

RonaDeck Eco Tree Pit

Resin bound porous tree pit system



FEATURES

- SuDS compliant—highly permeable
- UV stable—non yellowing resin
- natural aggregate appearance
- alternative to tree grilles
- recycled aggregates available
- installed by approved contractors
- design can accommodate some tree growth
- attractive; complements the surrounding area
- design accommodates tree growth
- low maintenance
- variety of colours

Description

RonaDeck Eco Tree Pit is a resin bound natural aggregate finish surround for planted trees in public and private areas. Surrounding the tree in a solid yet semi-flexible construction allows the tree to grow, prevents a build up of litter and removes a storage or hiding place for hazardous items such as syringes and needles. Dogs are also less likely to foul in such areas.

The RonaDeck Eco Tree Pit comprises a two component polyurethane hybrid resin and a range of selected rounded attractive aggregates. The design of this resin bound aggregate system provides a surface which is attractive, highly porous and able to receive light foot traffic.

Its porosity allows water to flow through a 6-10mm aggregate system at the rate of >850 litres/m²/minute. The flow rate may be reduced when using a smaller or more angular aggregate.

Physical Properties

Minimum depth 50mm
Traffic after 4 hours @ 20 °C

Mix Design (1.5kg resin)

RonaDeck Eco Tree Pit Resin 1.5kg
RonaDeck Eco Tree Pit Aggregate 25kg
Coverage 0.33m² 50mm

Mix Design (6kg resin)

RonaDeck Eco Tree Pit Resin 6kg
RonaDeck Eco Tree Pit Aggregate 100kg
Coverage 1.33m² @ 50mm

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UV Stable Resin

RonaDeck Eco Tree Pit resin is UV resistant and will not yellow on exposure to UV light. This is a more attractive option than other types of resin which can yellow, dramatically altering the appearance of the finished surface.

Application Conditions

The working time and pot life of the resin is affected by material, ambient and substrate temperature. At low temperatures pot life is longer, the material will take longer to cure and the time at which it can be trafficked will be delayed. At higher temperatures pot life, working time and trafficking time is shorter. Typically material can be applied between 5°C and 25°C.

Do not apply materials at higher temperatures as the pot life of the mixed resin will be so short that it cannot be properly mixed, applied and finished. Similarly do not apply materials if temperatures are so low that the resins are either too viscous to mix or so slow to cure that the applied material could become damaged before it has fully cured.

Instructions for Use

1. Only use clean, kiln-dried, well graded aggregates which are suitable for this use.
2. Only mix in the dry. The mixed material will tolerate light rain during application but the mixing station must be dry, to avoid entrapment of moisture in the aggregate. Even a small amount of moisture in the aggregate will cause foaming of the resin.
3. Create a sound base, minimum 150mm deep, to accommodate 100mm of loose gravel base and 50mm of RonaDeck Eco Tree Pit.
4. The base should be sound, clean and dry. Soil to be well compacted and tree root to be protected.
5. Lay 100mm depth of loose dry gravel on to the base; aggregate size approximately 25 - 5mm. Form a rising funnel of aggregate around the tree trunk such that the top of the loose aggregate is 15mm below the intended top of the RonaDeck Eco Tree Pit. The tree pit system will be laid on top of the loose aggregate.
6. Where required, form a solid perimeter using timber, kerbing, blocks or similar to create a permanent and secure edging for the loose gravel base and the RonaDeck Eco Tree Pit.
7. Place RonaDeck Eco Tree Pit Aggregate into a clean, dry, forced action mixer. When using 6kg resin packs, it is important to mix all the resin with the required amount of aggregate (107kg), this will require a forced action mixer of at least 120 litre capacity.
8. Scrape all the contents of the smaller resin container into the larger one and mix the two components of RonaDeck Eco Tree Pit Resin, using a slow speed drill fitted with a helical paddle attachment for 30-45 seconds until evenly dispersed. Keep mixing time to a minimum to avoid a build up of heat.
9. 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.

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10. Discharge the mixed resin and aggregate onto the prepared surface, compact, level and smooth with a steel float. Avoid excessive compaction as this will reduce porosity.
11. Leave sufficient space around the trunk to allow for movement and growth.
12. To provide a more slip-resistant and matt appearance finish, immediately cast RonaDeck TP Fine Aggregate into the top surface of the wet resin and aggregate at approximately 0.1kg/m². Scatter evenly to avoid a patchy appearance.
13. Allow to cure. Protect from heavy rain for 1 - 2 hours at 20°C and open to traffic as described in Physical Properties (page 1).

Adding Slip Resistance

Existing Tree Pit surfaces can be made more slip-resistant as follows:

1. Ensure surface is suitable, clean, sound, stable and dry. Remove moss, algae, debris.
2. Roller apply one coat of RonaDeck Resin Bonded Seal Coat UV at an approximate coverage rate of 2-7m² per litre. More resin will be needed on open matrix and textured surfaces.
3. Whilst wet scatter RonaDeck TP Fine Aggregate at 0.1kg per m² onto the resin
4. Allow to cure for 2 hours at 20°C and protect against moisture
5. Sweep to remove any unbonded aggregate
6. Apply a second coat of RonaDeck Resin Bonded Seal Coat UV at 5m² per litre
7. Allow to cure for 2 hours at 20°C and protect against moisture prior to trafficking
8. Refer to RonaDeck Resin Bonded Seal Coat data sheet

Shelf Life and Storage

Shelf life of RonaDeck Eco Tree Pit Resin is 6 months, aggregates have an unlimited shelf life when kept in warm, dry, well ventilated conditions. Store all materials in clean, dry, frost free warehouse conditions between 10°C and 25°C. Protect from sunlight.

Health and Safety

RonaDeck Eco Tree Pit 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.

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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.

Aggregates



Brittany Bronze 6-10mm



DKI Quartz 5-8mm



Dorset Gold 6-10mm



Rhine Gold 6-10mm



Silver Star 6-10mm



Yellow 6-10mm

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.