# Masonry Render System - Masonry Render System over Concrete Block -Cerano Finish - Acrylic 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 Cerano concrete 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 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**

# **Resene Construction Systems Starter Strip Brick Block**

• Supplied in 2.4m lengths

## **Resene Construction Systems EdgeSeal Window Flashing**

- Used for sill and jamb installations
- Supplied in 2400mm lengths

# **Resene Construction Systems Pre-meshed Corners**

• Supplied in 2400mm Lengths

# Soudal Holdfast Nailpower Construction Adhesive

Holdfast Nailpower Construction Adhesive is a high performance, paste like construction adhesive formulated to bond a variety of common construction materials.

Supplied in 375mls cartidges

## **Mono Render**

• Supplied in 20kg Bags

## Mesh - Blue (1200mm wide)

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

## **Resene Limelock**

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

## **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 Masonry / Clay brick veneer Substrate

Preparation based on new substrate installations.

## 2.2.1. Preliminary Checks

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

## 2.2.2. Wall Alignment

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

### 2.2.3. Weep Holes

Weep holes must be kept clear of Render unless an alternative solution is accepted by the BCA.

#### 2.2.4. Builder Supplied Flashings

Make sure all builder supplied flashings are in place. (Refer to Rockcote TradeSpec<sup>™</sup> document 3.2 Builder Supplied Flashings) for a list of possible builder supplied flashings.

#### 2.2.5. Rockcote Flashing Installation

Refer to the flashings as outlined within the Rockcote RenderSpec<sup>™</sup> section 5 and refer to their installation procedures in Rockcote TradeSpec<sup>™</sup> Document 3.1 Rockcote Flashings

#### 2.2.6. Control/Expansion Joint Set outs

for more information about control joints refer to TradeSpec™ Document 1.4 - Control Joints

#### Clay bricks

Control joints shall be included at locations specified by the brick manufacturer.

#### Concrete bricks

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

#### 2.2.7. 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.

#### 2.2.8. 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.

#### 2.2.9. Improve adhesion

If Rockcote Render is being applied to the masonry wall, wet the wall down, or apply a solution of Rockcote Acrylbond and Water – ratio1 part Acrylbond : 4 parts water to minimise the suction of the substrate.

Allows the render to maintain moisture content for longer, providing greater working time. This process assists with the initial hydration / curing of the render application.

### 2.2.10. Colour selection

For further information on Light Reflectance Values (LRV) refer to TradeSpec<sup>™</sup> Document 1.6 - Light Reflectance Values

## Polyblock, Masonry, SIPS Flashing Solution

### **General Notes**

Comply with the Trade Specific penetration flashing guidelines. Carry out to the required standard of execution to ensure water does not penetrate.

Refer to Resene Construction Systems technical drawings for the specified system being installed.

#### **Priming Flashings**

All Resene Construction Systems Flashings must be primed. It is a requirement of Resene Construction Systems to use a solution of 50% Acrylbond, 50% Water and Rockcote MultiStop Bedding compound or AAC Panel Compound. This is then brushed on to the flashings and left 24 hours so that it can adhere and cure.

### **Fixing flashings**

Use 40mm galvanised clouts to temporarily fix flashings in place.

## Starter Strip/Channel Installation

Must be installed directly to the substrate 50mm below finished floor level.

## Vertical control joint installation

Where a vertical control joint intersects with starter strips, the starter strip must be cut to allow for substrate movement.

10mm space between adjacent substrate must be allowed for the positioning of horizontal control joint.

Must be one continuous length. If cladding section exceeds flashing length, the joint must be under-flashed with Butyl based flashing tape to the underside of the flashing prior to installation.

### Horizontal control joint installation

30mm space between adjacent substrate must be allowed for the positioning of horizontal control joint.

Must be one continuous length. If cladding section exceeds flashing length, or at an external or internal corner the joint must be under-flashed with EIFS butyl tape to the underside of the flashing prior to installation.

### **Corner Beads**

Fix to external corners or other exposed edges of the substrate ensuring a plumb, straight edge is formed.

### **Dissimilar cladding junctions**

Refer to Resene Construction Systems and adjacent cladding manufacturers technical drawings.

### Horizontal

Must have apron/z-flashing installed unless otherwise detailed.

