

## SOLID PLASTER REPAIR SPECIFICATION

### 1 INTRODUCTION

This specification is for the application of Specialized Construction Products (SCP) Powaflex crack repair system for use over the surface of an existing 21mm thick solid plaster where the façade has cracked due to curing, seismic or structural stress. The Powaflex plaster system has been specially developed by Specialized Construction Products as a semi-flexible remedial system to repair and refurbish previously damaged solid plaster exteriors.

Powaflex plaster is a ready-to-use, fibre reinforced, organically bound base coat that can be easily applied over properly prepared solid plaster prior to a selected SCP/Dulux Acratex acrylic finishing texture being applied. The SCP/Dulux Acratex range of acrylic texture finishes are ready to use, pasty, synthetic resin final coats that can be applied to achieve a wide range of decorative finishes for internal and external areas.

### 2 PRE-PLASTERING REQUIREMENTS

The backing substrate for the existing solid plaster must have been installed in strict accordance with the manufacturer's specifications and recommended installation procedures and the solid plaster must be well supported. All exposed wire must be neutralized with a zinc-based primer and all the flashings used with the solid plaster system should be checked for damage prior to plastering. The finished appearance of the wall is highly dependent on the standard of the wall construction underneath.

This system must not be used in situations where water may pond. A minimum slope of 10° is required on all sills and copings. It is critical that pipes are flashed appropriately in accordance with E2 fig 68. All pipes must have a downward rake of a minimum of 5° and must be sealed in place using an appropriate MS Sealant both before plastering and after the installation of the acrylic finishing texture.

Construction joints must be provided according to New Zealand Solid Plastering Standards and design criteria. All construction joints must be in place and must be waterproof prior to the commencement of plastering.

### 3 SURFACE PREPARATION

All nibs, protrusions, and excess mortar on the surface of the solid plaster or irregularities in the slab must be ground off prior to plastering. All hollows in the existing solid plaster or areas that are not flat and true should be screeded with a coat of SCP Masonry Levelling Compound over a coat of SCP Tankit prior to the application of the mesh coat.

The entire surface of the existing solid plaster must be checked to ensure it is well adhered to the existing substrate. Any 'drummy' areas in the existing solid plaster must be saw cut back to a hard well adhered edge and removed from the surface of the wall before the area is primed with Tankit plaster and filled with Masonry Levelling Compound prior to mesh coating.

All surfaces to receive an application of any of Specialized plasters 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 water blasted with a high-pressure water blaster. All cracks that may be the subject to ongoing movement must be correctly repaired and reinforced with proprietary mesh imbedded in SCP Tankit. Failing to correctly prepare the substrate may cause delamination, chalking or failure in the base coat.

Some smooth, dense concrete surfaces such as poured insitu concrete must be slush coated before application of any plaster 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 cleaned with Dulux Acratex 400/4 Tiltwash to ensure any mould or release agents are removed before the plaster is applied. All joinery must be installed with air seals to comply with the manufacturer's technical details. All sill rebates must have a minimum fall of 15 degrees.

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

#### 4 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 recognized. 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. Prolonged skin contact with the wet compound should be avoided. People with sensitive skin must wear rubber gloves when handling the product. Materials Safety Data Sheets are available on request.

#### 5 MATERIALS APPLICATION

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 REPAIR BANDAGES & EXTERNAL CORNERS

Any areas in the existing plaster that have cracked since the product was first installed must be properly reinforced with proprietary mesh bandages embedded in SCP Tankit prior to the application of the Powaflex mesh coat. All exterior galvanised angles must be removed from the existing plaster and any exposed mesh must be well primed with a brush applied zinc-based primer before replacement external PVC corners are installed.

All pre-meshed PVC corners should be embedded in Powaflex plaster. Thickness is critical - a minimum thickness of 2mm must be achieved with this plaster. Do not force the mesh hard down onto the surface of the substrate. The mesh pattern should be "grinning" through, but the mesh itself completely covered with plaster. Once all the corners have been straightened and all existing cracks have been bandaged, the dwelling will be ready for its Powaflex mesh coat.

