



STOLIT K PLASTER SYSTEM SPECIFICATION

STO STOLIT K PLASTER OVER PRECAST PANEL CONSTRUCTION

Based on BRANZ Appraisal No 515 (2007) - ACAD Details www.sto.co.nz building with Sto

Project:

Prepared for:

Stolit K Plaster System on Precast Panel Construction

This specification is written for the application of the **Stolit K Plaster System** incorporating; Preparation as required **Sto Putzgrund** primer finished in selected **Stolit K** coloured finishing render coated with **StoColor Maxicryl** facade paint over Precast or Tilt panel concrete construction.

1. CONSTRUCTION & DETAILING

Responsibility

All work in this section shall be the responsibility of the Main Contractor, unless otherwise expressly agreed.

Materials of Construction

Concrete Panels

Panels shall be formed true and even and finished to NZS 3114 F5 standard, with all nibs and protrusions ground off, the surface deviation is to be no greater than 3 mm per 1200mm radius. Bagging of the surface is not normally required with concrete of the prescribed standard. If the concrete has had additives added or release agents applied this may affect the adhesion of the applied plaster system, confirm with Sto Contractor before he proceeds that appropriate cleaning has taken place. Walls may require moss-killing, degreasing and washing or water blasting to ensure existing release agent, contaminates, surface dirt is removed to leave a clean surface. Note: where high pressure water blasting is used care must be taken to avoid opening up the surface or damaging other building elements and adjacent surfaces. All concrete surfaces shall be cured, clean, dry and any defects, holes or chips shall be patched with a Sto patching mortar before commencing.

Control Joints – Panel Joints

All control joints required in the panelised walls, between dissimilar materials or as nominated by the engineer or pre cast manufacture shall be correctly formed and sealed.

Joinery Openings

Joinery openings should be formed in the panels with 20 / 25mm rebates incorporated into the concrete pour to provide a rebate for the joinery to sit against. This rebate should be sealed with two coats of StoColor Maxicryl before the joinery is installed and fixed normally incorporating sealant seals to the perimeter junctions with a free draining sill. **Note:** Timber must not be used to form rebates.

2. SURFACE PREPARATION

Responsibility

All work in this section shall be the responsibility of the Main Contractor, unless otherwise expressly agreed.

Aluminium Joinery

Joinery shall be fixed in accordance with the project drawings or the joinery manufactures specific design instructions. Before installing any joinery or sill trays the panel joints must be sealant jointed in accordance with the project specifications and any holes filled with **Sto Crack Filler Fine** before applying two coats of StoColor Maxicryl to seal the rebates before installing the joinery. **Sto Joint Seal Tape** can be used as required for a secondary seal by placing the tape onto the back of the aluminium joinery flange at the head & jambs before placing the window into position allowing a 5mm gap at the sill. Sealing the joinery perimeter with MS sealant at the **head & jambs** then forms the primary seal with a 5mm gap incorporated at the **sill** for drainage. The joinery installer must additionally incorporate back **air seals** to all joinery openings as per WANZ details.

Note: The air seals, Sto Joint Seal Tape and sealant seals to the windows is the responsibility of the nominated window installer.

Penetrations

Penetrations such as waste pipes and fixing brackets shall be adequately flashed and waterproofed prior to the plaster installation with all penetrations through the Sto Plaster System adequately sealed with M S Sealant. All electrical wiring that penetrates the Sto plaster system shall be in cased in appropriate sized uPVC conduit sheathing acting as an insulator installed @ a minimum 5° down wards rake. The conduit and any plumbing piping etc must then be sealed using MS Sealant.

Parapet Tops & Horizontal Plaster Surfaces

Horizontal surfaces should have a minimum 10° fall to drain water away from the wall face.

Foundations

As required to clean dry prepared walls apply Sto Flexyl waterproofing to the perimeter of the walls from 150mm above ground level to 100mm past the plaster in ground termination point to form a waterproof barrier.

Crack Treatment

All cracks stable cracks 0.500mm or greater in the substrate shall be cleaned out and sealed with **Stoplex W sealer** before filling with **StoEze Joint** crack filler and leaving to dry.

3. STOLIT K PLASTER APPLICATION

Responsibility

All work in this section shall be the responsibility of the Sto Contractor who must satisfy themselves that the surfaces to be plastered are suitable before commencing. Where the surface requires a levelling coat due to the condition of the substrate the main contractor is to be advised and the work carried out as a variation.

Materials

Stoanz Limited supplies all the following materials.

