The Surrounding Environment

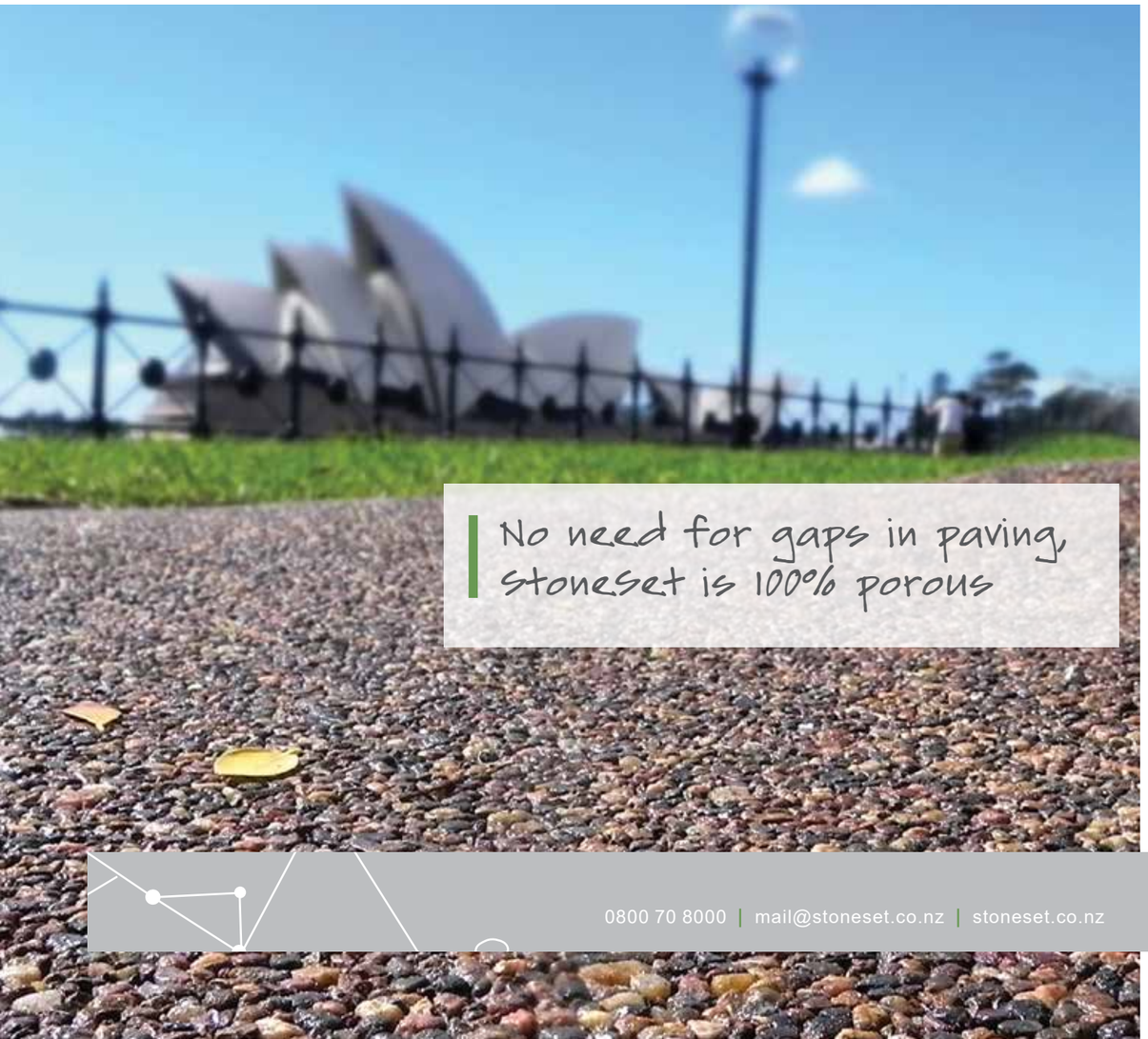
Trees and grasses are crucial for a pleasant and healthy environment, and for providing cleaner cooler air within cities.

Maintaining water flow to the roots of the trees is vital to their growth and life span. The paving of previously open areas of land such as car parks, driveways and pathways can cause major disruption to the soil moisture system.

