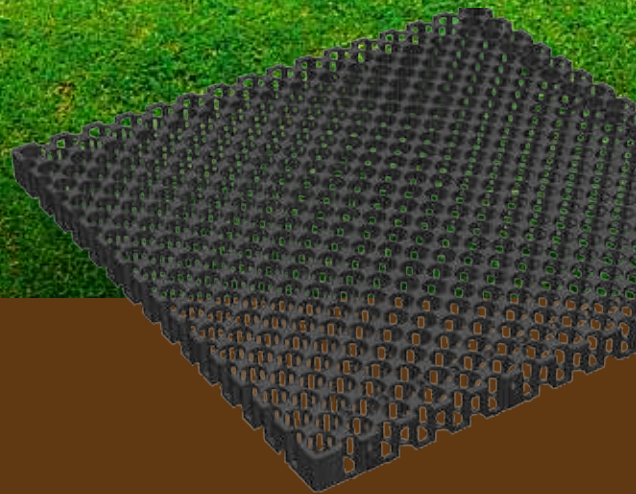


VersiCell®

Sub-Surface Drainage Module



**Creating Cities
Where Urban Meets Nature**



Our Innovation Your Solution

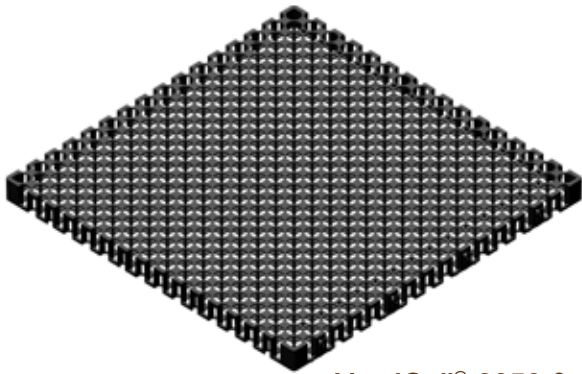
VersiCell® is designed and engineered for sub-surface drainage as well as providing waterproofing membrane protection and heat and sound insulation. It eliminates the use of heavy gravel aggregates for sub-surface drainage and screeds for waterproofing membrane protection in planter boxes and roof gardens. It is applied also on retaining walls to prevent build up of hydrostatic pressure.



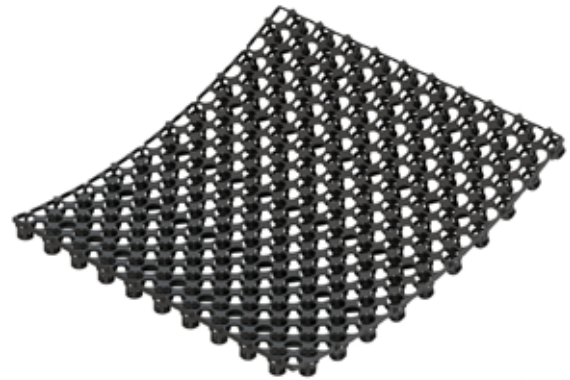
Vertical Drainage

VersiCell®

VersiCell® is designed and engineered for sub-surface drainage as well as for providing waterproofing membrane protection and heat and sound insulation. VersiCell® eliminates the use of heavy gravel aggregates for sub-surface drainage and screeds for waterproofing membrane protection in planter boxes and roof gardens. It is applied also on retaining walls to prevent buildup of hydrostatic pressure.



VersiCell® 2050 & 3050*



VersiCell® 3150

VersiCell® rigid or flexible modules, is a lightweight high-strength drainage cell manufactured from recycled plastics.

VersiCell® has a narrow profile and an open surface design with high volume internal void that enables rapid capture and transport of high water volumes.

VersiCell® is only approximately 2% of the aggregate weight of gravel for equivalent drainage discharge capacity. Its narrow profile makes a greater soil depth

possible in planter beds and thus allows a wider variety of landscape plants to be used.

VersiCell® modules are easy to install by interlocking one to another either horizontally or at right angles or simply by abutting.

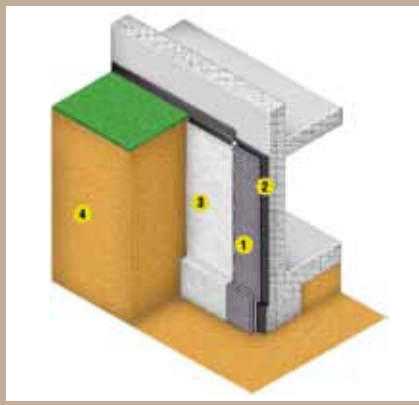
VersiCell® 3150 can flex and conform to curved surfaces and their ability to nest and stack reduces on-site storage and container space requirements and transportation costs.

