



## **MAXRAFT INSULATED FOUNDATION CONSTRUCTION**

### **STOMIRAL PLASTER SYSTEM OVER MAXRAFT FOUNDATIONS**

Based on BRANZ Appraisal No 604 - ACAD Details [www.sto.co.nz](http://www.sto.co.nz) building with Sto

**Project:** Standard Specification

**Prepared for:** To Be Advised

#### **StoMiral Plaster System on MAXRaft Insulated Foundations**

This specification details the application of the **StoMiral Plaster System** incorporating; Preparation, **Sto Flexyl waterproofing** if required, a basecoat of **Multiscreed** meshed plaster finished in **1.0mm Float** or **Stolit K** render coated in **StoColor Maxicryl** façade paint on **MAXRaft** foundation system.

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## **1. CONSTRUCTION PREPARATION AND DETAILING**

### **Responsibility**

All work in this section shall be the responsibility of the Main Contractor.

The Main Contractor is to ensure that he or she is fully conversant with all **MAXRaft** installation and fixing details (ACAD Detail Handbook) and the Main Contractor's responsibilities before works commence. The Main Contractor is to be responsible to liaison with the various sub contractors to ensure that all items relating to weather tightness affecting the insulation system are strictly in accordance with the specification, ACAD standard or project specific details, i.e. items such as joinery, wall cladding, light fittings, electrical wiring, paving, etc or any dissimilar items that are adjacent or through the foundations.

### **Materials of Construction**

#### **Concrete Installation**

The concrete installation, including reinforcement and concrete infill shall be made in strict accordance with the project specifications, drawings and details. In particular the floors shall be laid true, in plane with all services and openings correctly formed and tolerances are in accordance with NZS 4210: 2001 2.7.1.4 Table 2.2, i.e. no more than 3mm surface alignment deviation over a 1200mm radius. Control joints are required to be installed as per the details to manage shrinkage and structural stress.

#### **Penetrations**

Any penetrations through the insulation must be weatherproofed as per the standard and/or project specific details. All wiring must be sleeved in PVC conduit and terminations sealed using MS Sealant.

#### **MAXRaft Insulation**

Prepare the surface to ensure it's clean, and rasp as required to straighten joints, remove any degraded material, abrade XPS sheets and ensure the surface is satisfactory before commencing.

## 2. STOMIRAL PLASTER SYSTEM

### Responsibility

All work in this section shall be the responsibility of the **Sto Contractor**, unless otherwise expressly agreed. The **Sto Contractor** shall be satisfied that the substrate is satisfactory and all adjacent surfaces requiring protection are covered before proceeding with any plastering work.

### EIFS Flashing Tape

An approved EIFS flashing tape is to be applied to a clean DPM at the footing extending a minimum 75mm horizontally out from the foundation and lapped 50mm onto the MAXRaft

### Multiscreed basecoat plaster

To clean dry **MAXRaft** surfaces apply a basecoat of **Multiscreed** plaster by hawk and trowel at approximate thickness of 2-2.5mm. While plaster is still wet, lightly embed **Sto mesh**, ensuring adjacent drops of mesh are overlapped by a minimum of 75mm, lightly float the surface to ensure that the mesh has been embedded onto the basecoat and apply one further coat of **Multiscreed** at approximately 1.5mm by hawk and trowel to leave an even level plane surface free of hollows and deviations. All stress points require mesh butterflies on top of the mesh coat. Once dry remove any slight ridging etc of the plastered surface with a Sto rasp ready for subsequent topcoat.

### Sto Flexyl waterproofing below ground

Where the **MAXRaft** foundation is installed below ground the MaxRaft polystyrene is to be sealed with two coats of **Sto Flexyl** brushed on from 150mm above ground down the foundation to a minimum 50mm onto the EIFS flashing at the dpm connection. **Note:** where the **MAXRaft** foundation in ground detail forms part of an inhabitable space a tanking membrane with a 50 year durability warranty is required.

### Sealant Installation

After the mesh coat has dried any joints or detailing between the plaster mesh coat and dissimilar materials shall be sealed with MS Sealant in accordance with the TDS sheets.

## Finishing Section – as selected

### 1.0mm Float Finish

To all exterior plastered foundations apply **1.0mm Float** using a stainless steel trowel gauging to the thickness of the aggregate size and finished with a plastic float to the requisite pattern and allow to dry normally overnight before lightly rasping off any nibs. The spreading rate shall be approximately 9sqm - per bag.

### Alternatively - Stolit K coloured finishing render

#### **Stolit K render is available in 1.0mm, 1.5mm or courser 2.0mm coloured render**

To all exterior plastered foundations apply **Stolit K** coloured finishing render tinted to the selected colour using a stainless steel trowel gauging to the thickness of the aggregate size and finished with a plastic float to the requisite pattern and allow to dry normally overnight before lightly rasping off any nibs. The spreading rate shall be approximately 12sqm/1.0mm, 9sqm/1.5mm, 7sqm/2.0mm -/per pail.

### StoColor Maxicryl façade paint

All **1.0mm Float Finish** render shall receive two (2) coats and **Stolit K** render shall receive one (1) coat of **StoColor Maxicryl** façade paint tinted to the selected colour and applied by brush and roller at approximately 6/7 m<sup>2</sup> per litre. **Note:** Always maintain wet edges between cutting in and rolling in tight to ensure an even film build is maintained.

#### 4. GENERAL NOTES

##### Colour

As requested by the Architect or Client. Stoanz Limited recommends that the LRV (Light Reflectance Value) of the selected colour be greater than 25%. If a colour is selected outside of this recommendation, the warranty will be affected as darker colours subject the cladding system to additional thermal shock.

#### 5. MAINTENANCE

##### Refer; Sto Maintenance Schedule for comprehensive guide

The StoTherm Masonry Insulation System should be cleaned annually by low pressure washing to remove all existing surface contaminants. When recoating is required at the 7/8-year period to maintain long-term integrity and a pristine condition this can be carried out using a Sto façade paint or sealer over a cleaned surface. Where a colour change is required, Stoanz Limited should be consulted for a specific recommendation/specification.

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 **StoMiral Plaster System** described in this specification is warranted for a period of ten (10) years from the date of practical completion. This is to comply with the relevant New Zealand Building Code clauses for this type of building element provided normal maintenance requirements as set out in the Sto Maintenance Schedule are followed.

The warranty is supplied by the Sto Contractor with a five (5) year workmanship warranty signed off by the Sto Contractor carrying out the work. The warranty document including the material warranty is issued by Stoanz Limited provided that;

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

