

Masonry Render System - Masonry Render System over Concrete Block - Firewall - Mineral RenderSpec

General

Description of Works/Specification Notes

This specification deals with Resene Construction Systems Masonry Render System applied over Masonry Blocks. The system incorporates the application of a mineral texture finish.

Properties

Our Masonry Render System complies with the coating requirements set out in E2/AS3 when applied over concrete and concrete masonry construction within the scope of E2/AS3 and will meet the performance criteria of NZBC E2.

The Masonry Render System covers the weathertightness of the building envelope for:

- Concrete slab on ground,
- Concrete and concrete masonry wall systems,
- Concrete to timber construction junctions.

This system complies with CCANZ CP01 and therefore E2/AS3.

Building Code Compliance

If the project has a building consent then the following clauses apply.

B1 - Structure

This specification complies with the requirements as set out in B1 - Structure which requires buildings, building elements and sitework to withstand the combination of loads and physical conditions they are likely to experience during construction, alteration and throughout their lives. Loads and physical conditions include self-weight, temperature, water, earthquakes, snow, wind, fire.

B2 - Durability

This specification complies with the requirements as set out in B2 - Durability which must always be considered when demonstrating compliance with each of the clauses of the Building Code. It ensures that a building throughout its life will continue to satisfy the performance of the Building Code. It confirms the use of materials that will remain functional throughout the specified intended life of the building, but not less than 50, 15 or 5 years

This cladding system meets the expected durability of the NZBC of at least 15 years

E2 - External Moisture

This specification complies with the requirements as set out in E2 - External Moisture which demonstrates External roof, wall claddings and external openings will prevent external moisture from causing undue dampness or damage.

F2 - Hazardous building materials

This specification complies with the requirements as set out in F2 - Hazardous building materials which safeguards people from illness and injury from quantities of gas, liquid, radiation and solid particles caused by exposure to building materials

On Going Maintenance Instructions

Provide ongoing maintenance instructions required to meet the performance requirements of the NZBC.

Building Consent Authority Requirements

All the appropriate inspections are to be carried out by a BCA representative and that it complies with the NZBC requirements.

Documents

Abbreviations

The following abbreviations are used throughout this work section:

- BCA - Building Consent Authority
- LBP - Licensed Building Practitioner
- PPCS - Proprietary Plaster Cladding System
- MPNZA - Master Painters of New Zealand Association
- MSDS - Material Safety Data Sheet

- NZBC - New Zealand Building Code

Manufacturers Documents

Copies of the above relevant company documents referred to in this specification are available at;

Resene Construction Systems
Web: reseneconstruction.co.nz
Telephone: 0800 50 70 40

No Substitutions

Substitutions are not permitted to any specified Resene Construction Systems system. Materials and execution to Resene Construction Systems specification except where varied by this specification and supported by architectural detailing.

Qualifications

Use only LBP registered plasterers licensed to apply the Resene Construction Systems exterior render systems.

Documentation

Finish Sample

Submit one 300 mm x 300 mm sample of the selected texture finish and colour for approval on request by the main contractor or specifier. Obtain signature of acceptance on sample and return to the Registered Plasterer.

Maintenance Instructions

Provide Resene Construction Systems Maintenance Guide on or before practical completion of the contract for issuing to the building owner. Resene Construction Systems Maintenance Guide to be provided on request.

Producer Statement

If the project has a building consent then a producer statement shall be supplied by the plasterer in the form as required by the BCA.

Health and Safety

Refer to the requirements of the Health and Safety in Employment Act 2015 and Worksafe NZ: Guidelines for the provision of facilities and general safety in the construction industry. If the elimination or isolation of potential hazards and risks is not possible then minimise hazards and risks in this work on site by using the proper equipment and techniques as required in the MPNZA Painters hazard handbook. Supply protective clothing and equipment. Inform employees and others on site of the hazards and put into place procedures for dealing with emergencies. Obtain from Resene Construction Systems the Material Safety Data Sheets for each product. Keep sheets on site and comply with the required safety procedures. Confirmation at the start of the project as to whether a Site Specific Safety Plan is to be produced by the Registered Plasterer prior to works starting.

