ROCKCOTE MicroStone Finishes - MicroStone over Integra (Benchtops) - Mineral RenderSpec

General

Description of Works/Specification Notes

ROCKCOTE MicroStone creates a natural stone finish that exudes elegance across a multitude of spaces. MicroStone can be applied over a range of substrates and surfaces for a bespoke seamless finish. MicroStone is a two-part water-based product;

Properties

- Coverage Rate: 12-14m2/15Ltr @ 1mm build per coat
- Substrates: Plasterboard, Concrete Block, Fibre Cement Sheet
- Abrasive strength: Excellent
- Colour: Available in light base and can be tinted using liquid tints (max. 3%).
- Packaging: Part A 10L : Part B 5L
- Clean up: Water
- Thinning: Add up to 1.5% of clean water to assist with consistency for ease of application or 300ml / per kit.r
- Use by: 6 months from date of manufacture
- Storage: Cool, dry place
- Application Temperature: + 5 °C to + 35 °C
- Usual No Coats: 1-2. Do not apply greater than 2mm per coat, use multiple coats for higher build.
- Drying Time: 2-4 hours
- Touch Dry: 1 hour
- Dry to Recoat: Dry to recoat 24 hours prior to Sealer application
- Curing Time: No water or condensation should contact the coating for 5 days from February 2025 Pg 3 of 5
- Installation. It is important to have adequate airfl ow between coats, especially in humid environments, including wet areas.
- Dry Film Build: 1mm
- Wet Film Build: 1-2mm
- Walkable Hardness: 24 hours
- Fire Group Classifi cation: 1-S (Test in accordance with ISO 5660:2002)

Building Code Compliance

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

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 system meets the expected durability of the NZBC of at least 5 years

C - Protection from Fire

This specification complies with the requirements as set out in C - This clause provides objectives that apply to clauses C2 to C6 to: (a) safeguard people from an unacceptable risk of injury or illness caused by fire, (b) protect other property from damage caused by fire, and (c) facilitate firefighting and rescue operations.

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: 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.

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.

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 - 5 Years Materials only
Execution: by Registered Plasterer - 5 Years Workmanship only

Components Used

Integra Panel 50mm Panels

- Dry Density: 520kg/m3
- Compressive strength : 4mPa
- Modulus of Elasticity, E: 1800MPa
- Thermal Conductivity: 0.12 W/(mk)
- Thermal Resistivity, R: 0.29m2K/W
- Substrate Thickness: 50mm Integra panel
- Weight: 32 kg/m2 coatings and substrate, considered a Medium weight cladding in terms of NZS3604
- Panel size = 2200mm x 600mm

Wurth Zinc Spray Light Perfect

- Outstanding long-term protection and optimum metal surface appearance
- High layer thickness in first spray pass
- High degree of safety thanks to optimum weathering protection
- Minimum amount of time spent, as only one operation is required
- Good coverage
- Versatile use with adjustable spray head
- Large area and minor repairs can be carried out quickly and reliably with the variable spray head.
- High degree of resistance to running
- High degree of wear resistance
- Tested corrosion protection in accordance with DIN
- Can be used for repairs in accordance with DIN EN ISO 1461
- Supplied in 400ml spray cans

AAC Adhesive

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

Mesh - Blue (1200mm wide)

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

Mono Render

- Supplied in 20kg Bags

Microstone

Rockcote MicroStone creates a natural stone finish that exudes elegance across a multitude of spaces. MicroStone can be applied over a range of substrates and surfaces for a bespoke seamless finish.

MicroStone is a two-part water-based product; Part A 10L and Part B 5L. Exemplifying excellence, this product exhibits minimal shrinkage and ensuring a flawless result every time. Discover the true essence of luxury with Rockcote MicroStone.

Resene Uracryl 403 - gloss finish

Resene Uracryl 403 is a unique high performance two component finish coat with excellent resistance to abrasion, moisture, petroleum solvents and mineral and vegetable oils, alkalis and acids. The most unusual feature of Resene Uracryl 403 is that, unlike most other classes of high performance coatings, it looks as good as it protects. The sophisticated combination of aliphatic urethanes and urethane reactive acrylic resins gives a system unsurpassed for gloss and colour retention.

