AERATED CONCRETE BLOCK PLASTERING SPECIFICATION

Aerated Concrete Block Plastering

Project details

Project Name:

Project Address:

Specification Prepared For:

Specifier's Name:

Phone:

Date:

Licensed Specialized Plastering Contractor:

License Number:

BRANZ Appraised

NEW ZEALAND MADE

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Introduction

This specification is for the application of Specialized Construction Products fibre reinforced Aerated Concrete Block (ACB) flanking and finishing system. Fine Mesh Coat is a preblended, cement-based plaster that can be easily applied as a single levelling/ flanking coat 3-4 mm thick over properly sealed and prepared aerated concrete backgrounds to produce a high quality even and true surface.

The specially developed plaster mix contains a blended mix of aggregates, cement, proprietary ingredients and a unique fibre reinforcement which not only relieves curing stresses but also provides an excellent surface key for a variety of conventional plaster finishes.

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Pre-Plastering Requirements

The aerated concrete substrate must be installed in strict accordance with the manufacturer's specifications and recommended installation procedures. The manufacturers required curing time must be allowed after placement of the blocks to ensure all of the pointing has completely cured and the walls have stabilised. Failing to allow the pointing to fully cure can lead to excess shrinkage and cracking on the pointing lines after the walls have been plastered. The finished appearance of the wall is highly dependant on the standard of the wall construction.

This system must not be used in situations where water may pond. A minimum slope of 10° is required on all sills and copings. All pipes must have a downward rake of a minimum of 5° and must be sealed in place using MS Silaflex or another approved equivalent both before plastering and after the installation of the Fine Mesh Coat.

All meterboxes should have an aluminium or lead flashing fixed over the head and must allow water to drain to the outside of the building.

Particular attention to detail and workmanship must be given to the weatherproofing details contained in the technical literature relating to flashing and sealing building penetrations or junctions with other building materials. This plaster system is not designed as a waterproofing element for junctions between dissimilar materials. Its job is to provide an aesthetically pleasing, crack resistant surface coating. All junctions between the block substrate and dissimilar materials must be correctly flashed and sealed with MS Silaflex or another approved equivalent. The MS sealant must be installed in strict accordance with the manufacturer's requirements and must be left to properly cure prior to plastering.

Construction Joints must be provided according to the block manufacturers design criteria. All construction joints must be in place and must be waterproof prior to the commencement of plastering.

Surface Preparation

All nibs, protrusions and excess mortar on the surface of the blocks or irregularities in the slab must be ground off prior to plastering.

All surfaces to receive an application of Specialized's ACB System must be clean and free of debris, dirt and dust, efflorescence, grease, oils, curing agents, cleaning solutions, mould and algae or any other contaminants that may affect adhesion. Painted or glossy surfaces must be specially treated prior to the application of any plaster material, please refer to Specialized Construction Products for specialist advice before you proceed. All cracks that may be the subject to ongoing movement must be correctly repaired and reinforced.

Some smooth, dense concrete surfaces such as poured insitu concrete must be slush coated before application of Fine Mesh Coat to ensure a suitable bond is created, please refer to Specialized Construction Products for specialist advice before you proceed. Tilt slab and other precast concrete items should be chemically cleaned with a water blaster to ensure any mould release agents are removed before the plaster is applied.

All of the aerated panel must be properly sealed prior to the application of the plaster. To seal the panel a mix of 2 parts water to 1 part Specialized Resin must be painted over the surface and allowed to dry before plastering commences. Failing to correctly prepare and seal the aerated concrete substrate may cause delamination, chalking or failure in the base coat.

Do not wet down masonry surfaces before plastering and do not apply Fine Mesh Coat plaster to surfaces that are wet from rain or overnight dew.

Safety Precautions

Avoid contact with eyes and prolonged contact with skin. Wash thoroughly after handling all wet or dry plaster materials. In case of eye contact, flush immediately with running water for at least 15 minutes. Consult a physician immediately. Do not take internally. The potential irritant nature of the plaster dust (in dry powder form or from subsequent cutting of the hardened product) is recognised. Paper dust masks or a respirator must be worn at all times when the product is being mixed. Be sure to provide adequate ventilation when working in enclosed areas. The wet compound is alkaline and prolonged skin contact should be avoided. People with sensitive skin must wear rubber gloves when handling the product. Materials Safety Data Sheets are available on request.

Materials Application

On-site application is beyond the control of Specialized Construction Products Ltd. Therefore it cannot guarantee workmanship, supervision, aesthetic quality or the correct preparation and application of its products or the substrates to which its products may be applied.

Base Coat Plastering

The entire aerated concrete surface and any polystyrene shapes that have been attached to the wall must be mesh reinforced with 160g fibreglass mesh embedded in Fine Mesh Coat plaster. The instructions for mixing the base coat plaster are clearly spelt out on the bag.

Note: During summer, you can add one litre of resin per bag to help the plaster cure better in hot weather.

It is important that each mix stands for approximately 10 minutes, and is then re-stirred and the final consistency adjusted. This allows the thickening agents in the plaster to take effect and

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stops the brew becoming too thick too quickly. Do not use plaster that has been mixed for more than one hour. The plaster will continue to stiffen slightly over the hour.

