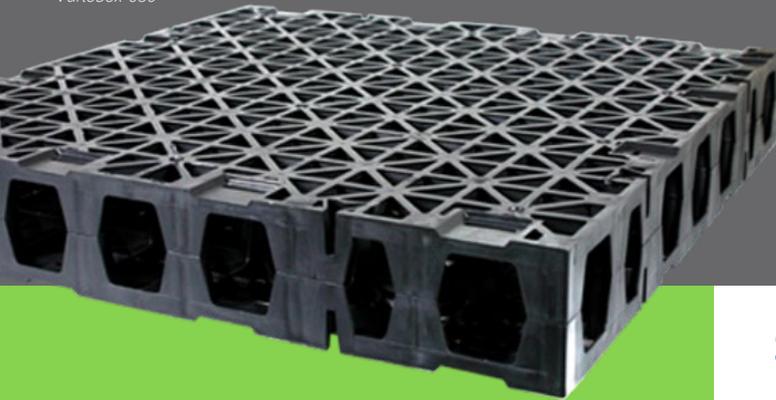


Vario Treebox system

raftsystem on top
of structural soils

Variobox 080



Vario Treebox system

Pressure spreading urban tree planting system

Application: as pressure spreading* on top of a load-bearing root penetrable zone. (typically structural soil)

Optionally, the Vario Treebox can be filled with high organic soils (e.g. Mulch compost).

VarioTreebox system** consists of:

Vario Treebox	boxes incl. connectors
Vario reinforcement TRC30	reinforcing fabric
Vario textile top	separating cloth

• A raft system (sandwich construction) gets its ultimate strength in its application as a pressure-spreading system by using geotextiles and geogrids tested for this specific application. And proper processing of the products.

** Depending on the system dimensions/layout, the exact number of components should be calculated.

Design lifetime	: 50 years
Storage	: protect from long-term UV exposure.

Compressive strength* :

* System tested compressive strength incl. matching cloths

Up to 2405 kN/m²
Vertical deflection 1 mm per 141kN/m²

Allowed axle load* ;

* At minimum road build-up on top. >5cm bedding and pavers.

>15 tonnes

Pore volume in the system

Larger openings allowing filling in of mulch.

Perforation surface > 63%
Opening size minimum 38 mm
Air volume approx. 94%

Matrix (connected elements)

Thanks to the connectors, the system becomes one connected whole, a click mechanism prevents any individual subsidence of the crates.

Conical connectors, at top and bottom with click mechanism

Vario box

Material : recycled PP
Colour : black
Dimensions : 600x600mm (LxW)

	height	weight
Variobox 050	5cm	5,3 kg/m ²
Variobox 065	6,5cm	6,1 kg/m ²
Variobox 080	8cm	7,0 kg/m ²
Variobox 100	10cm	7,7 kg/m ²
Variobox 150	15cm	10,2 kg/m ²

Lateral compressive strength : > 210 kN/m²
(deflection 1mm per 27 kN/m²)

Connector

Material : recycled PP
Colour : divers
Dimensions : 42x26 mm (LxW)
Weight : 8 gr

Vario reinforcement TRC30

Material : PP +
Colour : white +
Dimensions : 100 x 4,75m
Weight : 180 kg

Vario textile top

Material : PP non woven
Colour : White
Dimensions : 100 x 4m (LxW)
: 100 x 5,25m (LxW)
Weight : 80 kg
: 105 kg

Manufacturing in ISO-certified company. An ISO 9001 certificate shows that your organisation is customer-focused and committed to delivering consistent quality products.



Connectors :

The number of connector and the location determine the final strength of the assembly

22 connectors per m²
yield strength 62-75 kN/m²

Tensile strenght reinforcement fabric : EN ISO 10319

Reinforcement fabric folded over to top of boxes

30 kN/m MD CMD
7% elongation at nominal strenght

Water permeability : EN ISO 11058

Water permeability through the fabric (to plane test method)

> 75 mm/s

Pore size opening O90 : EN ISO 12956

Preventing sand particles from migrating into the boxes

80 µm (reinforcement fabric and seperation cloth)

Dynamic puncture resistance: EN ISO 13433

Additional requirement for separation fabric; Important when stone-based material are used as road build-up.

20 mm