

MONOBASE AAC/MONOSIDERAL AAC

THE ULTIMATE AERATED CONCRETE DECORATIVE SYSTEM

1.0 DESCRIPTION

1.1 General

The combination of MonoBase AAC and MonoSideral AAC is the ultimate traditional approach in exterior decorative coating specifically designed for aerated concrete. The unique and revolutionary lightweight composition and reinforcing fibers of MonoBase AAC combined with the very specific integral color formulation of MonoSideral AAC, yield a durable, fade resistant, colored finish to be applied by hand troweling or machine spraying directly over aerated concrete. The integral color provided by MonoSideral AAC is available in many attractive integral colors while custom colors are available upon request. The precise blend of calibrated sand, fibers and chemical additives, allows for vapor permeability and superb resistance to temperature variations.

2.0 MATERIALS

2.1 MonoBase AAC

MonoBase AAC is mainly composed of white cement, aggregates, hydraulic binders, reinforcing fibers, additives (water repellent agents, UV resistant agents) and proprietary admixture providing lightweight and flexibility. MonoBase AAC is available as a 55 pounds (25kg) factory blended bag only requiring the addition of potable water at the job site.

2.2 MonoSideral AAC

MonoSideral AAC consists of a factory blended white portland cement with pigments, additives (water repellent agents, UV resistant agents) and proprietary admixture. MonoSideral AAC is available as a 66lb. (30kg) bag of factory blended pre-sanded mix requiring only the addition of potable water at the job site.

2.3 Glass Fiber Fabric

A nominal 4.8 ounce per square yard, symmetrical, interlaced, open-weave glass fiber fabric mesh made with minimum 25 percent by weight alkaline resistant fiberglass fiber is to be used with the installation of MonoBase AAC over cracks in aerated concrete or stress areas.

2.4 Accessories

Corner reinforcements, expansion joints, casing beads, etc., are made from rigid vinyl or zinc coated (galvanized) designed for exterior use

2.5 Accessories Fasteners

Use fasteners recommended by aerated concrete manufacturers.

2.6 Caulk

The acrylic latex sealant shall be in compliance with ASTM C 834. Penetrations through the coating shall be caulked to prevent water infiltration. Allow 3 to 4 days minimum dry time prior to installing the sealant.

2.7 MIXING INSTRUCTIONS

1. MonoBase AAC

Approximately 4 quarts (1 gallon) of clean potable water is to be added per bag of MonoBase AAC. Mix in a clean standard stucco-mixing machine for a maximum of 10 minutes to yield good plasticity and a homogeneous mix. Do not over-mix. For best results, pour 8 quarts (2 gallons) of potable water in the mixer, followed by 2 bags of MonoBase AAC. Then add the remaining required water and 2 more bags. Allow to mix until a good homogeneous mix is achieved. Repeat the mixing procedure and add the same amount of water with every batch. Do not re-temper the material in the mixer nor use partially set or frozen material in the mix.

2. MonoSideral AAC

Approximately 5 quarts (1 ¼ gallon) of clean potable water is to be added per bag of MonoSideral AAC. Mix in a clean standard stucco-mixing machine for a maximum of 10 minutes to yield good plasticity and a homogeneous mix.. Do not over-mix. For best results, pour 10 quarts (2.5 gallons) of potable water in the mixer, followed by 2 bags of MonoSideral AAC. Then add the remaining required water and 2 more bags. Allow to mix until a good homogeneous mix is achieved. Repeat the mixing procedure and add the same amount of water with every batch to avoid color variations. Do not re-temper the

material in the mixer nor use partially set or frozen material in the mix. This may cause color variation.

2.8 INSTALLATION OVER AERATED CONCRETE

2.9 Surface Preparation

Surfaces must be free of all bond-inhibiting materials, including dirt, efflorescence, form oil and other foreign particles. Paint, loose or damaged material must be removed by water blasting, sandblasting or mechanical wire brushing and repaired. Irregular surfaces must be resurfaced and leveled to required tolerance and smoothness. Holes in aerated concrete and broken material shall be patched and repaired to required tolerance. Install accessories including corner beads to all corners of aerated concrete or areas to be reinforced and plaster stops to all terminations of MonoBase AAC & MonoSideral AAC. Soak the aerated concrete surface with water preferably using a garden hose shortly before application of MonoBase AAC. The aerated concrete should still be wet to the touch at the time of the application. The use of Sider-Resin M50 primer is recommended prior to the application of MonoBase AAC. Mark all high stress areas and cracks in aerated concrete. These areas will require reinforcing mesh in MonoBase AAC.

1. First Step: Base Coat – MonoBase AAC Application

Trowel Application

Apply MonoBase AAC directly over the aerated concrete or masonry surface with a clean, stainless steel trowel in one coat at a thickness of 1/4" (inch) (6mm) to 3/8" (inch) (9.53) minimum thickness according to substrate and surface conditions. Where mesh reinforcement is required, embed the mesh in MonoBase. Once applied the working time is up to 20 minutes according to ambient temperatures and surface condition. Trowel MonoBase AAC to required tolerance and allow to dry for a minimum of 24 to 48 hours during dry conditions.

Spray Application:

Apply MonoBase AAC with a conventional plaster pump (refer to section 5.7 for pump information) directly over the aerated concrete surface. Hold the spray nozzle at the same distance and move with a steady, even stroke building to the desired thickness. Apply an even coat to ensure full coverage in a one coat for a total thickness of 1/4" (inch) (6mm) to 3/8" (inch) (9.53) minimum thickness according to the substrate and surface conditions.

