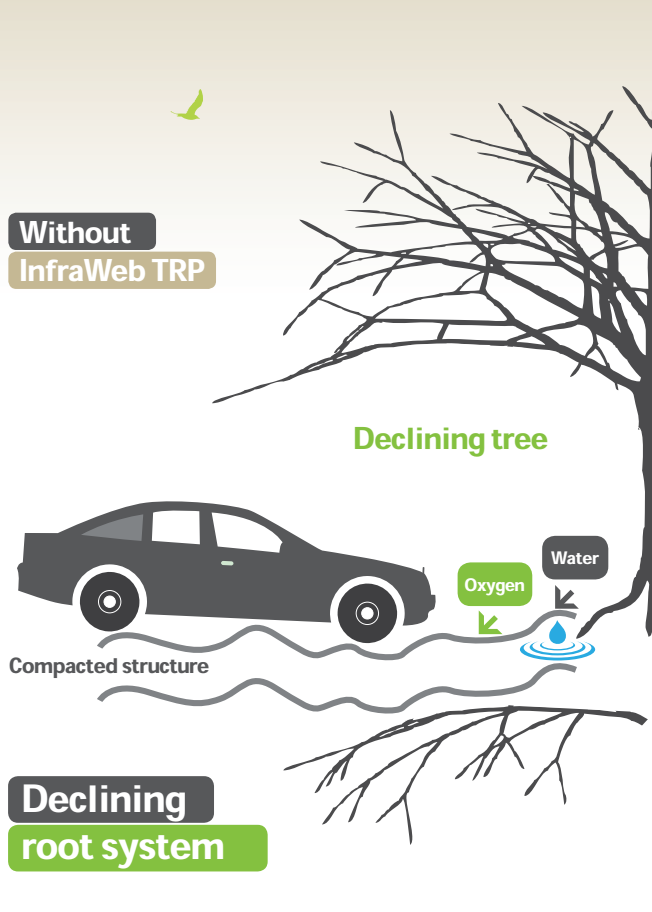


System Benefits

Vehicular traffic over unprotected areas within the tree root protection zones of existing trees causes compaction of sub soils leading to reduced voids within the soil structure.

This causes major problems with aeration and water transfer to the roots themselves which ultimately can lead to the root structure declining and eventual tree loss.



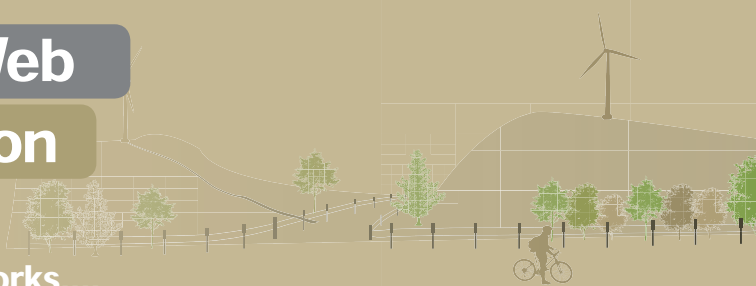
Water and Oxygen transfer through the InfraWeb TRP System



Bs5837 (2012) recommends the use of a 3 dimensional cellular confinement system for use as appropriate subbases for new hard surfacing over the RPA of existing trees.

The hard wearing, stable and free draining structure created using the InfraWeb TRP system prevents soil compaction whilst maintaining water and air flow to the roots by using 4/20 or 20/40 clean, angular stone for infill. This material will always be more permeable than existing soils ensuring free flow of air and water to the trees is achieved.

The InfraWeb TRP Solution



How the system works....



Step 1

PermaTex

PermaTex 300 is a non-woven geotextile specifically chosen for use with the system. The PermaTex acts as a separation and filter fabric, trapping hydrocarbons and heavy metals on the surface of the geotextile whilst allowing water to filter through to the soils below. The high puncture resistance of the PermaTex means that the clean stone infill will not penetrate the fabric.



Step 2

InfraWeb

InfraWeb TRP is a 3 dimensional cellular confinement system created by welding strips of 1.25mm high density polyethylene sheets together to create a flexible mattress. When filled with granular material the mattress acts as a structural raft spreading vertical loads across the raft thereby reducing the impact of wheel loads on the existing sub soils. The dissipation of these loads means that the soils bulk density is maintained and compaction is limited to levels that are suitable for continued healthy root growth. The perforated and textured cell walls create a frictional interlock with the granular infill making the final system extremely strong and stable. InfraWeb is available in 5 depths 50mm, 75mm, 100mm, 150mm and 200mm. The system can be placed in layers to create deeper structures to accommodate all vehicle loadings, or to raise existing ground levels to tie in required new finished levels.



Step 3

Granular Infill

The selection of the correct stone infill is key to the performance of the system. If the correct stone is not used then the system will fail. The specification should be a 4/20 or 20/40mm stone clean angular stone in accordance with BS EN 1235. The clean stone infill allows water to infiltrate into the sub soil and allows aeration, the key components to maintaining a healthy root structure. An InfraWeb installation will always be more porous than the existing sub soils meaning the system does not change the porosity of the existing ground.



Step 4

Surfacing

Ideally the system should be topped with a permeable surfacing such as porous asphalt, porous block paving, grass/gravel pavers, loose and bonded gravels, however, we understand this is not always viable therefore standard pavement constructions are also acceptable.