

# Specialized MLC Masonry & Brick Plaster System

## Proprietary Solid Plaster System

### 1. Introduction:

This is a specification for Specialized's proprietary solid plaster system which can be used over a solid backing of concrete masonry, clay brick veneer, in-situ, or pre-cast concrete.

The plaster system consists of either the cement-based option of a minimum 4mm thick base coat of Masonry Levelling Compound (MLC) plaster, followed by a selection of cement-based finishing plasters or Dulux Acratex acrylic finishing textures. Or the Powaflex acrylic option of a flanking coat of Masonry Levelling Compound, followed by a mesh coat of Powaflex acrylic plaster and a Dulux Acratex acrylic finishing texture. Both base coat options are finished with Dulux Acratex 955 Acrashield Advance an acrylic exterior paint system.

### 2. Health & Safety:

Avoid contact with eyes and prolonged contact with skin. Wash thoroughly after handling all wet or dry material. 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 cement 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.

### 3. Pre-Plastering Requirements:

The masonry/brick substrate must be installed in strict accordance with the manufacturer's specifications and recommended installation procedures. All pointing shall be flush finished. The manufacturer's required curing time must be allowed after placement of the bricks to ensure all 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 dependent on the standard of the wall construction.

#### Tankit Waterproofing Requirements:

**NOTE:** Prior to the joinery being installed in the concrete block construction the Specialized Tankit Waterproofing must be applied to all window and door openings.

Apply the Tankit to the Sill, Jamb, and head openings 100mm on the block face to the internal reveal and inside edge.

Tankit must be applied in 2 coats and must have a minimum dry thickness of 800µm. Where the product is being used to bridge the gap between different substrates or there is any concern with regard to the potential for ongoing movement in the substrate Tankit must be reinforced with fibreglass mesh cloth weighing 150g/m<sup>2</sup> (with a maximum aperture size of 4mm) between the first and second layers. All adjoining layers of fibreglass must overlap by a minimum of 50mm and care must be taken to ensure that all the material is well coated with Tankit. Do not overwork the

cloth as the strands may part under pressure reducing the overall effectiveness and strength of the coating. The fibreglass should be fully embedded in the Tankit coating.

Application is typically made with a medium nap roller using a brush for corners and up stands etc.

All uncured material can be removed with water. Mechanical removal will be required once the Tankit has dried.

Construction joints must be provided according to the brick masonry manufacturer's design criteria. All construction joints must be in place and must be waterproof prior to the commencement of plastering

#### 4. Surface Preparation:

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

All surfaces to receive an application of MLC 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 with Specialized Construction Products Tankit 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 subject to ongoing movement must be correctly repaired and reinforced.

Some smooth, dense concrete surfaces must be slush coated before application of MLC 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 Dulux Acratex 400/4 Tiltwash to ensure any mould release agents are removed before the plaster is applied. All very porous surfaces should be sealed with Dulux Acratex 501/10 Green Render Sealer prior to the application of the plaster. Failing to correctly prepare the masonry substrate may affect the aesthetic appearance of the finished wall.

**Do not** wet down masonry surfaces before plastering and do not apply MLC to surfaces that are wet from rain or overnight dew.

#### 5. Materials Application:

MLC can be applied using a steel trowel and conventional hand plastering techniques or can sprayed applied using a plastering pump. MLC must be applied a minimum of 4mm thick to ensure it maintains its cohesive strength and can be applied up to 50mm thick in one coat. If any areas require greater than a 50mm application they must be completed in several coats and left to dry between coats.

If the pointing between the bricks is in poor condition or if the dwelling is subject to excessive movement a layer of 160g alkali- resistant fibreglass mesh can be embedded into the MLC to increase the strength of the finished product. All stress points should be reinforced with butterflies of mesh. Once a layer of plaster has been applied to the substrate it should be floated or screeded flat to achieve a level plane which is free of deviations. Once the material is dry it can be sanded flat using a longboard or scraped with a broad knife to remove any ridges or minor bumps which have been left behind. The finished thickness of the MLC is dependent on the condition and alignment of the substrate it is covering.

On-site application is beyond the control of Specialized Construction Products. 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.

## 6. Finishing Texture: Cement-Based Texture Option A:

**NOTE:** Apply one coat of Acratex 501/10 Green Render Sealer prior to the application of the Acratex 951 acrylic texture or after the application of the bagged texture and prior to top coating.