Resene Aqua Clear Natural (Flat)

Resene Aquaclear has been developed as a waterborne alternative to turps thinned oil modified urethanes.

Installation/Application

Integra Wall Panel 50mm

There must be no horizontal surfaces which will be subject to water ponding; a minimum slope of 5 degrees is required (for metal caps only, 10 degrees for liquid membranes).

Ground Clearances

It is important that ground clearances are maintained after completion and occupation of the building, with the exterior ground sloped to carry water away from the exterior walls.

Garage floors

Need to be low enough to drive onto and high enough to provide a minimum 50 mm step-down to exterior paving, while maintaining cladding clearances either side of the garage door. To achieve this it may be necessary to construct the garage floor lower than the floor level of the building.

In these situations, providing a 'nib' at garage doorways allows the cladding to continue in a straight line while maintaining minimum clearances at the bottom of wall cavities for ventilation.

E2/AS1 : reference section 9.1.3 and Figure 65 and Table 18

It is the landscaper or other external contractor's responsibility for ground level compliance in relation to cladding clearance and that ground clearances are maintained after completion and occupation of the building.

Decking Clearances / Level thresholds

35mm minimum clearance at the highest point of the deck to the cladding is required.

E2/AS1 : reference section 7.0

Control/Expansion Joint Set outs

- Where columns intersect beamwork control joints should be formed so that they are running vertically and horizontally of the intersection
- Large doors & windows ie Ranch Sliders, & Bi-Fold type where the window area is greater than 8.0m2
- Junctions between dissimilar materials, ie Masonry to Resene Construction Systems EPS/XPS System
- Where there are small widths of plaster (ie. less than a trowel width)
- Where the wall length is greater than 8 metres in length a vertical control joint will need to be installed
- Inter-storey Drainage Joints must be provided for walls exceeding two storeys or 7 metres in height, in accordance with NZBC E2/AS1 Clause 9.1.9.4(b).

Substrate Installation

Panels are installed horizontally. Vertical panel edges may be jointed on-stud or off-stud. Horizontal panel edges do not require edge fixing. Vertical panel joints must be staggered for each row (stretcher bond pattern). The panel must be supported at fixing locations with a vertical batten or spacer (minimum 100mm long). At the base of the wall the panel must hang a minimum of 50mm below the supporting framing.

The minimum width of panel that can be installed is 100mm wide. If you need to install panel in smaller widths you must ensure care is taken, this must include predrilling panel and ensuring there is steel running through the panel, you should also install control joints of either end of the small width. Alternatively look at substituting the Integra for Graphex or EPS in the same thickness, ensure that control joints are formed where it junctions with the rest of the cladding.

Where there are gaps no greater than 25mm in the panel, for example in the following locations :-

- Where panel meets the soffit
- Where a sub-trade penetration penetrates the substrate
- Where a the substrate has been fitted over a a flashing (ie a diverter)
- Small damage to edge of substrate

We suggest that a low expansion foam be used to fill these areas. For larger gaps or broken pieces of panel we suggest that the affected area of the substrate be removed and replaced.

Substrate Preparation

Check should be made using a straight edge to ensure the wall is flat, plumb and true. Any irregularities should be taken out by straightening using a rasp or cup-stone grinder.

The Render coating is not designed to straighten deviations that exceed the specified Render System thickness.

Once the substrate is deemed ready for plaster, then the main contractor can continue to fix the internal linings. This is so that the main contractor can minimise the chance of any damage to the external plaster cladding that may be caused by the fixing process of the internal linings.

External Corners

All external corners must maintain a stretcher bond pattern.

Internal Corners

All internal corners have an option of maintaining a stretcher bond pattern or butting the panel in hard to the adjacent wall.

Mortar Joints

Apply AAC Adhesive/MultiStop Bedding Compound to all panel joins ensuring that an even spread of mortar is through the entire join of the panel. Ensure that any excess mortar does not fall into the cavity.

