RootSpace® Ocean

Pavement Support System

Manufactured from recycled ocean debris

GreenBlue URBAN

Establishing the future urban landscape

Saving our **ocean life** while transforming our **urban life**

Given the rise of global awareness about microplastic pollution in our seas and oceans, GreenBlue Urban has continued to research ways to reduce the disposal of plastics and increase the circular economy. We believe that plastic should not end its life in landfill or incineration – why can we not reuse it to create more sustainable towns and cities?

Although GreenBlue Urban produces its soil cells from 100% recycled post industrial waste material, we are trialling recycled marine waste plastics – fishing nets, ropes and trawls, which otherwise have historically been dumped at sea.

This disposal process has caused the deaths of countless animals and fish, and have entered the food cycle at all levels. Re-purposing these end of life products to manufacture soil cells, which will support healthy tree growth for over one hundred years is probably the greatest demonstration of the circular economy: as the trees grow, they sequester carbon – vastly more carbon than was produced in the plastic manufacture.

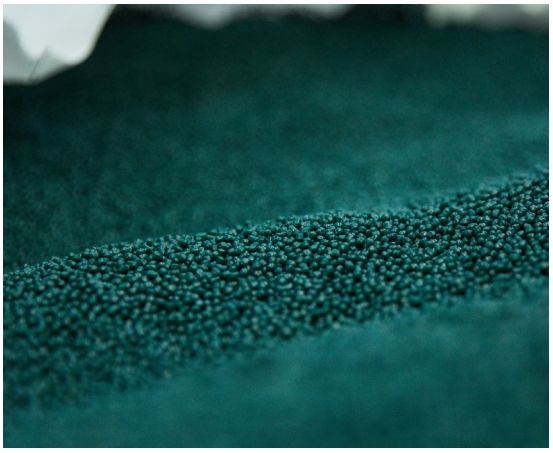
GreenBlue Urban = CleanBlue Oceans

Production of **RootSpace®** Ocean

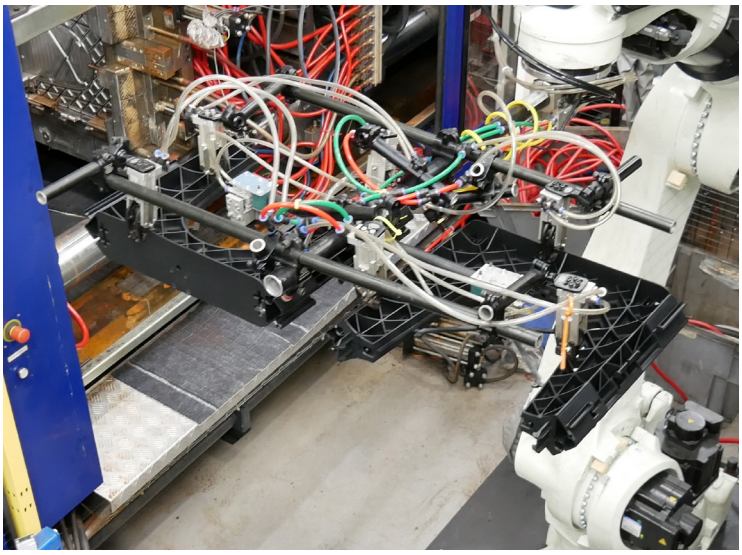
Utilising fishing nets, ropes and post-use rigid plastic, RootSpace Ocean takes a preventative approach to ensuring that these products are recycled into useful raw materials that do not end up in our oceans and watercourses... green plastics!

These green plastics are sourced by a trusted supplier that currently produces **12,000 tons of recycled plastic per year** to be used in the production of high-quality environmentally friendly products, including RootSpace.

All of the used nets, ropes and post-use rigid plastics undergo the same process upon arriving at the production plant. They are first inspected & registered, before being cleaned and fractioned. They then undergo a process of extrusion, washing, drying & finally separation before being cut into green pellets ready for production.



