



RootCell

Soil Structure System

Includes:

- Product information sheets
- Technical data sheet

RootCell

SOIL STRUCTURE SYSTEM

The **RootCell** system has been developed following consultation with landscape architects, local authorities and leading tree experts. The concept is simple – topsoil is the most favourable, natural rooting medium. **RootCells** provide the load bearing structure preventing the soil from becoming compacted and lifeless. Furthermore, the long term root zone can be maintained by incorporating **RootRain** irrigation/aeration in the design.

Load bearing Geonet is laid over the top of the **RootCell** structure to prevent the ingress of the surface sub-base into the rooting area.



BENEFITS

- Load bearing – RootCells have been independently tested to sustain loads of up to 80 tonnes per square metre evenly distributed.
- When loaded with topsoil, RootCells are 92% soil by volume.
- Easily installed in modular form
- Maximises rooting area for the tree.
- Constructed from 100% recycled material.
- Long term root zone management is possible when installed in conjunction with RootRain & Root Director products as shown
- Promotes a multiple rooting pattern more suited to urban locations.

Important - Please read these instructions fully before starting assembly
For further help telephone our technical helpline on 01424 433233

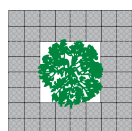
RootCell

SOIL STRUCTURE SYSTEM

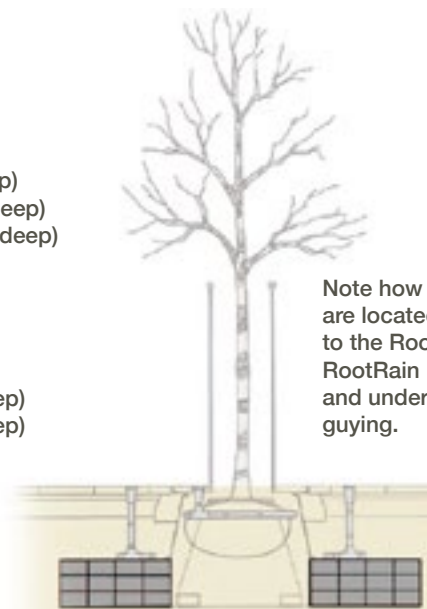
Typical RootCell layouts in plan view



64 (2 deep)
or 96 (3 deep)
or 128 (4 deep)



96 (2 deep)
or 144 (3 deep)
or 192 (4 deep)



Note how RootCells are located in relation to the Root Director, RootRain Precinct and underground guying.

RootCell Module specification

Description	Recycled plastic rigid skeletal interlocking ring structure
Material	Recycled HDPE
Dimensions	250mm x 250mm x 90mm

Code	Description
GLRCMA	RootCell Module
GLTWGNA	Load bearing Geonet membrane

Typical Installation Specification

Install GreenBlue Urban root management system comprising RootCells, Root Director and RootRain Precinct Double Inlet system. RootCells should be installed on a firm, level, free draining base. The contractor should allow for installing a land drain in areas prone to waterlogging.

RootCells should be loaded in situ with a good quality, free draining topsoil. A sandy loam with a neutral pH is recommended. RootCells can be loaded with topsoil four layers at a time. The soil mixture must be dry for this operation.

Where exceptionally heavy loading is anticipated, e.g. occasional HGV overrun, it is advisable not to lay modules more than four deep. The load capacity begins to decrease with depth. If in doubt, consult our technical department.

Specify the number of modules to be used per tree pit. Quantity will depend on space available and budget – contact our sales office for costings.

Once the cell structure has been sufficiently filled with soil, lay load bearing Geonet over the top, black webbing side downwards, lapping joints and sides of Root Barrier, or Root Director if used, by 150mm.



Compatible products

- Root management
- Underground root ball guying
- Tree grilles and guards
- Porous resin bound gravel

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RootCell

Soil Structure system

TYPE

Structural soil support module

CODE

GLRCMA 250mm x 250mm x 90mm

MATERIAL

Recycled HDPE

LOAD BEARING CAPACITY

up to 80 tonnes per m²

FINISH

Natural

COLOUR

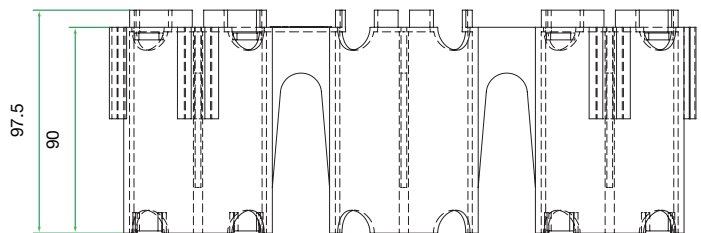
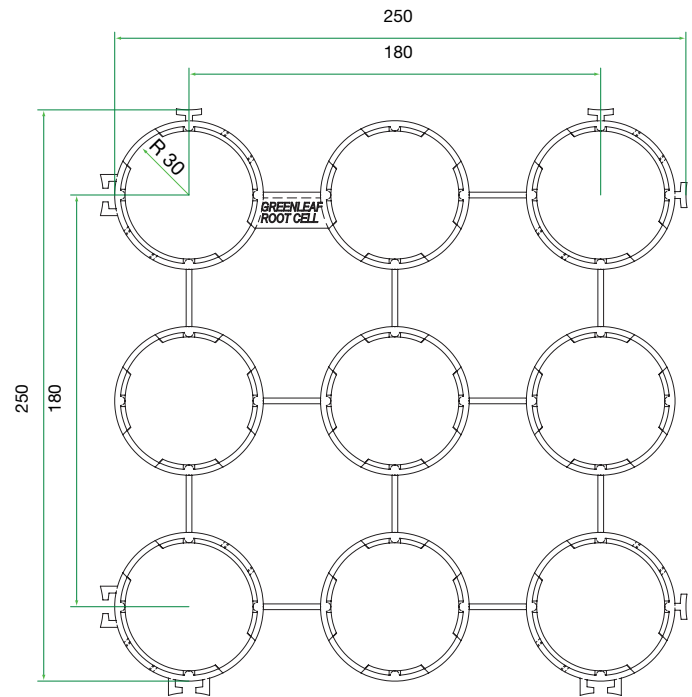
Black

WEIGHT

0.38kg

VOID/SOIL

92%



Load Bearing Geonet

DATASHEET



Raw Material

Grid	PET
Nonwoven	150 g/m ² PP
Coating	Polymer

Weight

EN ISO 9864	~420	g/m ²
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Ultimate tensile strength

EN ISO 10.319		
Longitudinal	≥ 40	kN/m
Transversal	≥ 40	kN/m

Strain at nominal tensile strength

EN ISO 10.319		
Longitudinal	≥ 12.5	%
Transversal	≥ 12.5	%

Mesh size of the geogrid

25 x 25 mm

Opening size

EN ISO 12956 ~0,10 mm

Opening size

EN ISO 11058 ~75 x 10-3 m/s

Standard Dimension

Width x Length 1m 100m

No responsibility is accepted for any change in product properties due to environmental influences and / or improper application or handling. Rights are reserved to modify the product to effect improvements.