Once applied the working time is up to 20 minutes according to ambient temperatures and surface condition. Trowel MonoBase AAC to required tolerance. Then allow to dry for a minimum of 24 to 48 hours during dry conditions.

Important: Apply MonoBase AAC in a continuous application, always working to a wet edge to eliminate cold joints. Arrange for the completion of an entire area. Avoid installation in direct sunlight. It is recommended that newly applied MonoBase AAC be fogged and kept damp for 24 to 48 hours.

2. Second step: Finish Textured Coat – MonoSideral AAC Application

Trowel Application

Mist with water MonoBase AAC surface prior to MonoSideral AAC application. Apply MonoSideral AAC directly over MonoBase AAC surface with a clean, stainless steel trowel in one coat at a thickness of 3/16” (4mm) to ¼” (inch) (6mm) minimum thickness according to substrate and surface conditions. Once applied the working time is up to 20 minutes according to ambient temperatures and surface condition. Trowel MonoSideral AAC to required tolerance. A fine sand finish texture may be achieved using a sponge, wood or plastic float.

Spray Application:

Mist with water MonoBase AAC surface prior to MonoSideral AAC application. Apply MonoSideral AAC with a conventional plaster pump (refer to section 5.7 for pump information) directly over the MonoBase AAC surface. Hold the spray nozzle at the same distance and move with a steady, even stroke building to the desired thickness. Apply an even coat to ensure full coverage in a one coat for a total thickness of 3/16” (4mm) to ¼” (inch) (6mm) minimum thickness according to the substrate and surface conditions. Once applied the working time is up to 20 minutes according to ambient temperatures and surface condition. Trowel MonoSideral AAC to required tolerance and texture with a sponge, wood or plastic float.

Important: Apply MonoSideral AAC in a continuous application, always working to a wet edge to eliminate cold joints. Arrange for the completion of an entire area. Avoid installation in direct sunlight. It is recommended that newly applied MonoSideral AAC be fogged and kept damp for 48 hours.

Limitations

Apply MonoBase AAC and MonoSideral AAC when surface and ambient temperatures are above 41°F (5°C) and below 95°F (35°C) during application and drying period. Do not apply to overheated, excessively dry or frozen substrates, nor during periods of high winds. MonoBase AAC & MonoSideral AAC should not be applied on horizontal, below grade or water immersed surfaces. Distance to grade varies with climate. Allow sufficient distance to prevent dirt, snow, ice and puddling water to be in contact with the coatings. Parapets should be protected with coping. Protect the coating from rain, freezing for at

least 24 hours and from uneven and excessive evaporation during hot temperatures by moist curing. Due to the natural ingredients which make-up MonoBase AAC & MonoSideral AAC or the nature of the substrate, the development of efflorescences may naturally occur and appear on the surface of MonoBase AAC & MonoSideral AAC. Please refer to the maintenance specs. for clean-up.

3.0 MISCELLANEOUS

3.1 Packaging

MonoBase AAC: 55 lb. (25kg) bag of powder in a 3-ply paper bag with moisture barrier.

MonoSideral AAC: 66 lb. (30kg) bag of powder in a 3-ply paper bag with moisture barrier.

3.2 Coverage

20 -30 square feet per MonoBase AAC bag at ¼” (6mm) thickness

30 - 35 square feet per MonoSideral AAC bag at ¼” (6mm) or 50-60 sq. ft at 3/16” thickness

3.3 Storage and Shelf Life

Shelter in a dry environment from extreme heat, direct sunlight, rain and freezing.
Shelf life is 6 months in the original sealed packaging properly sheltered.

3.4 Control Joints

Install control joints as specified by the design professional or builder. As a minimum, control joints are required in areas where structural movement occurs and at building expansion joints.

3.5 Professional Qualifications

Installation shall be performed by contractors with a minimum of 5 years documented experience in cement plastering or approved by Sider-Oxydro, Inc. All applicators should be able to provide several references from general contractors, architects or other applicable references for review by Sider-Oxydro, Inc. Sider-Oxydro, Inc. provides a required certified applicator program for all journeyman involved in the installation of MonoBase AAC & MonoSideral AAC. The program is designed to provide the required skills and full understanding of the proper installation expertise. A certified applicator shall have completed the full training course at the Sider-Oxydro, Inc. training facility in Hawkinsville, Georgia, or on a job site where coating is to be applied. The installation procedure is easily learned by any experienced applicator. The training course concentrates on the issue of texturing.

3.6 Technical Assistance

A Sider-Oxydro, Inc. master craftsman can start up the site at the expressed request of the

customer according to prearranged terms and conditions. For technical inquiries during normal business hours Contact Sider-Oxydro, Inc. at (1) **478-892-9800**.

3.7 Hand-Held Spray Gun and Plaster Pumps

Approved hand-held spray guns and manufacturers

- **Sablon spray gun (Ref # 32277or # 32278) by Maco-Meudon**
- **Wall model 4 holes spray gun by ACPO**
- **Spotting model by ACPO**
- **Wall model 1 hole by ACPO**

Recommended plaster pumps and manufacturers

- **P11 Series, Tommy Gun A3 series, S5 Rotor/Strator Pumps & Mixers by Putzmeister**
- **And most mortars and plasters sprayers and mixers.**

Contact Sider-Oxydro, Inc. for availability and additional information.

3.8 Clean Up

MonoBase AAC & MonoSideral AAC clean up with water prior to drying. Clean tools and equipment after use with water. Clean up and remove all debris and materials from the site caused by the installation according to federal, state and local regulations and dispose of waste in an approved landfill.

3.9 Commercial Names

**MONOBASE AAC
MONOSIDERAL AAC**