### Vertical junction

Must have back flashing installed prior to cladding installation.

10 – 15mm space must be provided from any adjacent cladding / substrate.

Oversize PEF Backing Rod must be inserted into the space 5mm-7mm below the outside line of the cladding.

Sealant must be applied to this junction.

## EdgeSeal™ Flashing Suite Installation

#### Preparation - aluminium joinery

Clean the surface / substrate to which the Resene Construction Systems EdgeSeal<sup>™</sup> Flashing Suite is being applied with Resene Construction Systems IPA wipes. Lightly rub the surface to which you are applying the Resene Construction Systems EdgeSeal<sup>™</sup> Flashing Suite. This process degreases and removes any pre and post construction site residue.

DO NOT USE OTHER NON APPROVED CLEANER as the powder coat warranty may be voided.

The EdgeSeal<sup>™</sup> Flashing Suite acquires maximum hold after 72 hours. Cladding installation can continue during this curing period. Once cured the flashing cannot be removed without difficulty and risk of damage to the surface to which it is adhered.

The EdgeSeal<sup>™</sup> Flashing Suite can be made up of 2 lengths, please ensure that the flashing is tight butted with the adjoining flashing.

#### Joinery Screws

If the Aluminium joinery has protruding screws along any edge, then you must trim the EdgeSeal<sup>™</sup> Window Flashing adhesive and uPVC edge accurately around these and seal with MS sealant prior to priming.

#### **Drainage holes**

If the Aluminium joinery has drainage holes located along the underside of the aluminium 'sill' edge you must leave these areas clear of plaster and sealant. When you are installing the EdgeSeal Flashing make sure you remove out a section of the EdgeSeal Flashing so that the drainage holes on the joinery are left clear. The upstand on the EdgeSeal Flashing must remain upright and continuous behind the holes. This will prevent wind driven rain entering the back of the cavity, and maintain drainage to the outside face of the cladding system.

#### EdgeSeal<sup>™</sup> Jamb Installation

- 1. Measure the length of the jamb from the top corner of the joinery unit to the exposed surface of the installed EdgeSeal™ sill flashing.
- 2. Cut the Rockcote EdgeSeal<sup>™</sup> Window Flashing approximately 1mm proud of total length cutting 1mm extra length will allow for a tight 'compressed' joint where the EdgeSeal<sup>™</sup> Window Flashing junctions to the sill.
- 3. Remove 100mmof the backing tape from the adhesive edge of the prepared flashing.
- 4. Install the flashing by slipping and butting firmly under the EdgeSeal<sup>™</sup> Window Head Flashing (or aluminium flashing depending on what is being used) first, then align the front edge of the flashing flush with the joinery unit.
- 5. Slowly pull off the tape while holding the flashing in position.
- 6. Apply pressure to the front of the flashing to make sure an adequate bond has been achieved between the flashing and joinery unit.
- 7. Tack the flashing in place to maintain its shape

### EdgeSeal<sup>™</sup> Head Installation

- 1. Measure the length of the Window Head and allow an extra 5mm on either side of the joinery unit (sill flashing should be measured and cut to the same dimension)
- 2. Cut the EdgeSeal<sup>™</sup> Window Head Flashing to length.
- 3. Remove 100mm of the backing tape from the adhesive edge of the prepared flashing.
- 4. Place the EdgeSeal<sup>™</sup> Window Head Flashing on top of the Window Head and slowly pull off the tape while holding the flashing in position
- 5. Apply firm pressure to the front of the flashing to make sure an adequate bond has been achieved between flashing and joinery

- 6. Using the same measurement as above, cut a length of Head Flashing tape that is compatible with the building wrap (eg. 3M All Weather Flashing Tape)
- Adhere the Head Flashing Tape to the top part of the EdgeSeal<sup>™</sup> Window Head Flashing and run this up onto the building wrap
  At either end create a small stop end by turning up the tape against the cavity batten, you need to prevent moisture from tracking off the ends of the Flashing Tape.
- Install the cladding substrate and decide whether you are plastering or painting the heads.
- 10. If you are painting the heads install the Universal Drip Edge Flashing between the cladding substrate and the EdgeSeal<sup>™</sup> Window Head Flashing

## **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.

## **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.

# **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>