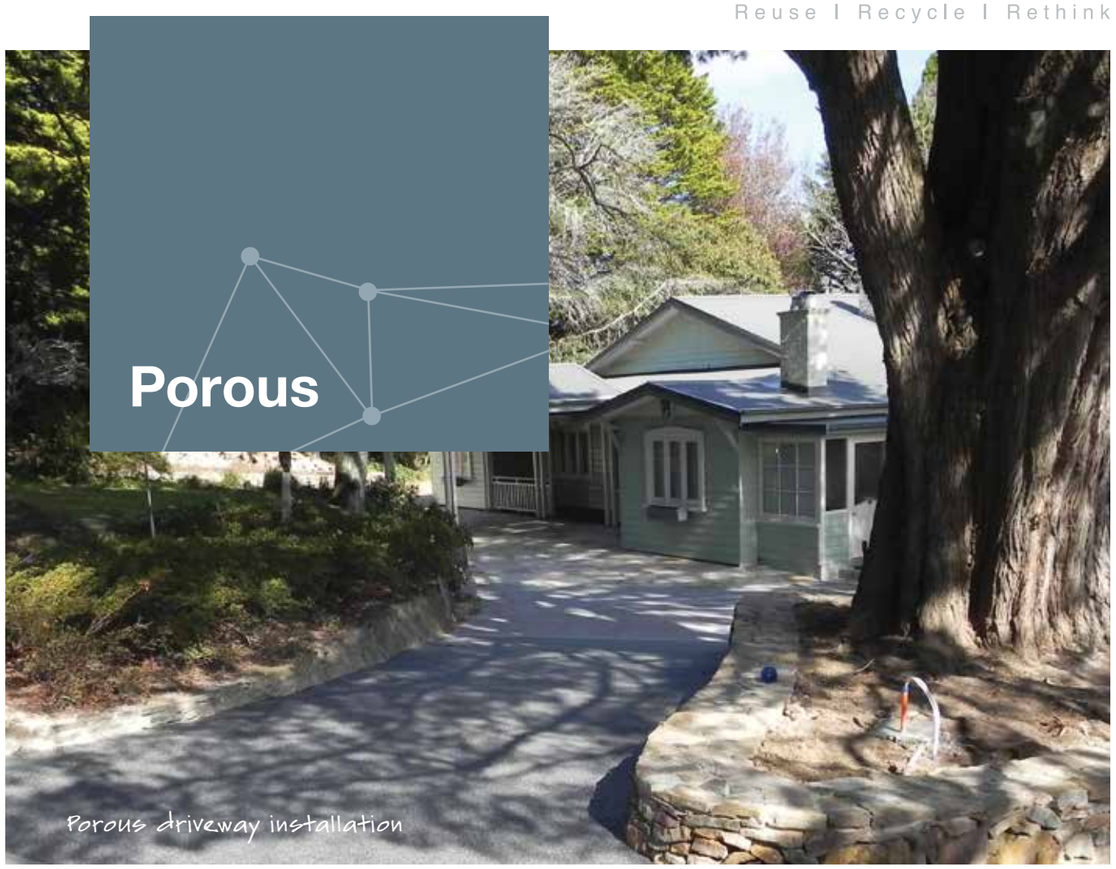
Paving an area with low permeability materials such as pavers, concrete or asphalt increases water run off and reduces the amount of rainwater that can soak into the ground. This may cause the trees to move in search of water, this root movement will cause disturbance of the ground, causing cracking and trip hazards.

Our range is a popular choice for Water Sensitive Urban Design (WSUD) and is regularly specified by councils as a tree surround solution.

StoneSet Tree Surround



StoneSet
Reuse I Recycle I Rethink



Water sensitive paving

ALL STONESET PRODUCTS ARE FULLY PERMEABLE which allows water to penetrate the surface and flow through to the ground below. With issues surrounding flooding, pollution and preservation orders on trees, a permeable surface is becoming increasingly important, in fact essential.

Because of the strength of our high grade resin, our design process uses optimal amounts of resin creating a strong bond. This results in the particles being held firmly together at the points of contact only, leaving voids for water and air to permeate through.

