Masonry Render System - Masonry Render System over Concrete Block -Cerano Finish - RMaxx 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 pre-coloured acrylic texture finish. This system utilises the RMaxx Render System to give you a full acrylic system over the top of the block.

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 Clading 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: <u>reseneconstruction.co.nz</u> Telephone: <u>0800 50 70 40</u>

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

RMaxx Render

RCS RMaxx - is a high-yielding, cement-free dispersion based basecoat mortar. Thanks to its high elasticity, it can prevent the formation of cracks and is thus also ideal for use as renovation filler.

Mesh - Blue (1200mm wide)

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

Rockcote Polymer Render

• 100% acrylic, high-build texture coating. Supplied in 15 Litre pails

Cerano Texture

ROCKCOTE Cerano is a flexible acrylic based coating manufactured using 100% acrylic emulsions, quality graded quartz and other additives blended together to provide a natural coloured render finish over many substrates. ROCKCOTE Cerano provides a seamless and natural solid rendered look, with the flexibility and performance required for all solid masonry substrates and modern lightweight walling systems.

Resene Aquapel - Solventborne

• Resene Aquapel is a water repellent treatment formulated to help control efflorescence and give a long-term water-beading effect to deter water penetration.

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.

Builder Supplied Flashings

Make sure all builder-supplied flashings are in place.

Liquid membrane flashings to openings

Refer to E2/AS3 for compatible products. RCS Hydroplast can be applied around the windows.

Rockcote Flashing Installation

Refer to the flashings as outlined within this Rockcote RenderSpec[™] and refer to their installation procedures.

Control / Expansion Joint Setouts

Control joints shall be included as specified in the New Zealand Concrete Masonry Manual and in any other locations specified by the manufacturer.

for more information about control joints, located at https://reseneconstruction.co.nz/control-joints/

Clean Surface

When the substrate has been left for some time, dust and dirt may build up on the surface. This contamination must be removed before the render application.

Masking

Before application of Render, apply masking 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.

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.

Colour selection

For further information on Light Reflectance Values (LRV) refer to the following link on our web page <u>https://reseneconstruction.co.nz/light-reflectance-values/</u>

Plaster Systems Hydroplast (Tanking to Reveals)

Waterproofing Window Reveals – Concrete and ICF Block

All joinery reveals must be waterproofed prior to application of renders. A liquid membrane or similar waterproofing must be applied. The membrane must cover the entire window reveal and extend at least 50mm down the outside face of the form work / block work.

Reveals must be made good (blow holes, bug holes 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 RMaxx - Base Coat

Surface Preparation

When using RMAXX make sure the substrate is clean, sound, dry and free from dust, dirt, grease, mould and lichen. If necessary, water blast, sand or rasp the surface accordingly. For reworking old facades, substrates should be clean, dry, stable and free from loose particles. Always

remove any film-forming release agents. Brush down thoroughly or water blast (and leave to dry afterwards) previously rendered surfaces. Highly-absorbent substrates are to be primed with RCS RenderPrep primer. Check tensile bond strength of critical substrates.

Application

RMAXX is ready for use after stirring. Apply RMAXX with a stainless steel trowel to a thickness of about 2-3mm. Dilute with max. 1 % clean water, if necessary. The reinforcement mesh (5x5 mm mesh size) must be completely embedded in the basecoat mortar and fully covered by it. Do not apply when substrate or ambient temperatures are below + 5 °C or in excessive heat above + 30°C. For reworking old facades, it may be necessary to use a 2layer buildup with reinforcement mesh. Allow the RMAXX to dry between layers.

Curing

In normal conditions (+ 20°C / 65 % relative humidity) allow approx. 24-48 hours for drying subject to the application thickness. During the setting and drying process, water evaporates from the material which is why it is significantly influenced by the ambient temperatures. Lower temperatures and/or higher humidity may extend the drying time.

