mastaVAULT® Mega Tree

Product Images

Short Description

mastaVAULT Mega Tree modular units provide trees and plants in development environments the nourishment they need to grow by providing un-compacted soil within the structure for free root growth.

Description

MASTAVAULT™ MEGA TREE ROOT SOIL SOLUTIONS

mastaVAULT™ MegaTree is a modular solution that assemble to form a skeletal matrix, providing uncompacted high-quality soil to encourage tree and plant root growth whilst supporting the relevant pavement loads. The un-compacted soil within the structure enables free root growth.

The skeletal matrix offers more than 95% of its internal void volume for un-compacted soil and root growth and is designed to supports roads, parking spaces and paving. mastaVAULT MegaTree modular design is ideal for almost any application.

Traditionally rock and soil mix is used to provide support for pavement, mastaVAULT MegaTree system have moved this principle forwarded by entirely replacing the rock (80% of the total volume), the engineered modules provide the structural strength for pavement loads whilst providing free un-compacted soil for root zone to grow and trees to flourish in an urban environment.

Downloadable Resources:

mastaVAULT® Mega Tree - Product Spec Sheet

mastaVAULT® Mega Tree - Module Spec Sheet

Applications:

- Applications
- Roads
- Streetscaping
- Car Parks
- Plaza Paving

Specifications

Property	Unit	Single Module^	Double Module^
Length	mm (in)	600(23.62)	600(23.62)
Width	mm (in)	600(23.62)	600(23.62)
Height	mm (in)	360 (14.72)	690 (27.16)
Module Volume	L	129.6	248.4
Soil Storage Volume	L	123.12	235.98
Void Area	%	95	95
Surface Void Area	%	95	95
Rib Thickness	mm (in)	4.3-4.4 (0.16 -0.17) (Minimum thickness of the load bearing members to full depth of the plate)	
Recycled Content%	%	85% Selected Recycled Polypropylene + 15% proprietary mix	

Biological & Chemical Resistance		Unaffected by moulds, algae, Soil borne Chemical, bacteria and bitumen, polypropylene is very inert
Ultimate Unconfined Vertical Crush Strength	ton/sqm (PSI)	65 (92.45) (Using a full -size plate that completely covers the top of the unit determines the pressure required to crush the entire unit)
Ultimate Unconfined Lateral Load Crush Strength on side	ton/sqm (PSI)	7.5 (10.66) (Using a full -size plate that completely covers the top of the unit determines the pressure required to crush the entire unit)
Short Term Deflection	per mm	Vertical Deflection 42.00kN/ m2 Lateral Deflection 2.8kN/ m2
Long Term Deflection	95kN/m2	1.08% 3.88mm (Estimated long term deflection (vertical creep) projected 50 yrs **applied test load of 95 kN / m2)
Projected Creep	15kN/m2	1.41% 8.46mm (Estimated long term deflection (lateral creep) projected 50 yrs ** applied test load of 15 kN/m2)

**All compressive strength at yield, maximum recommended safe design value, safety factors to be incorporated.*
***Derived from long term Extrapolated Creep testing data, 516 day minimum ^Other sizes available*

Additional Information

CODE	1000006
U.O.M	Each
Swatch	no_selection