

RonaDeck Resin Bound Surfacing

Resin bound permeable paving for pedestrian and vehicle traffic



FEATURES

- 38% of resin formulated from a botanic source
- UV stable non yellowing resin
- product warranty in excess of 15 years available
- natural appearance
- recycled aggregates available
- SuDS compliant
- highly permeable—up to 850 litres / m² / minute
- high slip resistance
- suitable for pool surrounds, pathways, driveways, car parks and access roads
- trafficable after 4 hours
- low maintenance
- variety of colours

Description

RonaDeck Resin Bound Surfacing is a resin bound aggregate surface for pedestrian and vehicular traffic. RonaDeck Resin Bound surfaces are decorative and functional, seamless and slightly flexible.

The open matrix allows water to drain through to the base, eliminating water ponding and allowing water to drain to planted areas or land drains. The surfacing may be applied to SuDS compliant bases and sub-bases, reducing the impact of urban development on flood risk and allowing water to flow into water courses. Edgings created from brick, stone, timber or steel should be installed to retain and protect the resin bound surfacing.

RonaDeck Resin Bound Surfacing is a two component polyurethane hybrid resin which binds a range of selected decorative kiln-dried aggregates. RonaDeck Resin Bound Surfacing provides an attractive porous surface which is strong enough for foot and light vehicle traffic.

Traffic

RonaDeck Resin Bound Surfacing is designed for pedestrian traffic and light vehicle traffic on drives, car parks and some access roads.

Resin and Aggregate

RonaDeck Resin Bound Surfacing Resin is UV resistant, it will not yellow on exposure to UV light. This is a more attractive option than other types of resin which can yellow and dramatically alter the appearance of the finished surface.

The performance and appearance of the finished surface is dependent on the aggregate used. The RonaDeck Resin Bound Surfacing Aggregate blends have been designed to achieve strength, resilience, porosity and decoration.

Some aggregates can contain small amounts of iron which can produce rust

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Resin and Aggregate (continued)

staining. This naturally occurring iron cannot be identified before use and Ronacrete Ltd cannot accept any responsibility for any loss or damage suffered as a result of staining.

Appearance

The appearance of RonaDeck Resin Bound Surfacing samples and materials are dependent on the colour, shade and grading of individual aggregates supplied to Ronacrete Ltd by its suppliers. Being largely natural aggregates, the appearance may be variable within batches and from batch to batch and uniformity of appearance should not be expected. Darker aggregate blends are less likely to show tyre marks. RonaDeck Resin Bound Surfacing is hand finished with a steel float and some variation in finished levels is to be expected. Levels variation may be accentuated in certain natural and artificial light conditions, such as at sunrise or sunset or when lighting is set into the surfacing.

Reflective Cracking

Angular intrusions into resin bound surfacing by walls; edgings etc may cause formation of reflective cracks in the surfacing. Intrusions into the surfacing should be avoided whenever possible and when unavoidable, intrusions should be curved rather than angular.

Maintenance

It is possible to repair localised damage by cutting out and replacing, ideally using the same aggregate as originally supplied. Ageing and weathering of the original may prevent an invisible repair. "Picking out" of some stones is possible but is likely to be minimal and localised. Any major loss of stone should be reported.

Slip Resistance

All RonaDeck Resin Bound Surfacing aggregate blends have been tested for slip resistance in accordance with BS 8204 Part 6. All aggregate blends achieved 'low potential for slip' in both wet and dry conditions.

Application of RonaDeck Resin Bound Resin Bound Surfacing System Anti-Slip Aggregate will significantly increase the slip resistance of the surface in the wet and on steep gradients without substantial change to appearance.

Contractors

RonaDeck Resin Bound Resin Bound Surfacing System is a specialist product and must only be applied by specialist applicators. Do not apply or allow it to be applied by contractors who do not possess the necessary skills and experience. You should consider appointing a Ronacrete Ltd Approved Contractor.

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Suggested Construction for Footpaths

RonaDeck Resin Bound Surfacing

RonaDeck Resin Bound Surfacing blend minimum 15mm thickness with optional RonaDeck Resin Bound Surfacing Anti-Slip Aggregate

Binder Course

50mm minimum depth of AC14 open graded asphalt concrete (macadam) maximum 100/150 pen binder to BS EN 13108-1.

Granular Sub-base

175mm minimum well compacted Type 3 granular sub-base or similar approved

Optional Impermeable Membrane

Impermeable membrane to carry water to infiltration/storage system
or

Optional Geotextile Layer

Geotextile layer to prevent upward migration of soil

Capping Layer

If required, depending on sub-grade condition

Sub-grade

Suggested Construction for Driveways

RonaDeck Resin Bound Surfacing

RonaDeck Resin Bound Surfacing blend minimum 15mm thickness with optional RonaDeck Resin Bound Surfacing Anti-Slip Aggregate

Binder Course

60mm minimum depth of AC14 open graded asphalt concrete (macadam) maximum 100/150 pen binder to BS EN 13108-1.