Warranty

Warrant this system under normal environmental and use conditions against failure. Resene Construction Systems system warranty.
Materials: by Resene Construction Systems - 15 Years Materials only
Execution: by Registered Plasterer - 5 Years Workmanship only

OnSite Assistance

Allow to inspect the whole of the work at each stage. Determine a programme for onsite assistance including notification when each part and stage of the work is ready for inspection prior to the work commencing. Permit representatives of Resene Construction Systems to inspect the work in progress and to take samples of their products from site if requested.

Components Used

Hydroplast

- Polymer modified, waterproof, flexible cement based dry plaster mix. Supplied in 10kg bags.

Mono Render

- Supplied in 20kg Bags

Mesh - Blue (1200mm wide)

- Alkali Resistant 6mm x 5mm Weave mesh supplied in 50m rolls

Ezytex Float

- Polymer-modified cement-based dry plaster mix. Supplied in 20 kg bags

Resene Limelock

- Water based acrylic polymer dispersion. Supplied in 10 litre pails.

Resene Lumbersider

- Resene Lumbersider is based on a tough 100% acrylic resin to ensure maximum durability in all exposed conditions. Imparts a natural low sheen look that is fully washable.
- Supplied in 4L and 10L Pails

Soudal Gorilla MS Sealant White

Gorilla MS is a high performance MS sealant, which is UV-resistant, waterproof, paintable*, solvent-free and with superior flexibility.

Ideal for the sealing of expansion and connection joints with a wide range of movement. Suitable for a wide range of substrates including blockwork, brickwork, granite, marble, timber, coated and uncoated aluminum.

Supplied in 420gm cartridges

Features and Benefits:

- Non slump
- The whitest of whites
- 900% elongation of break
- High performance MS
- BRANZ Appraised
- Works on damp surfaces
- Paintable 1 hour after application
- UV resistant
- AsureQuality tested
- Easily repairable
- Interior & exterior
- Solvent-free

Installation/Application

Check and Prepare Solid Filled Masonry

Preparation based on new substrate installations.

Preliminary Checks

Check all exposed surfaces of the substrate are straight, plumb and undamaged. Any loose material identified must be removed and replaced. Ensure pointing has cured according to manufacturer specifications.

Wall Alignment

Using a straight edge, check that the joints are smooth and that the wall is flat and true. The Render coating is not designed to straighten deviations that exceed the specified Rockcote Render System thickness.

Liquid membrane flashings to openings

A liquid membrane should be installed around the perimeter of the window before the windows are installed. For compatible products, refer to E2 /AS3. RCS Hydroplast is a suitable product to be used.

Builder Supplied Flashings

Make sure all builder-supplied flashings are in place. The architectural drawings provide a list of possible flashings.

RCS Flashing Installation

Refer to the flashings as outlined within the Resene Construction Systems Specification

Control/Expansion Joint Setouts

For more information about control joints refer to the technical note on the Resene Construction webpage at the following link
<https://reseneconstruction.co.nz/control-joints/>

The main contractor/substrate installer is responsible for all control joints, which must comply with the substrate supplier's specifications.

Clean Surface When the substrate has been left for a period of time, dust and dirt may build up on the surface. This contamination must be removed prior to render application.

Masking

Before applying the render, masking must be applied to all joinery, pipes, roofs, and all areas likely to be marked by the render. Use drop cloths and ground covers to keep the working areas clean.

Colour selection

For more information about light reflectance values refer to the technical note on the Resene Construction webpage at the following link <https://reseneconstruction.co.nz/light-reflectance-values/>

Improve adhesion

Wet the wall down, or use a solution of Rockcote Acrylbond and Water – ratio part Acrylbond: 4 parts water to minimise the suction of the substrate.

Plaster Systems Hydroplast (Tanking to Reveals)

Waterproofing Window Reveals – Concrete and ICF Block

All joinery reveals must be waterproofed prior to installation of joinery. HydroPlast must cover the entire window reveal and extend at least 50mm past the external corner onto the main wall face.

Reveals must be made good (blow holes, mortar joints, and bug holes patch rendered) to ensure the application of the water proof membrane is accurate.

Resene Construction Systems recommends the use of Resene Construction Systems Hydroplast (Refer to Technical DataSheet) as the waterproofing membrane. Refer to WANZ details July 2005 Windows Association of New Zealand for more information.

Typically used around Concrete block and ICF Block (Poly blocks) window and other openings. Also applied over prepared Foundations, parapets, balustrade tops to provide a waterproof coating ready to accept Rockcote Resene finishing coats.