Priming Steel

Using one of the products below make sure that all exposed steel has been spot primed

- Resene Galvo-Prime – Brush applied waterborne galvanised iron primer
- Zinc rich spray pak primer / solvent bourne – exterior solvent borne Spray application

available from Resene Construction Systems or Resene ColorShops, or other selected merchants.

Ventilation

When fixing the panel into a recessed foundation then adequate ventilation has to be achieved. There are 2 methods to achieving this:-

1. Sitting the panel in a starter strip 10mm of the foundation recess
2. Sitting the panel hard down on the concrete recess and create weep holes in the panel at the following dimensions (1000m2 per lineal metre), (Refer to Table 3 – Weep hole sizes). A plate/grill should then be placed over the hole. Make sure this plate is cleaned and etch primed before painting.

Table 3 – Weep hole sizes

	400mm centres	600mm centres	800mm centres	1000mm centres
Round Hole	23mm diameter	28mm diameter	32mm diameter	36mm diameter
Rectangular Hole	40mm x 10mm	60mm x 10mm	80mm x 10mm	100mm x 10mm

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.

Plaster Systems AAC Adhesive Skim 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 (8m2 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.

Rockcote MicroStone (2 Coats)

Mixing

- Mixing ratio by Volume: Part A 66% / Part B 33%. Kit weight ratio Part A 15kg / Part B 5.5kg.
- Before using stir Part A (10L wet component) to aerate content,
- Slowly add Part B (5L dry component) into Part A pail while mixing. Mix Part A thoroughly and combine Part B until homogenous.
- Mix to a smooth, lump-free consistency.
- To allow for proper hydration, let the product stand for 10 minutes, then re-mix for 1-2 minutes to a smooth paste consistency.
- To adjust consistency, ROCKCOTE MicroStone can be thinned up to 1.5% or 300ml / kit using clean water.
- Mixed Pot Life 90 minutes. Discard after this time.

Application

- Ensure the surface is properly prepared and ready to receive the MicroStone coating system.
- Any prior plaster coatings must be cured for a minimum of 48 hours or less than 15% WME before overcoating with a slurry mix
- The slurry mix must be allowed to dry for 4 hours before applying ROCKCOTE MicroStone.
- Apply the first coat in a tight and thin manner. When touch dry the application of the second coat can be commenced.
- Once the second coat is touch dry, go over it with a steel trowel to tighten and compress the coating. This will help to smooth any inconsistencies.
- When working in small areas, increased airflow is recommended to assist drying.
- Drying times will be affected by cooler air and substrate temperatures.

Sanding

- Sanding will be required to remove any minor imperfections in the MicroStone finish. The degree of sanding and the grit coarseness will depend on the MicroStone finish chosen.
- A random orbital sander fitted with a dust extractor or vacuum pump is highly recommended for sanding ROCKCOTE MicroStone finishes.
- Sanding screens are recommended as they will give a better finish, and will not clog during use like sandpaper and will reduce the risk of scratching the finish.
- ROCKCOTE MicroStone can be sanded once the MicroStone finish has dried completely.
- The recommended coarseness of the sanding screens and sandpapers are: Smooth Finish - 240 grit, Textured Finish - 180 grit and Exposed Stone Finish - 120 grit.
- Light hand sanding is recommended for small and detailed areas only.

Resene Aquaclear (1 Coats)

Resene Aquaclear has been developed as a waterborne alternative to turps-thinned oil-modified urethanes. It will provide a harder-wearing finish to the interior plaster range of products.

Application typically over interior finishes

Diluted 50% with clean water.

1 coat application with #4 synthetic roller

Resene Uracryl 403 (2 Coats) - gloss finish

Mixing

Stir each container separately using an explosion-proof mixer. Add total contents of hardener container to total contents of base. Power mix until uniformly blended and allow mixed product to stand for 10-15 minutes prior to application.

Application

Roller (strong solvent resistant), brush, spray. Thin as required according to application method. When brushing or rolling work in a continuous direction and immediately lay-off with a brush if bubbles persist.

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/