### **Option 1: Float Finish:**

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

### **Option 2: 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.

### **Option 3: Coarse Texture:**

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

### **Option 4: Fine Texture:**

Use fine mesh 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

## 7. Finishing Texture: Acrylic-Based Texture Option B: Powaflex Acrylic System

The areas around all penetrations should be completed first using Powaflex to bed the soft flexible 160g/m<sup>2</sup> alkali resistant mesh. Once all penetrations and awkward areas have been completed all the flat areas of wall should be done using a 160g/m<sup>2</sup> alkali resistant hard mesh. Drops of hard mesh should overlap by a minimum of 50mm. At the corners of all openings, a second layer of mesh 100x200mm (butterfly) must be applied and embedded in the mesh coat plaster on the diagonal to reduce the chance of any subsequent cracking at these high stress points.

### **Acrylic Finishing Texture:**

There are six acrylic texture options (5 to 10) once the Powaflex Base Coat plaster and mesh have been applied. Apply one coat of Acratex 501/10 Green Render Sealer prior to the application of the Acratex 951 Acrylic Texture or after the application of the Bagged Texture and prior to top

**Option 5:** Acratex 951 Coventry Coarse Acrylic Texture - 15L

**Option 6:** Acratex 951 1mm Super Trowel Acrylic Texture - 15L

**Option 7:** Acratex 951 Sienna Coarse Sand Finish Acrylic Texture - 15L

**Option 8:** Acratex 951 Sienna Natural Acrylic Texture - 15L

**Option 9:** Specialized FlexiFloat - 20kg (This product is a bagged texture and not tintable)

**Option 10:** Specialized FlexiFlat -20kg (This product is a bagged texture and not tintable)

The ready to use, acrylic textures which when polished flat achieve a granular finish. Smooth plasters will not cover up the background imperfections, particularly when walls are subject to side lighting at certain times of the day.

## 8. **Painting:**

### **Dulux Acratex 955 Acrashield Advance**

The following paint system must be used over the finishing plasters to make the system weathertight and give the desired finish colour to exterior walls. Dulux Acratex 955 Acrashield Advance is a 100% acrylic- based paint that has been specially formulated for use over cement based and acrylic plasters. Cement based plaster finishes must be coated with a minimum of 1 coat of Dulux Acratex 501/10 Green Render Sealer and 2 coats of 955 Acrashield Advance tinted to the selected colour and applied by brush and roller at a spread rate of approximately 6m<sup>2</sup>/litre. Acrylic texture finishes when tinted only require 1 coat of 955 Acrashield Advance. Dulux Acratex 955 Acrashield Advance is an exterior paint system complying with any of Parts 7, 8, 9 & 10 of AS 3730.

This paint system must be applied in accordance with the Dulux Acratex 955 Acrashield Advance application instructions. Other paint systems are not covered by this specification sheet and Specialized Construction Products will not warrant the use or suitability of alternative paint systems over the surface of its plaster finishes.

**Paint colours must have an LRV (Light Reflectance Value) of 25% minimum regardless of gloss value unless an acrylic finishing texture is used.**

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 MLC contains cement and it will not fully cure for 28 days, if the MLC has had a cement based finish applied over its surface it can be painted after the finish coats have cured for a minimum of 3-4 days.

## 9. **Curing:**

The curing times of MLC and Powaflex 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.

## 10. **Cleaning:**

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

before the material sets.

### 11. 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.

### 12. Limitations:

**DO NOT** apply plaster 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 plaster or deviate from the mixing or application procedures outlined in any of Specialized Construction Products' technical data sheets without written approval from Specialized Construction Products.

**DO NOT** apply plaster 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 the MLC 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, discolouration, wash off, and overall system failure.

### 13. Maintenance:

The wall cladding system applied should be cleaned, at least annually, by washing with clean water to remove dirt and to maintain the finish appearance.

Grime can be removed with warm water and detergent.

Plastered walls should be recoated with Dulux Acratex 955 Acrashield Advance 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 surface coating is maintained, 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.

#### 14. **Warranty:**

The recommendations, suggestions, statements, and technical data provided by Specialized Construction Products 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 be liable for incidental or consequential damages. Specialized Construction Products 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, 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.

Specialized Construction Products guarantees this product is free from manufacturing defects and will perform to its specification for 10 years from the date of application if application occurs within the products stated shelf life.

##### **Material Guarantee Period**

15 years from date of practical completion to plastering.

##### **Workmanship Guarantee Period**

5 years from date of practical completion to plastering.

##### **Technical Assistance**

Assistance and information are available by calling Specialized Construction Products on (09) 414 4499 or 0800 800 79 or by e-mail at [info@specialized.co.nz](mailto:info@specialized.co.nz).