BUILDING CHEMISTRY INDUSTRY

Method Statement for BCI Road Marking Epoxy Adhesive BC Poxy Fix

1. Introduction

This method statement outlines the procedures for applying epoxy adhesive for road markings. Epoxy adhesives are commonly used due to their strong bonding properties, chemical resistance, and durability in high-traffic areas.

2. Scope of Work

This method statement covers the preparation, application, and inspection of epoxy adhesive used in road markings.

3. Materials

BC Poxy Fix Epoxy adhesive: Two-component epoxy resin (resin and hardener) suitable for outdoor applications.
Road marking tape or paint (depending on the application type).
BC Poxy Primer 349 : If required by the substrate condition.
Thinners: As recommended by the manufacturer.
Cleaners: For surface preparation (degreasers, solvents).

4. Tools and Equipment

Mixing tools (mechanical stirrer, spatula)
Roller or brush (for adhesive application)
Epoxy resin applicator
Road marking equipment (if marking paint is used)
Surface preparation tools (grinder, pressure washer, etc.)
Measuring tools (tape, rulers, etc.)
Personal Protective Equipment (PPE): gloves, safety goggles, respirators

5. Procedure

Step 1: Surface Preparation

Ensure that the surface is clean, dry, and free from dust, oil, grease, and other contaminants.

If necessary, clean the surface using a pressure washer or mechanical grinding to remove any loose particles or old paint.

If applying on concrete or asphalt, ensure any cracks or holes are repaired prior to adhesive application.

Check the surface for any moisture. It should be dry to prevent bonding issues.

Step 2: Masking

Mark the layout of the road markings using tape or chalk, depending on the specific design.

Use masking tape to mark the boundaries where the epoxy adhesive will be applied.

Step 3: Mixing of Epoxy Adhesive

Follow the manufacturer's instructions for the correct ratio of resin and hardener.

Mix the components thoroughly using a mechanical stirrer for about 3-5 minutes until the mixture is uniform.

Ensure the mixing is completed before the adhesive's pot life expires.

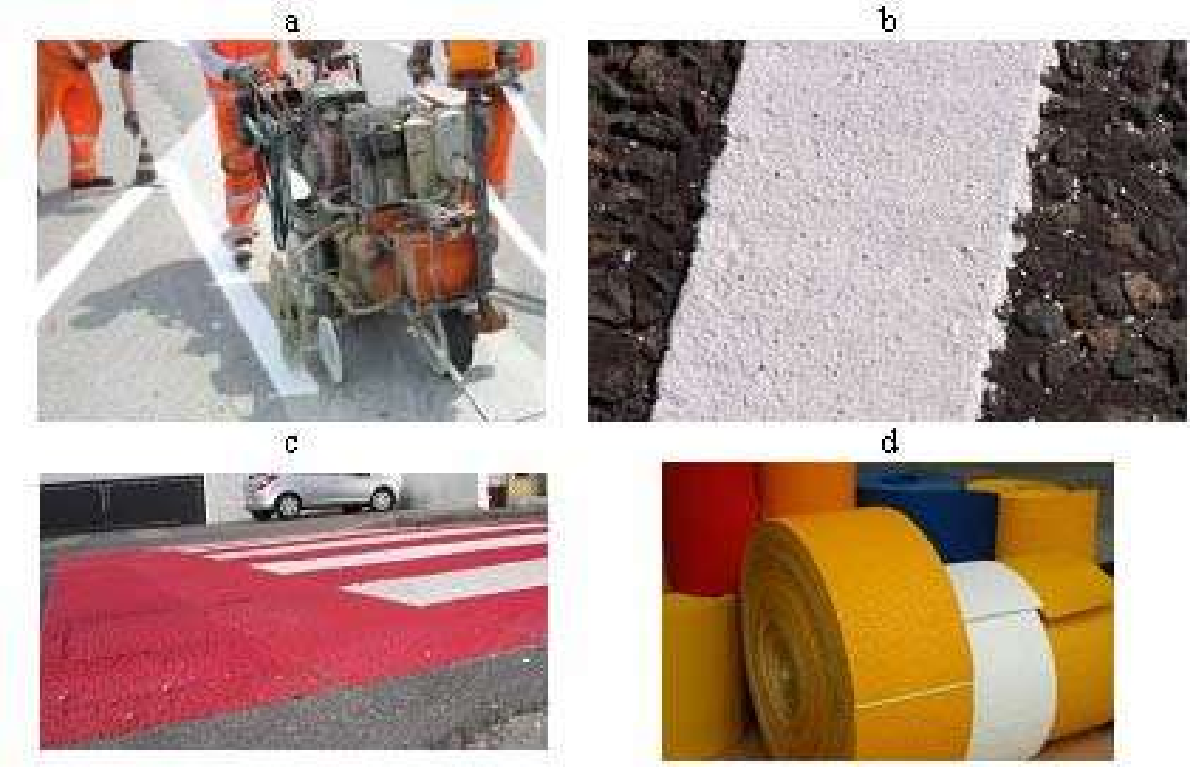
Step 4: Application of Primer (if required)

Some surfaces may require the application of a primer to enhance the bonding strength of the epoxy.

Apply the primer using a roller or brush and allow it to dry as per the manufacturer's recommendations.

Step 5: Application of Epoxy Adhesive

Pour the mixed epoxy adhesive along the marked lines or in the area specified for the road marking.



Spread the adhesive using a roller or a flat applicator to ensure an even layer across the surface.

For thicker applications, ensure the epoxy does not pool or form uneven layers.

Follow the open time for the adhesive (as provided by the manufacturer) to avoid hardening before the placement of road markings or aggregates.

Step 6: Placing Road Marking Material

If using road marking tape, carefully place the tape onto the wet adhesive, ensuring proper alignment and avoiding air bubbles.

If using paint, apply the paint onto the wet adhesive using road marking machines or manual application methods.

Press the material firmly into the adhesive to ensure strong bonding.

Step 7: Curing

Allow the epoxy adhesive to cure as per the manufacturer's instructions. Curing times may vary depending on the type of epoxy and ambient conditions (typically 12-24 hours).

Prevent traffic or any disturbances on the freshly applied markings until the epoxy has fully cured.

6. Quality Control

Adhesion Test: Perform adhesion tests after curing to ensure proper bonding.

Visual Inspection: Inspect the road marking for evenness, alignment, and defects such as bubbles or improper bonding.

Thickness Check: Verify the thickness of the adhesive layer is consistent with the project specifications.

7. Safety Considerations

Ensure all workers use appropriate PPE, such as gloves, goggles, and respirators.

Ensure proper ventilation when working with epoxy adhesives, as fumes may be harmful.

Prevent unauthorized personnel from entering the work zone until the adhesive is fully cured.

Follow the manufacturer's safety data sheets (SDS) for handling and disposing of epoxy adhesives.

8. Environmental Considerations

Dispose of waste materials (including used containers, residual epoxy, etc.) in accordance with local environmental regulations.

Prevent spillage of epoxy adhesives into drains or soil.

9. Conclusion

This method statement ensures that epoxy adhesive for road markings is applied correctly, resulting in durable and long-lasting road markings. Proper surface preparation, accurate mixing, and strict adherence to curing times are critical for successful application