Application of Resene Umbrella additive to assist the improvement of dry times can be added to the RMAXX prior to application. Application

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.

Resene Construction Systems RMaxx - Level Coat

Surface Preparation

When using RMAXX make sure the substrate is clean, sound, dry and free from dust, dirt, grease, mould and lichen. If necessary, water blast, sand or rasp the surface accordingly. For reworking old facades, substrates should be clean, dry, stable and free from loose particles. Always remove any film-forming release agents. Brush down thoroughly or water blast (and leave to dry afterwards) previously rendered surfaces. Highly-absorbent substrates are to be primed with RCS RenderPrep primer. Check tensile bond strength of critical substrates.

Application

RMAXX is ready for use after stirring. Apply RMAXX with a stainless steel trowel to a thickness of about 1 mm over the existing mesh coat of RMAXX. Dilute with max. 1 % clean water, if necessary. Allow the RMAXX to dry between layers. Once dry (see "Curing") or hardened, a finishing render from the Resene Construction Systems suitable for RMAXX can be applied, e. g. Rockcote Classico.

Wait at least 24-48 hours before applying classico and subsequent paint coats.

Curing

In normal conditions (+ 20°C / 65 % relative humidity) allow approx. 24-48 hours for drying subject to the application thickness. During the setting and drying process, water evaporates from the material which is why it is significantly influenced by the ambient temperatures. Lower temperatures and/or higher humidity may extend the drying time.

Application of Resene Umbrella additive to assist the improvement of dry times can be added to the RMAXX prior to application.

Rockcote Polymer Render

Description:

Polymer Render/Torino is an acrylic based texture for use over mesh coats on a variety of substrates both interior and exterior. Polymer Render/Torino is an attractive, subtle, granular texture ideally suited to modern construction. Apply as 1 coat to achieve desired finish. Polymer Render/Torino is also used prior to applying an Acrylic Texture over ICF Block (Polyblock) and Fibre Cement Backer Boards/Sheets.

Application

Texture is applied not less than 1mm 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.

Coverage approximately 15m2 per pail

Rockcote Cerano (2 Coats)

Limitations

Check colour before use Ensure same batch numbers are used on a single wall where possible Should not be applied in temperatures below 5° C or above 35° C Not suitable for areas of continual damp or areas submerged in water

Surface Preparation:

ROCKCOTE Cerano must be applied over properly prepared substrates that are free of dirt, dust, grime and any other contaminants. Substrates must not contain more than 15% moisture prior to application. Do not apply if air and surface temperatures are below 5°C or above 35°C. Must be applied over the top of ROCKCOTE Polymer Render. When applied over Fibre Cement Sheet then RMaxx must be used.

Application

Check colour before use. Ensure same batch numbers are used on a single wall where possible. Mix to help reactivate and aerate contents. Apply evenly over the properly prepared substrate with a hawk and trowel. Ideally apply slightly thicker than the sand granules to achieve optimum results. Finish with a steel or Venetian trowel. Be sure to keep a wet edge with this product and plan your work to suit the product and weather conditions. If joining up to previous day's application, it is "good working practice" to start and finish on an external or internal corner. Keep sheltered from rain & moisture for 24 - 48 hrs after completion dependent on climatic conditions.

Coverage approximately 2-2.5m2 per litre

Resene Aquapel - Solventborne (2 Coats)

Surface preparation

Ensure surface is clean and dry, free from dirt, dust and loose material, oil, grease and mould.

Waterblasting is the best exterior surface preparation method prior to painting.

Application

Stir thoroughly before use. Apply by brush, roller or low pressure spray. Recoat after six hours under normal conditions.

Dependent on surface porosity – typically 2.5 sq. metres per litre for concrete block, 8-11 sq. metres per litre for concrete (tilt, precast and plaster)

Water repellence will reduce over time. To maintain water repellence reapplication will be usually required every three years or when water repellence disappears. Reapplication will be required when water applied to the treated areas does not form beads.

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