Stolit K 1.0, 1.5 or 2.0mm coloured finishing render
StoColor Maxicryl façade paint
StoFlexyl meshed waterproofing

Sto Putzgrund primer
StoEze joint crack filler

General

Installation shall be carried out in stages i.e. Prepare the surface by filling any defects as required then apply **Sto Putzgrund** primer to seal the surface and finish in selected **Stolit K** coloured finishing render coated with **StoColor Maxicryl** facade paint. Allow adequate protection of adjacent surfaces.

Note: Any release or curing agents must be removed to achieve good adhesion using an appropriate cleaner before commencing any work.

Preparation

All concrete surfaces to be plastered shall be clean, dry and free of all surface contaminants, check with the main contractor to establish that appropriate cleaning methods have been undertaken. As necessary clean surfaces and fill any blowholes, cracks, chips or damage.

Coating Removal

Any coating that are de laminating, bituminous based or adhesion impairing require removal.

Moss Treatment

All surfaces shall be treated with a chemical solution to kill all moss and mould spores ensuring the stipulated kill times are observed before commencing.

Cleaning

All surfaces to be plastered shall be water blasted with a 3000psi machine and chemically cleaned to remove all contaminants supplemented by hand or mechanical removal of any loose or friable material, etc to establish a sound clean substrate. **Note:** When cleaning and using the waterblaster due care must be taken to avoid any damage to the surface, building elements or adjacent surfaces.

Defects

Any surface defects or small blow holes that are present shall be filled with the **StoEze Joint filler** larger areas can be pre stopped with the applicable **Sto leveling plaster** as required before the **Sto Putzgrund** primer coat is applied.

Control Joints

Ensure existing panel sealant is masked off

Sto Putzgrund Primer

To clean dry prepared pre cast concrete or tilt panel surfaces apply one full coat of **Sto Putzgrund** primer by brush and roller at approximately 7/8 sqm per litre to seal the surface and leave to dry.

Finishing Section

Stolit K 1.0, 1.5 or 2.0mm coloured finishing render as selected

To all exterior plastered surfaces apply selected finish **Stolit K 1.0, 1.5 or 2.0mm** tinted to the selected colour, applied with a stainless steel trowel gauging to the thickness of the aggregate size and finished with a plastic trowel to the requisite pattern. Allow to dry overnight. The spreading rate shall be approximately 12sqm/1.0mm - 9sqm/1.5mm - 7sqm/2.0mm-m²/per pail.

StoColor Maxicryl façade paint

All **Stolit K** surfaces shall receive one (1) full coat of **StoColor Maxicryl** façade paint tinted to the selected colour and applied by brush and roller at approximately 6/7 m² per litre.

Note:; Always maintain wet edges between rolling and cutting in to maintain an even film build.

4. GENERAL NOTES

The colour is to be selected by the specifier or client if required the a sample for approval is to be prepared before main works commence. Stoanz recommend a LRV Value of grater than20% to avoid thermal stress.

5. MAINTENANCE

The Stolit K Plaster System must be cleaned annually by low pressure washing to remove all existing surface contaminants, with special attention to non-rain washed areas. When recoating is required at the 8 -10-year period to maintain long-term integrity and a pristine condition, this can be carried out using StoColor Maxicryl over a cleaned surface. Where a colour change is required Stoanz Limited should be consulted for a specific specification. Physical damage must be repaired using the appropriate Sto Plaster as required.

Annual inspections are to be implemented after completion to clearly identify any faults in the cladding, sealant beads, flashings and any other connections. A repair process must be implemented immediately to address any faults so the long-term warranty is not compromised.

6. WARRANTY

The **Stolit K Plaster System** described in this specification is warranted for a period of ten (10) years from the date of application. The warranty is provided to comply with the relevant clauses in, **B2 Durability** and **E2/AS1 External Moisture** and **F2 Hazardous Building Material** performance of the New Zealand Building Code for this type of building envelope element with normal maintenance requirements which are stated in the custom Stoanz Ltd's specification and maintenance .

A five (5) year workmanship warranty is issued by the Sto Contractor carrying out the work, and is backed by the Manufacturer as to the suitability for use of the material supplied, provided that

- (a) The Approved **Sto Contractor**, who must adequately complete and sign a Sto QA Compliance Form and PS3 Workmanship Warranty, carries out all specified work.
- (b) All work is carried out in accordance with this Specification or any written amendments thereto issued by the Manufacturers.
- (c) The warranty does not cover situations where the plaster system is subjected to physical disturbance, chemical spillage or interference.

