



STOARMAT PLASTER SYSTEM SPECIFICATION

STOARMAT PLASTER OVER PRECAST PANEL CONSTRUCTION

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

Project:

Prepared for:

StoArmat Plaster System with Sto 12mm Control Joints on Precast Panel Construction

This specification details the application of the **StoArmat Plaster System** incorporating;
Preparation to remove any surface contaminates, detailing of chamfered edged pre cast control joints for **Sto 12mm Control Joints**, application of the **StoArmat Classic meshed** reinforcement plaster finished in the selected **Stolit K 1.0 or 1.5mm** coloured finishing render coated in **StoColor Maxicryl** façade paint over exterior concrete pre cast construction.

1. CONSTRUCTION & DETAILING

Responsibility

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

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.

Pre Cast 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 concrete 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.

2. SURFACE PREPARATION

Responsibility

All work in this section shall be the responsibility of the Main Contractor, unless otherwise 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. 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 and sealant seals to the windows are 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.

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. STOARMAT PLASTER SYSTEM

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 for the proposed system. If the precast 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 Ltd supplies all the following materials:

Sto Crack Repair System

StoArmat Classic meshed reinforcement plaster

Stolit K coloured finishing renders

Sto uPVC control joints and flashings

Sto Putzgrund primer

Sto Flexyl waterproofing membrane

StoColor Maxicryl façade paint

General

Installation over the prepared panels shall be carried out incorporating; **Sto Putzgrund** primer on smooth surfaces as required to stop slip, **StoArmat Meshed** reinforcement plaster finished in selected **Stolit K** coloured finishing render coated in **StoColor Maxicryl**. Adequate protection of all adjacent surfaces must be undertaken.

Stopping

As required fill holes, voids and surface defects flush using **Sto Repair Mortar** or **Sto Crack Filler**. Rasp any proud plastered areas to ensure they are flush and true to surrounding surfaces. Once dry remove dust and surface contaminants.

Minor Fractures

Any stable fractures can be stopped flush using the **Sto Crack Repair System**.

Sto Putzgrund primer

As required to clean, dry, very smooth surfaces apply a coat of **Sto Putzgrund** primer by brush and roller at the approximate spreading rate of 7/8m²/litre to grit the surface.

Panel Control Joints

The existing chamfered edge control joints are to be squared up by inserting a 15mm thick polystyrene fillet centred on the joint and filling the edges flush using **Multiscreed** plaster. Once dry rake back the polystyrene and insert a **Sto 12mm Control Joint** in the **StoArmat Classic** plaster mesh coat.

StoArmat Classic meshed reinforcement plaster

To clean dry surfaces, apply **StoArmat Classic** plaster by hawk and trowel at approximate thickness of 1.5/2.0mm. Whilst the **StoArmat Classic** is still wet, lightly embed Sto mesh ensuring adjacent drops of mesh are overlapped by a minimum of 75mm. Float the surface to ensure that the mesh has been lightly embedded into the plaster coat. Allow to dry and apply one further coat of **StoArmat Classic** at approximately 1/1.5 mm thick by hawk and trowel to leave a level plane surface free of voids or deviations. Once dry remove any slight ridging etc of finished **StoArmat Classic** with a Sto rasp ready for subsequent topcoat. All application procedures for the **StoArmat Classic** must be in accordance with the TDS sheet and Stoanz Limiter's recommendations.

Detailing

As required use Sto pre meshed corners, finishing edges and drip edges in the **StoArmat Classic** plaster.

Sealant Installation

All junctions between the cladding, joinery and around penetrations, flashings and dissimilar shall be sealed with **MS Sealant**.

Finishing Render as selected**Stolit K 1.0 or 1.5mm coloured finishing render (as selected)**

To all exterior plastered surfaces apply selected finishing render **Stolit K 1.0 or 1.5mm** tinted to the selected colour and applied with a stainless steel trowel gauging to the thickness of the aggregate size and finished with a plastic trowel to the requisite pattern and allow to dry normally overnight. The spreading rate shall be approximately 12sqm/1.0mm 9sqm/1.5mm -/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 cutting in and rolling tight to maintain an even film build.

4. GENERAL NOTES**Colour**

As selected by the client or Architect Stoanz recommend the selected colour should have a minimum light reflectance value of 20% to avoid thermal stress.

5. MAINTENANCE

The **StoArmat 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 a Sto Coating 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 **StoArmat Plaster System** described in this specification is warranted for a period of fifteen (15) years from the date of application. The weatherproof warranty is provided to comply with the required 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 element with only normal maintenance requirements which are stated in the custom Stoanz Ltd's specification.

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.