#### 7 MESH COATING

Once all penetrations and awkward areas have been reinforced with mesh all the flat areas of wall should be done using a 160g/m2 alkali resistant hard mesh embedded in Powaflex plaster. Drops of hard mesh should overlap by a minimum of 50mm.

At the corners of all openings, a second layer of mesh 100 x 200mm (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.

Powaflex is to be used only as "Thin-Layer-System" with a nominal thickness of 2-3mm.

The instructions for mixing Powaflex and the subsequent SCP/Dulux Acratex acrylic finishing textures are clearly spelt out on the labels on the bag/bucket.

The air temperature and the temperature of the substrate and the plaster itself must be higher than +5°C during processing and setting. While it is curing all finished work must be protected from direct solar radiation, rain, or strong wind (e.g., scaffolding protection net). High temperatures during summer will seriously shorten the working and drying time of the product.

**It is important that each mix of Powaflex stands for approximately 5 minutes and is then re-stirred, and the final consistency adjusted. This allows the thickening agents in the plaster to take effect and stops the material 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.**

## 8 Finishing Plaster Options

- Option 1: Acratex 951 Coventry Coarse Acrylic Texture - 15L
- Option 2: Acratex 951 1mm Super Trowel Acrylic Texture - 15L
- Option 3: Acratex 951 Sienna Coarse Sand Finish Acrylic Texture - 15L
- Option 4: Acratex 951 Sienna Natural Acrylic Texture - 15L
- Option 5: Specialized FlexiFloat - 20kg (This product is a bagged texture and not tintable)
- Option 6: Specialized FlexiFlat -20kg (This product is a bagged texture and not tintable)

## 9 Paint Coating

Once the plaster system is complete and has fully cured it must be coated with 2 coats of a 100% acrylic-based exterior paint. The Dulux Acratex 955 Acrashield Advance system complies with all parts of 7, 8, 9 or 10 of AS3730. Specialized Construction Products specifies the use of the Dulux Acratex 955 Acrashield Advance paint system, alternative paint systems are not covered by this specification sheet. Specialized Construction Products will therefore not warrant the use or suitability of alternative paint systems over the surface of its plaster finishes.

## 10 CURING

The curing time of SCP's plaster finishes 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 effect.

## 11 LIMITATIONS

**DO NOT** apply the system when the ambient or surface temperature is below 5°C or above 30°C or will be in that range for the 24-hour period after application. Material that is allowed to freeze or material that dries too quickly may suffer irreparable damage.

**DO NOT** add any other materials to the Powaflex base coat or acrylic finishes and do not 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.

**DO NOT** apply the system 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 the products used in this system.

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

**DO NOT** reactivate any 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.

## 12 CLEANING

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

## 13 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. Any plaster stock that is older than six months should be discarded.

## 14 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 walls should be recoated with Dulux Acratex 955 Acrashield Advance paint system at 5 to 8 yearly intervals or sooner if required to maintain weather tightness. Regular checks, at least annually, must be made of the system to ensure that the weather resistant coating is maintained weathertight, 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 only.

## 15 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.

**System guarantee period – 10 years** from date of practical completion

**Workmanship guarantee period – 5 years** from date of practical completion

Technical assistance and information is available by calling Specialized Construction Products at (09) 414 4499 or by e-mail at "info@specialized.co.nz".

## DISCLAIMER — PLEASE READ

If the Solid Plaster substrate has been direct fixed to the exterior framing (i.e., no cavity has been installed behind the substrate), the system outlined above should only ever be considered as an interim measure to increase the weather-tightness of the dwelling prior to the potential for a full reclad. As the backing substrate will not be removed during the application of this system neither Specialized Construction Products nor its Certified Contractors can vouch for or be deemed to have any knowledge of the quality of the framing hidden behind the substrate. This system is aesthetic in nature only and does not replace or supersede a full re-clad installed over the surface of a fully drained and ventilated cavity. Specialized Construction Products and the members of its Certified Contractors network do not accept any 'duty of care' to inform any party associated with this work with regard to any weather-tightness issues that may be present or perceived.