along the entire length of the joint.

5.4 Curing:

Once the water stop material is applied, cure it as per the manufacturer's recommendations.

For general curing, cover the application with a moist cloth or use a curing compound to prevent the surface from drying out too quickly.

Maintain moist curing for at least 24-48 hours depending on ambient conditions.

6. Quality Control and Inspection:

Inspect the joints to ensure the water stop material is applied uniformly and covers the entire surface without voids or gaps.
Check the surface preparation, adhesion, and proper curing.
Allow the water stop to cure fully before subjecting it to water pressure.

7. Health and Safety:

All personnel involved in the work shall wear appropriate PPE including gloves, goggles, and face masks.
Follow the safety data sheet (SDS) of the water stop material for handling and mixing precautions.
Ensure proper ventilation if working in enclosed areas.
Clean all tools and equipment after use to avoid material buildup.

8. Completion and Handover:

After curing and inspection, the cementitious water stop system is ready for further structural works or exposure to water pressure.

Ensure all records, including batch numbers of materials and inspection forms, are properly documented.

9. References:

Manufacturer's product data sheet.

Project specifications and drawings.

This method statement ensures that a high-quality and long-lasting cementitious water stop system is installed, following both manufacturer guidelines and site-specific requirements.