Applicable Areas

- Landscaped decks
- Paved areas and roadways
- Sports fields
- Retaining/basement walls
- Pond filter systems
- Bridge abutments
- Tunnels and landfills
- Golf courses
- Planter boxes

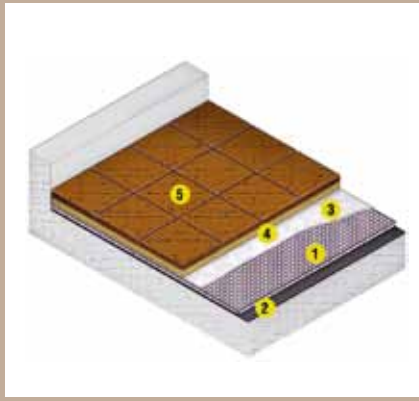


* VersiCell® 2050 is 20 mm thick, while VersiCell® 3050 is 30 mm thick.



1. VersiCell®
2. Waterproofing membrane
3. Geotextile
4. Soil

Basement Wall



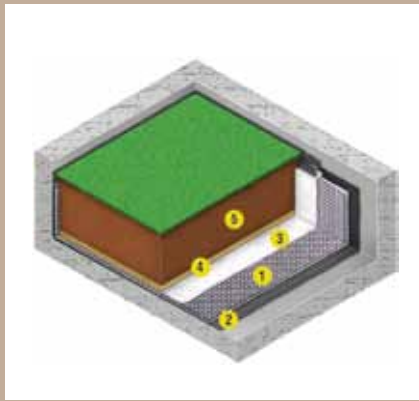
1. VersiCell®
2. Waterproofing membrane
3. Geotextile
4. Sand
5. Pavers

Plaza Deck



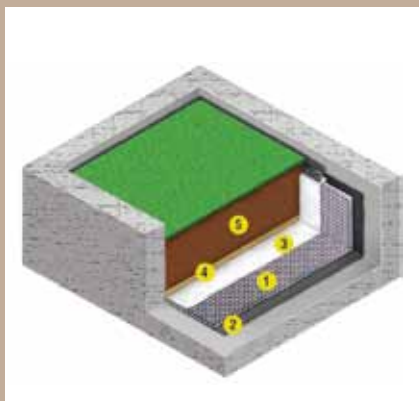
1. VersiCell®
2. Geotextile
3. Coarse Sand
4. Soil

Sports Field



1. VersiCell®
2. Waterproofing membrane
3. Geotextile
4. Coarse sand
5. Planting soil

Landscape Deck



1. VersiCell®
2. Waterproofing membrane
3. Geotextile
4. Coarse sand
5. Planting soil

Planter Box



Technical Specifications

Material	Polypropylene
Size	500 mm x 500 mm*
Height	
VersiCell® 3150	30 mm
VersiCell® 3050	30 mm
VersiCell® 2050	20 mm
Weight	
VersiCell® 3150	~ 2.0 kg/m ²
VersiCell® 3050	~ 2.5 kg/m ²
VersiCell® 2050	~ 2 kg/m ²
Colour	Black
Compressive Strength	
VersiCell® 3150	max. 600 kN/m ²
VersiCell® 3050	max. 800 kN/m ²
VersiCell® 2050	max. 800 kN/m ²
Discharge Capacity @ 1% gradient	
VersiCell® 3150	~16.5 l/m.s
VersiCell® 3050	~16.5 l/m.s
VersiCell® 2050	~13.0 l/m.s
Surface Void Area	~62%
Internal Void Area	~95%
Biological / Chemical Resistance	Unaffected by moulds and algae Good resistance to alkali and bitumen

*also available in 500 mm x 250 mm for VersiCell® 3050

VersiCell® is also known as Nordrain® and Nordrain® V.
International patents pending.

Advantages

Design Flexibility

Modules may be interlocked at right angles to form conduits or tanks or in a single plane to form continuous large panels.

Easy Installation

Modules are easy to join into large or long pre-assembled panels for rapid installation minimising on-site disruption.

Able to flex and bend as well as nest

Ability to flex allows VersiCell® 3150 to be used against curved surfaces. On-site storage and container space requirements and transportation costs is reduced by ability to nest and stack.

Lightweight and High Strength

Honeycomb design gives the modules high compressive strength whilst remaining lightweight.

Efficient

Open surface design and high volume internal void facilitates efficient drainage. A narrow module profile provides greater soil depth in planter boxes allowing a wider variety of plants to be used.

Sustainable and Environmentally Friendly

VersiCell® is made from recycled plastics and support Green Label Certification.



The Elmich security hologram ensures authenticity of the products.

Distributed by:

Note: The information provided in this brochure is based on current knowledge and experience and does not infer any legally binding assurance or warranty, expressed or implied. Intending purchasers should verify whether any changes to specifications or applications or otherwise have been made since the issue of this literature. Environmentally-friendly recycled materials are used in product manufacture wherever possible. Physical product properties including colour may differ due to source of raw materials used. Colour may also fade due to UV exposure. All components of the product are designed for specific application, design calculations and any variation and/or deviation therefrom shall be the responsibility of the specifier and/or user.



ELMICH PTE LTD www.elmich.com

Singapore: (+65) 6356 2800

info@elmich.com

Singapore | Australia | Germany | Malaysia | Switzerland | USA