Soft landscaping footprint

By using StoneSet you can achieve all the low maintenance benefits of hard surfaced areas such as blocks, pavers and concrete. Together with the properties of a soft landscaped lawn or loose gravel, you can meet council requirements and have a positive effect on the environment. Unlike alternative solutions, StoneSet will maintain its porosity as it will not compact or clog over time.

In an effort to control the quality of our waterways and reduce surface run off and flooding, local councils are now restricting the footprint of impervious surfaces on plots of land. The size of a property, driveway and pathway can be affected by these new restrictions. StoneSet provides you with a hard wearing usable surface while be classed as “soft landscaping”.

The Water cycle

“continuous movement of water on earth”

Water evaporates, forms clouds and falls back to earth as precipitation, which either soaks into the ground or becomes surface run off, which re-fills rivers and lakes. Water soaking back into the ground is very important to recharge ground water creeks and streams, the process naturally filters the water providing cleaner healthier waterways.

→ THE PROBLEM

As cities and neighbourhoods continue to grow, hard surfaces are created. Roof tops, car parks, driveways and paths do not allow the rain water to soak into the ground. The stormwater that flows across these surfaces becomes run off that disrupts the water cycle and can cause serious problems such as toxic contamination and flooding.

Water that cannot soak into the ground moves too quickly to rivers and streams and hits them in a rush which creates erosion and storm water surges. In addition, when the stormwater run off flows across roads, driveways and car parks it picks up pollutants like oil, fertiliser and litter. These are carried directly into our rivers and, ultimately, into the ocean.

→ THE SOLUTION:

Improve your hard to soft landscaping ratio with porous surfacing

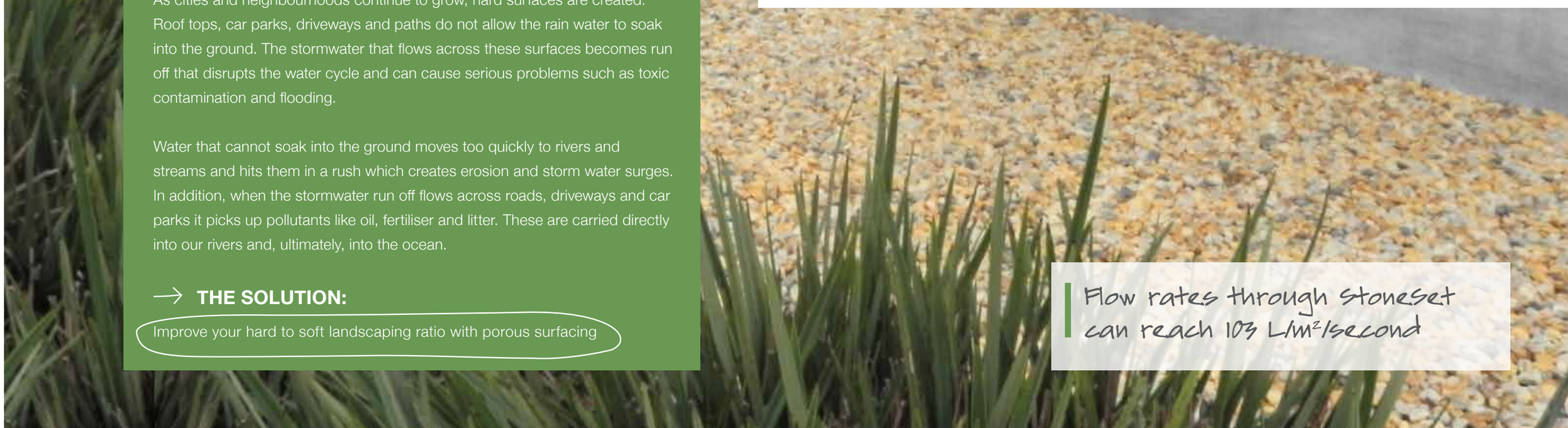
Specification & Installation

To create a fully porous hard surface, care and consideration needs to be put into the construction of the substrate.

We recommend the use of a 20-5 mm road-base with no fines, this allows for maximum compaction while maintaining good rates of porosity.

For vehicular traffic areas a load bearing drainage cell layer is perfect to provide a stable substrate that will not sink or deform under the weight of vehicles.

For full specification advice visit
WWW.STONESET.CO.NZ or call **0800 70 8000**.



Flow rates through Stoneset can reach 103 L/m²/second