Thickness is critical – a minimum thickness of 3-4mm must be achieved with this first coat. Do not force the mesh hard down onto the surface of the substrate. The mesh pattern should be "grinning" through, but the mesh itself should be completely covered with plaster. Once imbedded scrape away the plaster at the edge of the mesh to ensure there is no plaster ridge there when you join on later. Repeat the process. Mesh must overlap the adjacent drop and plaster coat by at least 30mm. The mesh and plaster coat must cover all polystyrene surfaces including the polystyrene edges around all window reveals and sills.

Finishing Plaster Options

☐ **FLOAT FINISH**

A polymer modified cement based plaster which is polished flat to achieve a fine granular finish.

☐ **SPANISH FINISH**

A polymer-modified, cement based plaster used to achieve an undulating adobe style finish. This product can be applied in various thicknesses and using a number of different techniques. Before finish coating begins ensure the style of finish that is desired has been correctly communicated and understood by the plasterer. A trial sample is highly recommended.

☐ **TEXTURE**

A polymer-modified, cement based plaster which can be sprayed through a sagola gun to achieve a finely spiked texture finish.

☐ **FINE BASE COAT**

A polymer-modified, cement based plaster which can be sprayed through a hopper gun or a sagola gun to achieve a heavy stucco plaster finish.

PLASTERSHIELD

A 100% acrylic-based paint that has been specially formulated for use over cement based plasters. All plastered surfaces must be coated with a minimum of 2 coats of Plastershield tinted to the selected colour and applied by brush and roller at a spread rate of approximately 6m2. Other paint systems are not covered by this specification sheet and Specialized Construction Products Ltd will not warrant the use or suitability of alternative paint systems over the surface of its plaster finishes.

Paint colour required:

Manufacturer:

Curing

The curing time of Specialized's ACB System will vary due to ambient temperature, relative humidity, surface temperature, surface porosity, application methods, and/or the thickness of the material. All freshly applied material must be protected from inclement weather for a minimum of 24 hours after application. It is the responsibility of the plaster applicator to determine if the product is cured and/or dry prior to applying any additional coats that may be required or exposing the applied product to rain, snow, dew, and/or any other inclement weather condition that may have a detrimental affect. Although the ACB system contains cement and it will not fully cure for 28 days, if the Fine Mesh Coat has had a finish applied over its surface, and as long as it is lightly hosed down with fresh water 12 hours prior to painting, it can be painted after the finish coats have cured for a minimum of 3-4 days.

Limitations

DO NOT apply the ACB system when the ambient or surface temperature is below 4°C or above 30°C or will be in that range for the 24-hour period after application. When hot, dry, or windy conditions exist, moist curing and protection must be provided. Material that is allowed to freeze or material that dries too quickly may suffer irreparable damage.

DO NOT add any other materials to the Fine Mesh Coat or deviate from the mixing or application procedures outlined in any of Specialized Construction Product's technical data sheets without written approval from Specialized Constructions Products Ltd.

DO NOT apply Fine Mesh Coat unless the substrate has been properly cleaned and prepared. See Surface Preparation above.

DO NOT add any more water than prescribed by the technical data sheet for this product.

DO NOT wet the wall prior to the application of this material.

DO NOT reactivate Fine Mesh Coat plaster with more water once it has begun to set.

DO NOT mix more plaster than you can use in 45 minutes.

NOTE: Failure to follow the manufacturers written specifications could result in the following but not limited to spalling, cracking, peeling, chipping, delamination, discoloration, wash off, and overall system failure.

Cleaning

Cleaning may be accomplished with water immediately after use. Clean the whisk and the bucket between mixes and discard the cleaning water.

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Plaster Storage

In bagged form this product must be stored in a dry area, off the floor on a timber pallet or timber dunnage and it must be protected from the weather and from mechanical damage. Rotate the stock to ensure that the oldest material is used first. Plaster stock that is older than six months should be discarded.

Maintenance

The wall cladding system should be regularly cleaned, at least annually, by washing with clean water to remove dirt and to maintain the finish appearance. Grime may be removed with warm water and detergent.

Plastered wall should be recoated with either Plastershield or another approved paint system at 5 to 8 yearly intervals or sooner if required to maintain watertightness. Regular checks, at least annually, must be made of the system to ensure that the weather resistant coating is maintained watertight, and that the sealant, flashings, and other joints continue to perform their function and do not allow water to penetrate. Failure to correctly maintain the system may void any long-term warranties offered with the system. Any accidental damage to the cladding must be repaired immediately using Specialized Construction Products materials.

Warranty

The recommendations, suggestions, statements and technical data provided by Specialized Construction Products Ltd are based on the best current knowledge available and are given for information purposes only without any responsibility for their use. It is expressly understood and agreed that the buyer's sole and exclusive remedy shall be the replacement of defective products, and under no circumstance, shall Specialized Construction Products Ltd be liable for incidental or consequential damages. Specialized Construction Products Ltd neither assumes, nor authorizes, any others to assume for it any liability with respect to furnishing of the product. Handling and use of the products are beyond the control of Specialized Construction Products Ltd; therefore, no warranty is made, expressed or implied, as to the results or on site quality that can be obtained from the use of the product.

System Guarantee Period
15 years from date of practical completion.

Workmanship Guarantee Period
5 years from date of practical completion.

Technical Assistance

Assistance and information is available by calling Specialized Construction Products Ltd on **(09) 414 4499** or **0800 800 79** or by e-mail at **info@specialized.co.nz.**

