Porous Tree Surround

Specification Advice

PURPOSE

To provide an attractive, low maintenance, durable, fully porous hard surface, with no loose stone.

WHERE

This specification is designed for tree surrounds or tree trenches, with regular foot traffic. Perfect for city centres.

WHY

To maximise the exchange of water and oxygen to maintain a healthy tree.

Fine cast of sand applied to assist with slip resistance

30mm depth of 6mm StoneSet Porous Paving

New Tree

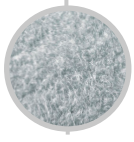
100mm compacted porous road base. 20/4mm Graded material for compaction, with limited fines to maintain porosity. Installed in 2 layers of 50mm to ensure maximum compaction. For higher porosity rates or heavy traffic, a drainage cell can be used.

Established Tree

Remove enough to allow for 30mm StoneSet layer above. Level with capping layer and compact if required.

200-300mm dia. tree ring (back filled with loose stone if required) for new and immature trees.

Permanent edge restraint or paving



Geotextile membrane to prevent upward migration of subgrade

Structural soil compacted as per advice from an arborist. A period of settling should be allowed for before installing StoneSet layer.

Notes – Porous Tree Surround

For established trees, the only preparation normally required is to remove enough existing aggregate to allow for the 30mm StoneSet layer. This will still need to be compacted lightly to ensure a smooth surface.

For all new trees after the base has been installed it is ideal to allow 3 months of establishment before the StoneSet is installed to reduce the chance of sinkage.

Tree trenches, areas around a tree greater than 2m form the trunk, will require greater compaction to allow for more frequent traffic depending on the requirements of the site.

Flow rates through StoneSet can reach 103ltrs/m2/second.

Base preparation may need to vary depending on required porosity rates beneath the StoneSet layer. The thickness of the sub-base layer required is dependent on sub-grade soil conditions. Total sub-base thickness will be dictated by expected loading and sub-grade strength. Particular attention should be given when clay rich soils are present, If plastic or silty sub-grade is present, then a capping layer should be used in accordance with New Zealand standards.

Structural soil should be specified to provide a hospitable environment to actively encourage tree roots down and therefore minimise potential damage to surrounding paving.

This specification is based on normal good practice for porous surfacing and does not absolve the specifier from designing a construction suitable for the expected traffic and ground conditions pertaining on a given site.

The details in this specification are intended only as a guide in specifying StoneSet products, actual designs should be developed by the project designers taking into account the specific circumstances of the intended application. StoneSet assumes no responsibility for improper reliance upon or misuse of the data herein. Product design and specification are subject to change without further notice.

For project specific advice please call 0800 70 8000 or email mail@stoneset.co.nz