This raw material is then delivered to GreenBlue Urban's HQ in Bodiam, East Sussex, where our own manufacturing team inject this raw material into our RootSpace soil cell. A truly green alternative to urban tree planting.



Product Specifications

Code	Description	Height (mm)	Width (mm)	Breadth (mm)
GBURS41A-OP	RootSpace G2 400mm Depth (1 Cell)	475	1000	1000
GBURS41IA-OP	RootSpace G2 400mm Depth (1 Cell) With Side Panels	475	1000	1000
GBURS42A-OP	RootSpace G2 800mm Depth (2 Cell)	875	1000	1000
GBURS42IA-OP	RootSpace G2 800mm Depth (2 Cell) With Side Panels	875	1000	1000
GBURS61A-OP	RootSpace G2 600mm Depth (1 Cell)	675	1000	1000
GBURS61IA-OP	RootSpace G2 600mm Depth (1 Cell) With Side Panels	675	1000	1000
GBURS62A-OP	RootSpace G2 1200mm Depth (2 Cell)	1275	1000	1000
GBURS62IA-OP	RootSpace G2 1200mm Depth (2 Cell) With Side Panels	1275	1000	1000
GBURS64A-OP	RootSpace G2 1000mm Depth (2 Cell)	1075	1000	1000
GBURS64IA-OP	RootSpace G2 1000mm Depth (2 Cell) With Side Panels	1075	1000	1000

Material	Legs: 100% recycled high density polypropylene Lids: 100% recycled ocean waste high density polypropylene
Manufacture Location	Injection moulded in the UK

Load Bearing Capacity

Load bearing capacity of structural soil cells is a complex science. It is common to interpret the actual breaking point of structural products as the ultimate allowable wheel load. Engineers employed by GreenBlue allow a factor of safety by basing calculations on loadings before undue displacement occurs.

Vertical Capacity

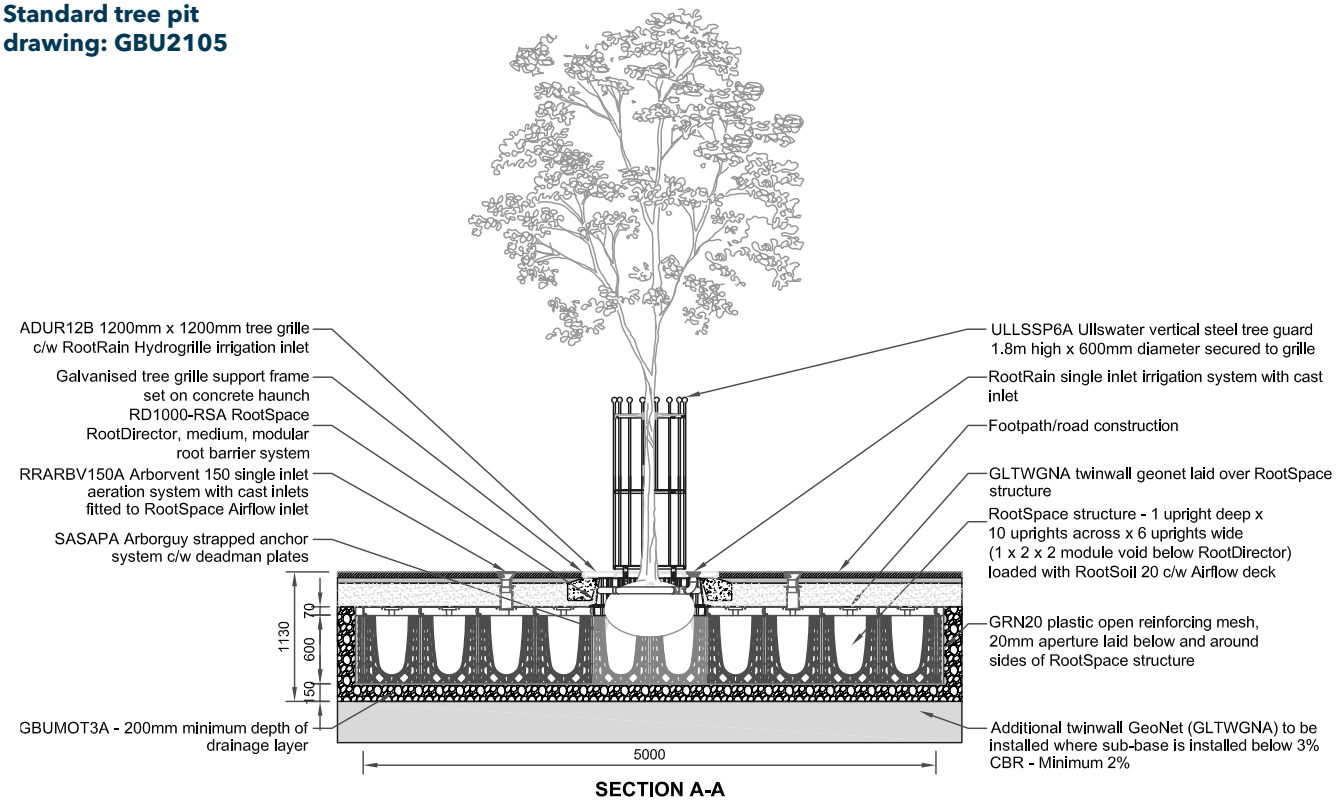
RootSpace Configuration	Vertical Crushing Load	
	kN/m2	tonne/m2
G2 400: 475mm units (single height)	434.0	44.3
G2 400: 875mm units (double height)	297.7	30.4
G2 600: 675mm units (single height)	308.0	31.4
G2 600: 1275mm units (double height)	285.7	29.1