Granular Sub-base

200mm minimum well compacted Type 3 granular sub-base or similar approved

Optional Impermeable Membrane

Impermeable membrane to carry water to infiltration/storage system
or

Optional Geotextile Layer

Geotextile layer to prevent upward migration of soil

Capping Layer

If required, depending on sub-grade condition

Sub-grade

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Suggested Construction for Car Parks suitable for cars & light delivery vehicles

RonaDeck Resin Bound Surfacing

RonaDeck Resin Bound Surfacing blend minimum 18mm thickness with optional RonaDeck Resin Bound Surfacing Anti-Slip Aggregate

Binder Course

90mm minimum depth of AC14 open graded asphalt concrete (macadam) maximum 100/150 pen binder to BS EN 13108-1.

Granular Sub-base

300mm minimum well compacted Type 3 granular sub-base or similar approved

Optional Impermeable Membrane

Impermeable membrane to carry water to infiltration/storage system
or

Optional Geotextile Layer

Geotextile layer to prevent upward migration of soil

Capping Layer

If required, depending on sub-grade condition

Sub-grade

Suggested Construction for Access Roads—suitable for cars & light delivery vehicles

RonaDeck Resin Bound Surfacing

RonaDeck Resin Bound Surfacing blend minimum 18mm thickness with optional RonaDeck Resin Bound Surfacing Anti-Slip Aggregate

Binder Course

60mm minimum depth of AC14 open graded asphalt concrete (macadam) maximum 100/150 pen binder to BS EN 13108-1.

Base Course

150mm minimum depth AC20 open graded asphalt concrete (2 layers). Maximum 100/150 pen binder to BS EN 13108-1.

Granular Sub-base

300mm minimum well compacted Type 3 granular sub-base or similar approved

Optional Impermeable Membrane

Impermeable membrane to carry water to infiltration/storage system
or

Optional Geotextile Layer

Geotextile layer to prevent upward migration of soil

Capping Layer

If required, depending on sub-grade condition

Sub-grade

The above information is produced for guidance only, the designer/ contractor should be satisfied that the construction is suitable for the expected traffic and ground conditions. Guidance about thickness and type of asphalt concrete has

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Suggested Construction (continued)

been provided by an asphalt supplier and while due care has been taken to ensure the information is correct, it is not the responsibility of Ronacrete Limited to design this or any other element of the construction.

Mix Design

RonaDeck Resin Bound Surfacing Resin 7.5kg
RonaDeck Resin Bound Surfacing Aggregate 107kg

Coverage

Coverage @ 15mm 4.675m² (approx)
Coverage @ 18mm 3.89m² (approx)
Coverage @ 20mm 3.5m² (approx)

Coverage is based on application to a smooth flat surface and will vary when applied to undulating surfaces, according to compaction, and to the aggregate grading, which can change from batch to batch.

Traffic Times

Foot traffic after 4 hours @ 20 °C
Light vehicle traffic after 1—2 days @ 20 °C

Instructions for Use

1. Allow the asphalt concrete to cure for at least 3 weeks, until free volatiles have evaporated.
2. The surface of the asphalt concrete must be clean, dry and free from loose materials.
3. Ensure that the mixing station is fully waterproof when rain is expected, discontinue mixing when fog or mist are anticipated. Light rain on the surface of the system is unlikely to damage or affect the surface, see later reference to application in rainy conditions.
4. Place RonaDeck Resin Bound Surfacing Aggregate into a clean, dry, forced action mixer minimum pan capacity 120 litres, Baron E120 mixer or similar.
5. Scrape all of the contents of RonaDeck Resin Bound Surfacing B component into the larger A component container and mix with a drill and helical paddle mixer attachment for 30-45 seconds. Keep mixing time to a minimum to avoid a build up of heat.
6. Immediately add the mixed resin to the aggregate in the mixer. Mix the aggregate and resin together until all the aggregate is evenly coated with resin. Keep mixing time to a minimum to avoid a build up of heat.
7. Discharge the mixed resin and aggregate onto the prepared surface, level and smooth. Excessive compaction will reduce permeability.
8. Finish the surface with a suitable float.
9. If required, immediately cast RonaDeck Resin Bound Surfacing Anti-Slip Aggregate onto the top surface of the wet resin and aggregate, at the rate of approximately 0.1kg/m². Ensure even coverage to prevent a patchy appearance.
10. Allow to cure. At 20°C protect against damage by heavy rain for 1 - 2 hours (see Rain during application) and open to traffic as described above.

