



# MONOBASE AAC / MONOSIDERAL AAC

## THE ULTIMATE ‘OLD-WORLD’ AERATED CONCRETE-AAC DECORATIVE STUCCO 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. **Monobase AAC** also offers the flexibility to be used over metal lath fastened to open framing or a variety of masonry surfaces. 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 different size aggregate and is available in many standard 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 the ultimate pre-sanded base-coat specifically formulated for Aerated Concrete (AAC). The unique and revolutionary light weight composition and reinforcing fibers of **Monobase AAC** yield a strong base coat to be applied by hand, troweling or machine spraying, directly over aerated concrete.

#### 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 in a 66 lb. (30 kg) bag of factory blended pre-sanded mix requiring only the addition of potable water at the job site.

#### 2.3 Reinforcing Mesh

A nominal 4.8 ounce per square yard, symmetrical, interlaced, open-weave polyester fabric mesh made with minimum 25 percent by weight 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 approved for use on AAC surfaces.

## **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.

# **3.0 MIXING INSTRUCTIONS**

## **3.1 Monobase AAC**

Approximately 8 quarts (~ 8 liters) of clean potable water is to be added per bag of **Monobase AAC**. Mix in a clean standard stucco paddle-mixing machine for no less than 5 minutes to yield good plasticity and a homogeneous mix. Do not over-mix. 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.

## **3.2 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 mixing 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.

# **4.0 INSTALLATION OVER AERATED CONCRETE**

## **4.1 Surface Preparation**

Surfaces must be free of all bond-inhibiting materials, including dirt, efflorescence, from 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** and **Monosideral AAC**. Wash the aerated concrete surface with water to remove dust and other bond-inhibiting residue before the application of **Monobase AAC**. Mark all high stress areas and cracks in aerated concrete. These areas will require reinforcing mesh in **Monobase AAC**.

## **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" (6 mm) to 3/8" (9.53 mm) minimum thickness according to substrate and surface conditions. Where mesh reinforcement is required, embed the mesh in **Monobase AAC**. Once applied the working time is up to 20 minutes according to ambient temperatures and surface condition. Trowel **Monobase AAC** slick or sand float to create an even and plumb surface to receive **Monosideral AAC** and allow to dry for a minimum of 48 to 72 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" (6 mm) to 3/8" (9.53 mm) 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 (dependent on ambient conditions) prior to application of finish coat.

**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.

## **Second step: Finish Textured Coat – Monosideral AAC Application**

### **Trowel Application**

Mist **Monobase AAC** surface with water 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" (4 mm) minimum thickness to 1/4" (6 mm) maximum 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 **Monobase AAC** surface with water 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" (4 mm) minimum thickness to 1/4" (6 mm) maximum 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 and during periods of high winds. 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 45° F (8° C) and below 95° F (35° C) during application and drying period. Do not apply to overheated, excessively dry or frozen substrate, or during periods of high winds. **Monobase AAC** and **Monosideral AAC** should not be applied on horizontal, below grade or water immersed surfaces. Distance to grade varies with climate and local building codes. 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** and **Monosideral AAC** or the nature of the substrate, the development of efflorescence may naturally occur and appear on the surface of **Monobase AAC** and **Monosideral AAC**. Please refer to the maintenance specifications for clean up.

**5.0 MISCELLANEOUS**

**5.1 Packaging**

**Monobase AAC:** 55 lb. (25 kg) bag of concentrated powder in paper bag with moisture barrier

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

**5.2 Coverage**

**Monobase AAC:** ~ 16 to 17 sq. ft. per bag at 3/8” thickness  
~10 to 12 sq. ft per bag at 1/2” thickness

**Monosideral AAC:** ~ 30 to 35 sq. ft. per bag at 1/4” thickness  
~ 45 to 50 sq. ft. per bag at 3/16” thickness

(Coverage is approximated and is given for estimating purposes only. Actual jobsite coverage may vary according to substrate conditions and application techniques.)

**5.3 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.

**5.4 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.

**5.5 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.

## **5.6 Technical Assistance**

For technical inquiries during normal business hours contact Sider-Oxydro, Inc. at **Toll Free: 888-743-3750.**

## **5.7 Hand-Held Spray Gun and Plaster Pumps**

Approved hand-held spray guns and manufacturers

Sablon spray gun (Ref # 32277 or # 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

Rotor/Strator Pumps & Mixers by Putzmeister or PFT

And most mortars and plasters sprayers and mixers.

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

## **5.8 Clean Up**

**Monobase AAC** and **Monosideral AAC** clean up with water before 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.

## **5.9 Commercial Name**

**MONOBASE AAC**

**MONOSIDERAL AAC**

*Benefit from **MONOBASE AAC** and **MONOSIDERAL AAC**, a revolutionary technology developed by Sider-Oxydro, Inc., innovative leaders in the construction industry since 1937.*

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