Expectation

HydroPlast will cure to form a strong, hydrophobic, flexible and crack resistant background which will accept Rockcote Resene finishing coats.

Limitations

Do not apply more than 2mm per coat. Can be used with or without reinforcing mesh dependant on specified application. If applying to foundations or balustrade tops 150gsm Alkali resistant fibreglass mesh must be applied. Mix only enough as can be used in 30mins @ 18 degrees.

Technical Data

Coverage: 5m² @ 2mm thick

Mix ratio: Trowellable - 10kg plaster requires approx. 3L of water (trowellable)

Brushable - 10kg plaster requires approx. 3.3L of water

Rockcote Mono5 Base Coat

Surface Preparation

Ensure surface is clean, sound, dry and free from dust, dirt, grease, mould and lichen.

Application

Plaster can be applied with a steel trowel, pump or broad-knife at approximately 3-5mm thick (3m² per bag). Apply with firm pressure lay in mesh and trowel well to embed mesh (for base coat only). Apply plaster only when the temperature is between 5°C and 30°C and will be in that range for the 24 hours period following application.

Curing:

Render should be protected from hot drying winds and direct sunlight for the first 16 hours. Protect newly applied plaster from rain and water run off for the first 24 hours.

Resene Construction Systems Mesh (Standard Weave)

General

Measured and cut slightly longer than the height/length of the area to be covered.

Application of Fibreglass Mesh

Apply the pre-measured mesh from the top of the wall.

Press the fibreglass mesh into the render mix with a steel trowel starting at the centre and working outwards towards the sides, so that it is completely embedded with the render mix forced right through the mesh holes.

Ensure there are no wrinkles or trapped bubbles in the mesh and that it is fully embedded just below the surface of the render.

Do not embed the leading edge of mesh as this locates your next mesh layer.

Mesh must not be exposed but retained as close to the surface as possible.

Overlap mesh 100 mm with the adjacent drop of mesh, and trowel to embed together.

Ensure the fibreglass mesh covers all exposed areas of the substrate, including any recesses around the exterior joinery and internal corners.

Fibreglass Mesh must be bought to the outside edge of all Flashings.

Apply 450 x 150 mm strips of fibreglass mesh 'butterflies' diagonally at every corner of openings for window and door joinery, meter boxes etc.

After the render mix has cured, trim off excess length accurately against the flashing edge.

Rockcote Mono5 Level/Second Coat

Surface Preparation

Ensure surface is clean, sound, dry and free from dust, dirt, grease, mould and lichen.

Application

Plaster can be applied with a steel trowel, pump or broad-knife at approximately 2-3mm thick (6m² per bag). Apply plaster only when the temperature is between 5°C and 30°C and will be in that range for the 24 hours period following application.

Curing:

Render should be protected from hot drying winds and direct sunlight for the first 16 hours. Protect newly applied plaster from rain and water run off for the first 24 hours.

Plaster Systems Ezytex Float Texture Finish

Application:

Plaster is applied not less than 1mm (8m² per bag) with a steel trowel to a flat finish then float using a circular action to an even texture over the following five minutes with a plastic float. Apply plaster only when the temperature is between 5°C and 30°C and will be in that range for the 24 hours period following application.

Curing:

Plaster should be protected from hot drying winds and direct sunlight for the first 16 hours. Protect newly applied plaster from rain and water run off for the first 24 hours. It is able to be sealed while the finish is still green.

Resene Limelock Sealer

Application

Apply to trowelled plasters immediately after final trowelling (Dependent on surface porosity, typically 5-8m² per litre). Apply one coat of Resene Limelock over the fresh substrate by commercial grade knapsack sprayer, spray, long pile roller or brush and allow to dry. Evenly coat all fresh surfaces to ensure uniform curing and that free lime cannot be transferred through weak points.

Resene Lumbersider Paint Finish (2 Coats)

Important:

This specification must be read in conjunction with the Resene Construction Systems technical drawings.

No alteration to the Resene Construction Systems RenderSpec® is permitted.

All Technical Data Sheets are available at <https://reseneconstruction.co.nz/technical-library/technical-data-sheets/>

All Safety Data Sheets are available at <https://reseneconstruction.co.nz/technical-library/safety-data-sheets/>