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Working Temperatures

Working time is affected by temperature including material, air and substrate temperature. At temperatures above 25°C the pot life and working time may be insufficient to allow its proper application.

Work should therefore not proceed when product, air or substrate temperature exceed 25°C. The temperature of the substrate must therefore be measured and monitored during application and work should stop when temperature is above 25°C.

At low temperatures RonaDeck Resin Bound Surfacing Resin will not flow sufficiently to achieve a smooth finish and work should not proceed when air, material or substrate temperature is below 5°C.

Rain During Application

Light rain on the surface of the system is unlikely to cause damage to or affect the surface. Heavy rain is likely to spoil the appearance of the surface. Very heavy rain could wash out resin and aggregate. Therefore application during rain or when rain is anticipated during the cure period is not recommended. Care must be taken to keep the mixing station dry, thus avoiding entrapment of moisture between aggregate and resin.

Shelf Life and Storage

Shelf life of RonaDeck Resin Bound Surfacing Resin is 6 months, aggregates have an unlimited shelf life. Store materials in clean, dry, frost free warehouse conditions between 5°C and 25°C. Protect from sunlight

Health and Safety

RonaDeck Resin Bound Surfacing Resin contains small amounts of isocyanates and is harmful by ingestion and skin contact. It is not considered harmful for transportation. Protective clothing such as goggles, overalls and gloves is recommended to prevent any effect from prolonged skin contact, inhalation or ingestion. Refer to Health and Safety Data Sheet.

Site Attendance

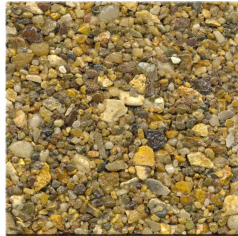
When on site Ronacrete Ltd representatives are able, if asked, to give a general indication of the correct method of installing an Ronacrete Ltd product. It is important to bear in mind that Ronacrete Ltd is a manufacturer and not an application contractor and it is therefore the responsibility of the contractor and his employer to ensure he is aware of and implements the correct practices and procedures to ensure the correct installation of the product and that liability for its correct installation lies with the contractor and not with Ronacrete Ltd .

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Autumn Forest 14.37



Autumn Harvest 1.17



Aztec Gold 23.63



Beige Pearl 22.92



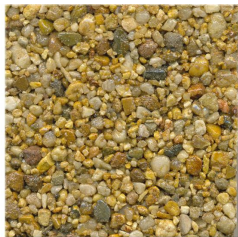
Choc Chip Harvest 20.70



Desert Sand 24.44



Golden Glow 13.36



Golden Harvest 15.38



Harvest Crunch 9.32



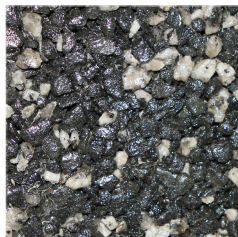
Ice Quartz 8.31



Lunar 19.69



Maple Harvest 18.55



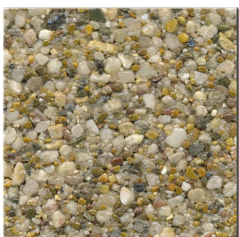
Midnight 17.40



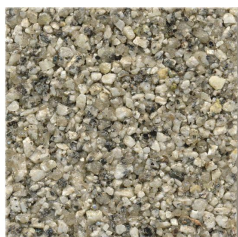
Quartz Parallel 16.39



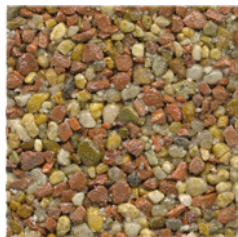
Rustic Bronze 10.33



Sepia Quartz 5.28



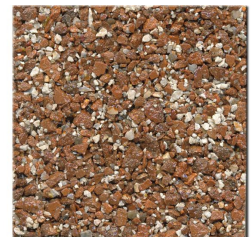
Silver Moon 11.34



Terracotta Gold 3.21



Terracotta Medium 21.80



Terracotta Snow 4.26

The information detailed in this leaflet is liable to modification from time to time in the light of experience and of normal product application, and before using, customers are advised to check with Ronacrete Ltd, quoting the reference number, that they possess the latest issue. Any person or company using the product without first making further enquiries as to the suitability of the product for the intended use does so at his own risk, and Ronacrete Ltd can accept no responsibility for the performance of the product, or for any loss or damage arising out of such use.

Resin Bound and Bonded Surfacing

Ronacrete