

# SPECIALIZED PRECAST SKIMMING COMPOUND SPECIFICATION

## 1. Introduction

This specification is for the application of Specialized Construction Products Precast Skimming Compound. Specialized Construction Product's Precast Skimming Compound is a preblended, cement-based skimming plaster that can be easily applied to provide a sandable, permanent finish to dense concrete surfaces prior to the application of a chosen paint or texture system. Precast Skimming Compound has been specifically designed to fill pin holes, small surface cracks and other minor surface irregularities that occur during the fabrication of tilt slab panels and other precast concrete structures.

## 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. Properties

Application Temperature: 8°C - 30°C

Service Temperature Range: -20°C to 60°C

Dry Film Thickness: 800 - 1000µm

Coverage: Approximately 1.5m<sup>2</sup>/L per coat at a film build of 650µm

## 4. Pre-Plastering Requirements

All precast panels must be formed true and even and finished to the NZS 3114 F5 standard. The surface deviation is to be no greater than ±3mm per 1200mm radius. If the concrete has been chemically modified or release agents applied, this may affect the adhesion of the applied plaster system. Before plastering commences confirm that appropriate surface cleaning has taken place.

All concrete surfaces shall be clean and dry and any defects, holes, or chips deeper than 2mm must be patched with Specialized's Fine Mesh Coat or another appropriate Specialized alternative prior to skimming. All lifting lugs in the tilt slab should also be prefilled with Specialized's Masonry Levelling Compound and left to dry before they are skim coated. Ensure the concrete and any repairs are cured before the skimming application commences.

The precast panels must be installed in strict accordance with the manufacturer's specifications and recommended engineering installation procedures. The manufacturer's required curing time must be allowed after placement of the precast panels to ensure the walls have stabilised. The finished appearance of the wall is very dependent on the standard of the wall construction.

This skimming system must not be used in situations where water may pond and a minimum slope of 15° 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 MS Sealant or another approved equivalent both before plastering and after the installation of the Precast Skimming Compound.

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

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

All joinery must be installed with air seals to comply with the manufacturer's technical details. To ensure all sill, head and jamb rebates are completely waterproof they must be sealed with a minimum of two coats of Specialized's Tankit waterproofing system thinned to a brush able consistency prior to plastering. Do not apply Tankit when rain appears imminent or where the surface temperature is below 8°C and falling or greater than 30°C. The Tankit System should be applied at approximately 1.5m<sup>2</sup>/litre per coat. A minimum of 8 hours should be left between coats.

## 5. Surface Preparation

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 specially prepared prior to the 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 Tilt-Wash to ensure any mould release agents are removed before the plaster is applied. Failing to correctly prepare the concrete substrate may cause delamination, chalking or failure in the base coat.

**Do not** wet down masonry surfaces before plastering.

**Do not** apply plaster to surfaces that are wet from rain or overnight dew.

## 6. Materials Application

When using the plaster, 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 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 lightly over the hour.

**NOTE:** Precast Skimming Compound can be sanded with P180 grit sand paper up to 72 hrs after it has hardened to achieve a smooth defect free background which can be painted. The longer this product is left to harden the harder it becomes to sand.

Apply a tight coat of Precast Skimming Compound to the entire surface of the panel ensuring a wet edge is always kept between successive sweeps.

**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.**

## 7. Curing

The curing time of Specialized's Precast Skimming Compound 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. Although Precast Skimming Compound contains cement and it will not fully cure for 28 days, if it has been applied as a finish it can be painted after it has cured for a minimum of 3-4 days.

## 8. Texturing and Coating of Pre-Cast Skimming Compound

For texturing over Pre-Cast Skimming Compound using an Dulux Acratex acrylic texture over the Tilt-Up and Pre-Cast panels once the Pre-Cast Skimming compound has been applied, apply a full coat of Dulux Acratex 501/10 Green Render Sealer prior to the application of the Dulux Acratex acrylic texture tinted to the specified colour followed by 1 coat the Dulux Acratex Acrashield Advance tinted to the specified colour. If applying an cementious texture this should be applied directly over the Pre- Cast compound, then apply the Dulux Acratex 501/10 Green Render Sealer followed by 2 coats of Dulux Acratex 955 Acrashield Advance tinted to the specified colour.

## 9. Alternative Finishing Texture 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 several 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.

### **Spray Texture:**

A polymer-modified, cement-based plaster which can be sprayed through a sagola gun

to achieve a finely spiked texture finish.

## 10. Acrylic Finishing Texture Options

The options below are the options once the Precast Skimming Compound has been applied.

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

Ready to use, synthetic resin-based render which is polished flat to achieve a fine granular finish or sprayed through a hopper gun or a sagola gun to achieve a fine stippled appearance. The smooth plaster will not cover up the background imperfections, particularly when walls are subject to side lighting at certain times of the day.

## 11. Paint System

Dulux Acratex 955 Acrashield Advance:

A 100% acrylic-based paint that has been specially formulated for use over cement based plasters. Apply 1 or 2 coats of Dulux Acratex 955 Acrashield Advance dependent on the finishing texture system used and tinted to the selected colour and applied by brush and roller at a spread rate of approximately 6m<sup>2</sup>/L.

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.

## 12. 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.

## 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. Plaster stock that is older than six months should be discarded.

## 14. Limitations

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

**DO NOT** apply Precast Skimming Compound 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 Precast Skimming Compound 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.

## 15. Maintenance

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

Plastered walls should be recoated with Dulux Acratex 955 Acrashield Advance the approved paint system at 8 to 10 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.

## 16. 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).