

# Gulf Arab Crete Contracting Company شركة عرب كريت الخليجية للمقاولات

# METHOD OF STATEMENT FOR COLORED CONCRETE



# 1. Objective:

The objective of this method statement is to provide guidelines and procedures for the proper installation of Colored concrete floors using GAC Color Hardener (Color Crete 200)/Integral Color(Color Crete 500) and protective sealer (ST 200) resulting in a durable, aesthetically pleasing, and gloss/Matt finish.

# 2. Scope:

This method statement applies to the installation of Colored concrete floors in various areas such as commercial buildings, residential properties, and industrial facilities.

# 3. Responsibilities:

- Project Manager: Overall responsibility for ensuring the proper execution of the method statement.
- Site Engineer: Responsible for supervising the Colored concrete installation process and coordinating with the construction team.
- Concrete Contractor: Responsible for providing the necessary tools, equipment, materials, and skilled personnel for the installation, concrete pouring and finishing.

# 4. Equipment and Materials:

- Concrete mix (as per project specifications)
- Reinforcement materials (if required)
- GAC Color Hardener(Color Crete 200)/Integral Color(Color Crete 500) per project requirements
- GAC Protective sealer
- Power trowel / Power Float /Grinder
- Sprayer or roller for applying sealer
- Safety equipment (personal protective equipment)

#### 5. Procedure:

#### 5.1 Preparation:

- 5.1.1 Conduct a site inspection to ensure the concrete substrate is suitable for laying. Check for any cracks, spalling, or surface defects that may require repair or rectification.
- 5.1.2 Ensure the concrete mix design meets the project specifications, and any required reinforcement materials are properly installed.
- 5.1.3 Clean the concrete surface thoroughly, removing any debris, oil, grease, or other contaminants that may affect the adhesion and performance of the GAC products.
- 5.1.4 Polythene sheet will be used up to 250/500 microns.
- 5.1.5 Installation of wire mesh up to as per Project Specification.

#### 5.2 Application of Colored Concrete:

- 5.2.1 Prepare the concrete mix as per the approved design mix, ensuring the correct proportions of aggregates, cement, water, and admixtures are used.
- 5.2.2 Transport the concrete mix from the batching plant to the application area using suitable equipment, such as concrete trucks or pumps. For smaller projects and for areas not accessible by concrete trucks and pumps, dry mix concrete is used which is supplied in bags from factory and mixed with water on site.
- 5.2.3 Pour the concrete onto the designated area, ensuring it is spread evenly using shovels or rakes.
- 5.2.4 Use a vibrating screed to level the concrete surface and remove any excess air voids or inconsistencies(recommended.)
- 5.2.5 After screeding, use a bull float to further level the concrete surface and achieve a smooth finish.
- 5.2.6 Broadcast the Color hardener on concrete when it is still wet but suitable for walking. Make sure there is no



excess water on the surface which may lead to bleeding and loss of colour from dry shake powder. Use trowel or floater to push material into the still wet concrete surface unto 4-6mm deep for durable colour and stronger concrete surface

<u>Recommended:</u> Add GAC integral color (CC500) directly to the concrete mix in strict accordance with the manufacturer's instructions, and ensure thorough mixing to achieve a uniform and consistent color throughout the entire concrete mass.

Please note that Color Hardener (CC200) provides coloration only to the top surface layer and does not color the full depth of the concrete.

#### 5.3 Smooth Finish Process:

- 5.3.1 Allow the concrete to reach the appropriate consistency for Power trowel. It should be firm enough to workable.
- 5.3.2 Continue Trowel the concrete to create a seamless pattern.
- 5.3.3 Use hand tools and trowels to create detailed edges and finish.

#### 5.4 Curing and Finishing:

- 5.4.1 Once the process is complete, allow the concrete to cure for the recommended time as per the concrete mix specifications and environmental conditions.
- 5.4.2 Protect the Broom Finish concrete from direct sunlight, wind, rain, and other adverse weather conditions during the curing process.
- 5.4.3 After the curing period, thoroughly clean the Broom Finish surface using water and a mild detergent to remove any residual release agents or debris.
- 5.4.4 Apply a sealer or protective coating to enhance the durability and appearance of the Broom Finish concrete, following the manufacturer's recommendations.

### 6. Health, Safety, and Environmental Precautions:

- 6.1 Ensure all personnel involved in the installation and polishing process wear appropriate personal protective equipment (PPE) such as safety goggles, gloves, and boots.
- 6.2 Adhere to local safety regulations and guidelines throughout the application and polishing process.
- 6.3 Properly dispose of any waste materials, such as excess concrete or packaging, in accordance with local environmental regulations.