

Artscape™ a new way of stenciling:

Case Example tree pits:

The Need for Trees in Urban Areas

Trees are an important part of our natural life support system: they have a vital role to play in the sustainability of our towns and cities and we need to take better care of them, both now and in the future.

There is a growing recognition that trees and woods can provide a whole range of multifunctional contributions to environmental, social and economic sustainability.

Trees help to improve the quality of life for the millions of people who live and work in urban areas, and since ours is among the most urbanised societies in the world, the UK is a very good place to show how the urban forest can contribute to sustainable development.

Most people agree that trees are a good thing, and yet we see them starved of natural food and water, damaged at their roots by earthworks, particularly in developed areas of towns and car parks.

Problems

Because of the built environment roots of trees can at times struggle to grow through the soils. This would be mainly due to the compaction over the top of the natural root growth.



In a trees search for water and nutrients, it has been known for the roots to cause cracking of the pavements and to interfere with underground services, such as water pipes, gas pipes and electrical ducts.

Buildings themselves have also been affected by the advancing roots as they go in search of food and water.

The effect on the area around the tree can thus be problematic and lead to expensive repair work having to be undertaken. At times the tree may even have to be removed.

(Abridged from text supplied by Trees for Cities. For further information please visit www.treesforcities.org)

www.netregs.gov.uk/netregs/102255.aspx

Solution:

Artscape™ tree pits.

A totally new way of combating the battle between nature and urbanization of trees, by utilizing the proven technology behind **Sudscape™** porous paving and drive ways.

With increasing problems of flash flooding and drainage systems overloading, **Sudscape™** is the perfect product to resolve these problems. Using a totally porous sub layer of recycled car tyre crumb (up to 3 per m²); with a porous resin bound aggregate mix as a surface topping that is both aesthetically attractive, and a hard wearing solution. The topping using **Artscape™** unique method can then be stenciled to any Cad driven design. This then can be either 3 dimensional or flush. And totally bespoke!

With **Sudscape™** being a totally porous system it complies with *sustainable urban drainage systems (SUDS)*. Local authorities look favourably on developments that Utilise SUDS. A new planning policy statement requires new developments to incorporate sustainable drainage.

Artscape™ can be either pre made in a two part galvanised grid system, for easy of laying and minimal disruption on site, or poured in situ to any size or shape. It offers significant savings in terms of labour time and cost compared to similar porous solutions and is environmentally friendly by utilising large volumes of recycled tyres which has previously been a real concern for the environment agency.

The benefits to employing **Sudscape™** constructions are:

- The area promoting efficient water ingress (infiltration) and egress (exfiltration) through **Sudscape™** these properties combine to provide ideal drainage conditions to avoid saturation of the root zone whilst simultaneously providing efficient sub-base drainage to alleviate sub grade softening. In the simplest form, water collected can soak away directly into the ground where soil conditions are suitable as part of an overall project specific SUDS solution.
- One of the essential requirements for healthy trees is a constant supply of oxygen to the roots. The One of the essential requirements for healthy trees is a constant supply of oxygen to the roots. **Sudscape™** has a 20% volumetric void ratio which acts like a fresh air duct to provide a constant source of oxygen to the perimeter of the root zone area.
-
- When charged with rain water, **Sudscape™** will retain up to 20% of their volume. This water is released as required by the tree using natural capillary attraction through the root zone. **Sudscape™** may be charged with surface runoff water directly from the surrounding area as part of the overall project specific SUDS solution.
- .