

Natural aggregate resin bound surfacing system



FEATURES

- SuDS compliant—highly permeable paving
- UV stable resin will not discolour
- Natural aggregates
- Alternative to conventional paving
- Flexible
- Installed by approved contractors
- Low maintenance

Description

RonaDeck EcoAgg UV is a resin bound aggregate surface for pedestrian traffic. RonaDeck EcoAgg UV 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 system is designed to be SuDS compliant reducing the impact of development on flood risk and allowing water to flow into water courses or water harvesting systems. Edgings created from brick, stone, timber or steel should be installed to retain and protect the resin bound surfacing.

RonaDeck EcoAgg UV comprises RonaDeck EcoAgg UV Resin, a two component UV stable polyurethane resin which binds the aggregate. RonaDeck EcoAgg UV provides an attractive surface, is strong enough for foot traffic, and is highly porous. RonaDeck EcoAgg UV is typically applied to compacted Type 3 aggregate to provide a thin alternative to asphalt or concrete. RonaDeck EcoAgg UV is designed for light foot traffic only. It is not designed for road surfacing, drives or car parks.

Traffic Foot Traffic After 14-15 hours @ 20°C

Aggregate

Some aggregates can contain small amounts of iron which can produce rust staining. This naturally occurring iron cannot be identified before use and Ronacrete cannot accept any responsibility for any loss or damage suffered as a

result of staining.

Appearance

The appearance of samples and of materials supplied by Ronacrete are based on the colour, shade and grading of individual aggregates supplied to Ronacrete by its suppliers. The appearance of natural aggregates will vary from bag to bag and batch to batch, a uniform appearance should not be expected and cannot be achieved.

Resin Bound and Bonded Surfacing

Natural aggregate resin bound surfacing system

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

Application of RonaDeck EcoAgg UV Anti-Slip Aggregate will significantly increase the slip resistance of the surface in the wet, without substantial change to appearance and its use may help comply with Health and Safety obligations.

Contractors

RonaDeck EcoAgg UV 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 Approved Contractor.

Suggested Construction SuDS Compliant Permeable Construction for Footpaths

RonaDeck EcoAgg UV System is designed for light foot traffic only, a suggested form of paving construction follows.

EcoAgg UV Surfacing

40mm minimum depth of RonaDeck EcoAgg UV natural aggregate bound with RonaDeck EcoAgg UV Resin.

Granular Sub-base

150mm minimum well compacted Type 3 granular sub-base or similar approved

Optional Impermeable Membrane

Impermeable membrane to carry water to infiltration/storage system or soakaway

Or

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.

Mix Design

RonaDeck EcoAgg UV Resin 1 x 7kg
RonaDeck EcoAgg UV Aggregate 4 x 25kg
RonaDeck Recycle Fine Aggregate 1 x 5kg

Coverage

Coverage @ 40mm

1.65m² (approximately)

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.

Resin Bound and Bonded Surfacing

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Instructions for Use

- 1. Place 100kg RonaDeck EcoAgg UV kiln-dried aggregate into a clean, forced action mixer, minimum pan capacity 120 litres, Baron mixer or similar, followed by RonaDeck Recycled Fine Aggregate.
- 2. Scrape all of the contents of RonaDeck EcoAgg UV Resin Part B component into the larger Part A container and mix with a slow speed drill (≤ 450RPM) and MR2 paddle mixer attachment for 2 minutes. Overmixing will increase heat generation and reduce working time.
- 3. 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. Mix for approximately 3-4 minutes. Overmixing will increase heat generation and reduce working time.
- 4. Discharge the mixed resin and aggregate onto the prepared sub-base, level and smooth. Excessive compaction will reduce permeability.
- 5. Light rain on the surface of the system is unlikely to damage or affect the surface, see later reference to application in rainy conditions.
- 6. Finish the surface with a suitable float. RonaDeck Low VOC Tool Cleaner/ Trowel Finishing Aid should be used if required, the use of white spirit is not acceptable.
- 7. If required, immediately cast RonaDeck EcoAgg UV Anti-Slip Aggregate onto the surface of the wet resin, at the rate of approximately 0.1kg/m2. Ensure even coverage to prevent a patchy appearance.
- 8. Allow to cure. At 20°C protect against damage by heavy rain for 12 hours and open to traffic after approximately 14 hours at 20°C.

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 EcoAgg UV 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. The surface must not be trafficked until it has gained sufficient strength.

Rain During Application

Application during rain or when rain is anticipated during the cure period is not recommended. Light rain on the surface of the system is unlikely to affect the surface but may affect the bond between particles, reducing the strength of the system. Note that application to a damp substrate will reduce bond strength. Unmixed aggregate must be kept dry at all times.

Shelf Life and Storage

Shelf life of RonaDeck EcoAgg UV is 6 months, aggregates have an unlimited shelf life when stored in clean, dry and well ventilated conditions between 5°C and 25°C. Protect from sunlight.

Health and Safety

Refer to Safety Data Sheet.

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Site Attendance

When on site Ronacrete representatives are able, if asked, to give a general indication of the correct method of installing a Ronacrete 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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