

Method Statement for BCI Non-Shrink Cementitious Grout , BC cem tec grout Application

Introduction

This method statement outlines the procedure for the application of non-shrink cementitious grout, commonly used for filling voids, grouting baseplates, and securing anchors where shrinkage is undesirable.

Materials and Tools Required

Materials:

Non-shrink cementitious grout BC Cem tec Grout
Clean potable water for mixing
Bonding agent (if required)
Curing compound (if necessary)

Tools:

Mixing container or mechanical mixer
Measuring tools (tape, scale)
Trowels, spatulas, or rubber mallet
Grouting funnel or hopper
Clean cloth or sponge
Brush for surface cleaning
Water hose or spray bottle for wetting substrate

Surface Preparation

Cleaning the Substrate:

Ensure all surfaces to be grouted are structurally sound, clean, and free from dust, dirt, oil, grease, laitance, or any contaminants that may affect the bond of the grout.

Use wire brushes, scrapers, or high-pressure water jets for cleaning.

If necessary, use a degreaser or detergent for oily surfaces and thoroughly rinse with water.

Pre-Wetting the Surface:

Saturate the substrate with clean water for at least 2-4 hours before application to reduce the absorption of water from the grout.

The surface should be damp but free of standing water at the time of grout application.

Mixing of BC Cemtec Grout

Water Measurement:

Measure the amount of clean potable water as recommended by the manufacturer for each bag of grout. Do not exceed the water ratio to prevent reducing the grout strength.

Mixing Process:

Pour the measured water into the mixing container or mechanical mixer.

Slowly add the dry grout to the water while mixing continuously.

Mix for approximately 3-5 minutes until a smooth, lump-free, homogeneous mix is achieved. Avoid over-mixing, which may lead to air entrapment.

For larger jobs, use a mechanical mixer for consistent and uniform mixing.

Application Procedure

Placing the Grout:

Pour or pump the grout into the prepared area using a funnel or hopper to guide the flow and ensure uniform placement.

For baseplate applications, pour the grout from one side to avoid air entrapment and to allow it to flow to the opposite side.

Use a trowel or spatula to work the grout into hard-to-reach areas, and lightly tap the sides with a rubber mallet to remove any trapped air.



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Finishing:

Once placed, smooth and finish the exposed surface using a trowel.

Trim away any excess grout to ensure the finished surface is level and consistent.

Avoid overworking the surface as this may cause segregation of the mix.

Curing Process

Curing:

To prevent rapid moisture loss, begin curing as soon as the grout has set sufficiently (after 2-4 hours).

Cure the grout by applying a curing compound, damp hessian, or water spray for a minimum of 7 days.

Protect the grout from extreme weather conditions, such as direct sunlight, wind, or rain, during the curing period.

Inspection and Quality Control

Checking Grout Strength:

Perform tests such as cube or cylinder compressive strength testing as per the project specifications to ensure compliance with strength requirements.

Visual Inspection:

Inspect for uniformity, voids, cracks, or surface defects. Any identified defects should be repaired as per the manufacturer's instructions.

Safety and Environmental Considerations

Safety Measures:

Workers should wear personal protective equipment (PPE), including gloves, safety glasses, and protective clothing.

Ensure proper ventilation in enclosed spaces.

Waste Disposal:

Dispose of excess grout and other waste materials according to local environmental regulations.

Completion and Handover

Final Inspection:

Ensure that the grout has cured properly and that there are no defects in the work.

Handover:

Upon satisfactory completion and inspection, submit reports and samples (if required) to the client for approval.

This method statement ensures that non-shrink cementitious grout is applied correctly and achieves its desired performance, such as non-shrinkage and high-strength characteristics.