









Resin bound rubber granule porous tree pit system



#### **FEATURES**

- SuDS compliant—highly permeable
- UV stable—non yellowing resin
- includes recycled rubber granules
- alternative to tree grilles
- installed by approved contractors
- design can accommodate some tree growth
- attractive; complements the surrounding area
- low maintenance
- range of coloured granules

#### **Description**

RonaDeck UV Rubber Granule Tree Pit is a resin bound rubber granule tree surround for planted trees in hard landscaped areas. Surrounding the tree in a solid yet 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.

The RonaDeck UV Rubber Granule Tree Pit comprises a two component polyurethane resin and rubber granules. The two layer system incorporates a base layer of black recycled 2-6mm granules bound in UV stable polyurethane resin and a topping layer of 1-4mm coloured granules bound in UV stable polyurethane resin. The design of this resin bound tree pit system provides a surface which is attractive, highly porous and able to receive light foot traffic.

Physical Properties	Minimum depth Traffic after	40mm 24 hours @ 20°C
Mix Design RonaDeck Rubber Granule Tree Pit Topping	RonaDeck Wet Pour Rubber Granule Surfacing RonaDeck Rubber Granules (1-4mm)	1 x 10kg 2 x 25kg
	Minimum thickness Traffic after	15mm 24 hours @ 20°C
	Coverage per batch @ 15mm Coverage per batch @ 20mm	3.8m <sup>2</sup> 2.85m <sup>2</sup>
Mix Design RonaDeck Rubber Granule Tree Pit Base	RonaDeck UV Rubber Granule Tree Pit Base RonaDeck Rubber Granules (2-6mm)	1 x 6kg 2 x 25kg

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Mix Design RonaDeck Rubber Granule Tree Pit Base (continued)

Minimum thickness Apply topping after 25mm

4-24 hours @ 20°C

Coverage per batch @ 25mm Coverage per batch @ 30mm

3.8m<sup>2</sup> 3.16m<sup>2</sup>

**UV Stable Resin** 

RonaDeck UV Rubber Granule 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.

**Working Temperatures** 

RonaDeck Wet Pour Rubber Granule Surfacing Resin is rapid setting and rapid curing. It's pot life and 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 temperature exceed 25°C. At low temperatures the resin will not flow sufficiently to achieve a smooth finish and work should not proceed when air and material temperature is below 5°C. Whilst it is possible to mix and apply at temperatures down to 0°C, the cure rate and rate of strength gain will be retarded; the surface must not be trafficked until it has gained sufficient strength.

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 and very heavy rain may cause failure. Therefore application during rain or when rain is anticipated during the cure period is not recommended. Note that application to a damp substrate will reduce bond strength. Unmixed granules must be kept dry at all times.

**Traffic** 

RonaDeck Wet Pour Rubber Granule Surfacing is designed for foot traffic. Vehicle traffic, heavy impact, high point and shear loading will damage the surface and may result in failure.

**Rubber Granules** 

The performance and appearance of the finished surface is not only dependent on the resin but also on the rubber granules. The RonaDeck Wet Pour Rubber Granule Surfacing blends have been designed to achieve strength, resilience, porosity and decoration. Blended granules can be supplied pre-bagged by Ronacrete Ltd or can be blended on site by the contractor following the guide mixes issued by Ronacrete.

**Appearance** 

The appearance of samples and of materials supplied by Ronacrete are based on the colour, shade and grading of individual rubber granules supplied to Ronacrete by its suppliers. The appearance may vary from batch to batch.

Repairs

It is possible to repair localised damage by cutting out and replacing, ideally using the same blend as originally supplied. Ageing and weathering of the original may

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#### Repairs (continued)

prevent an invisible repair. "Picking out" of some rubber granules is possible but is likely to be minimal and localised. Any major loss of rubber granules should be reported.

#### **Contractors**

RonaDeck Wet Pour Rubber Granule Surfacing 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.

#### Instructions for Use

Only apply to a suitable substrate which is capable of supporting, restraining and bearing the weight of the traffic load. The best substrate is a well designed and constructed concrete; asphalt concrete may be used but there is a risk of migratory staining from the bitumen binder. Application to other surfaces may result in failure. If you are unsure of the substrate and its suitability to receive RonaDeck Wet Pour Rubber Granule Surfacing, do not proceed. RonaDeck Wet Pour Rubber Granule Surfacing is a thin layer of 15mm minimum thickness or more. It may therefore mirror and reflect any surface unevenness. Substrates should therefore be levelled or smoothed prior to application to avoid this. The substrate must be completely dry and free from any contamination for example, grease or oil.

- 1. Only use rubber granules supplied by Ronacrete for this use.
- 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. Even a small amount of moisture trapped between resin and granules will cause foaming of the resin.
- 3. Create a sound base, minimum 140mm deep, to accommodate 100mm of loose gravel base and 40mm of RonaDeck UV Rubber Granule 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 UV Rubber Granule 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 UV Rubber Granule Tree Pit.
- Place 2-6mm black RonaDeck Rubber Granules into a clean, dry, forced action mixer. It is important to mix all the resin with the required amount of aggregate (56kg), 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 UV Rubber Granule Tree Pit Resin 6kg, 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 granules in the mixer. Mix the granules and resin together until all the aggregate is evenly coated with resin.

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# Instructions for Use (continued)

- Keep mixing time to a minimum to avoid a build up of heat.
- 10. Discharge the mixed resin and granules onto the prepared surface to a minimum thickness of 25mm, 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. Place 1-4mm coloured RonaDeck Rubber Granules into a clean, dry, forced action mixer. It is important to mix all the resin with the required amount of aggregate (60kg), this will require a forced action mixer of at least 120 litre capacity.
- 13. Scrape all the contents of the smaller resin container into the larger one and mix the two components of RonaDeck UV Rubber Granule Tree Pit Resin 10kg, 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.
- 14. Immediately add the mixed resin to the granules in the mixer. Mix the granules 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.
- 15. Discharge the mixed resin and granules onto the prepared surface, compact and level.
- 16. Finish the surface with a suitable (metal) float and ensure that the surface is completely flat. Avoid excessive use of the float as this may cause picking out of the granules; protruding rubber granules will tear and damage the system. Lightly wetting the float with RonaDeck Resin Trowel Finishing Aid will assist in achieving a smooth surface finish.
- 17. Leave sufficient space around the trunk to allow for movement and growth.
- 18. 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/m<sup>2</sup>. Scatter evenly to avoid a patchy appearance.
- 19. 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
- Apply a second coat of RonaDeck Resin Bonded Seal Coat UV at 5m<sup>2</sup> 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

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Shelf Life and Storage Shelf life of RonaDeck UV Rubber Granule 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** Refer to Safety Data Sheet.

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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Please note that all efforts have been made to get these swatches as close to the finished items as possible but due to limitation in the printing process accuracy is not guaranteed. We advise that cured samples are ordered before making a decision.

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 how no responsibility for the performance of the product, or for any loss or damage arising out of such use