Horizontal Capacity (with side panels)

RootSpace Configuration	Horizontal Crushing Load	
	kN/m2	tonne/m2
G2 400: 875mm units (double height) Loaded on side - with side panels	139.4	14.2
G2 600: 1275mm units (double height) Loaded on side - with side panels	56.5	5.8

Typical Tree Pit & Ancillary Components

Standard tree pit drawing: GBU2105



Key RootSpace Tree Pit Products:

- GBURAC500A RootSpace Airflow deck - 56 No. 500mm x (") 500mm x 70mm
- GBURAC500A RootSpace Airflow deck - 56 No. 500mm x (") 500mm x 70mm
- Rootsoil 20 to fill RootSpace and RootDirector spaces (including root ball volume) - allow 9 cu. m per tree. Additional allowance needs to be made for settlement
- RootStart Mycorrhiza - apply to tree pit at time of planting in accordance with manufacturer's rzecommendations - allow 200g per tree
- RRARBV150A Arborvent 150 single inlet aeration system with cast inlets including 0.75m 100mm diameter pipe
- RD1000-RSA RootSpace RootDirector - medium
- GL TWGNA twinwall geonet - 15 sq. m
- GRN20 plastic open reinforcing mesh, 20mm aperture - 31 sq. m
- SASAPA Arborguy strapped anchor system - large
- GBUMOT3A - Drainage layer as per installation instructions

Optional RootSpace Tree Pit Products:

- ADUR12B Adur 1200mm x 1200mm tree grille, finished in black,with galvanised steel support frame
- ULLSSP6A Ullswater vertical steel tree guard with round angle-section rings, 16mm round bars topped with 50mm diameter ball finials, finished in black

Note:
20% additional for with the Geotextile and Reinforcing Mesh to allow for overlap and cutting requirements

For heavy load applications, install RootSpace side panels to installation as directed by engineer

Structural engineer's note:
For increased strength and stability in soft ground conditions, specify RootSpace modules to incorporate side panel inserts to tree pit perimeter

Additional geonet is required where sub-base is less than 3% CBR

GreenBlue Urban Ltd - UK
Northpoint, Compass Park
Bodiam TN32 5BS
United Kingdom

www.greenblue.com
enquiries@greenblueurban.com
Sales and Service: +44 (0)1580 830 800