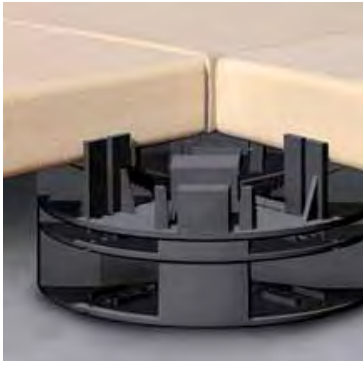




# Sustainable Landscape & Building Products



## Solutions & Applications

Sub-Surface Drainage  
Paver & Decking Support  
Green Roofs

Turf & Soil Stabilisation  
Underground Stormwater Tanks  
Vertical Green Walls



# VersiCell® & VersiFlex®

## Sub-Soil Drainage Modules

Efficient lightweight, high strength interlocking plastic drainage modules, that capture and transport high water volumes and also serve to protect waterproofing membranes. Modules interlock to form large panels or long units that may be positioned both vertically and horizontally.

### Features & Benefits

- High water capture (70% surface void)
- High strength (<100 t/m<sup>2</sup>)
- High water transport (16.5 l.m.s)
- Lightweight (<2.9 kg/m<sup>2</sup>)
- Interlock for stability
- Waterproof membrane protection
- Easy installation

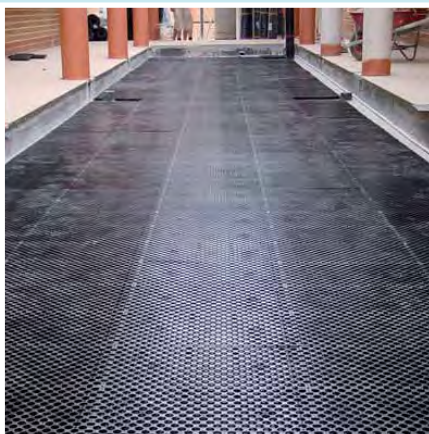
### Applications

- Landscaped decks
- Intensive green roofs
- Planter boxes
- Retaining and basement walls
- Paved areas & roadways
- Sports fields



1. Waterproofing Membrane
2. VersiCell® / VersiFlex®
3. Geotextile
4. Coarse Sand
5. Growing Media

## Planter Box Drainage



Constitutional Hill Retirement Village, Sydney

Gungahlin Centre, ACT

## Landscape Deck Drainage



Croydon Health Centre, Sydney

## Green Roof Garden Drainage



Housing Development Board, Singapore

## Basement & Retaining Wall Drainage



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



Retaining Wall, Singapore



Minter Ellison Building, ACT

# VersiDrain® 25P

## Water Storage & Drainage Sheet

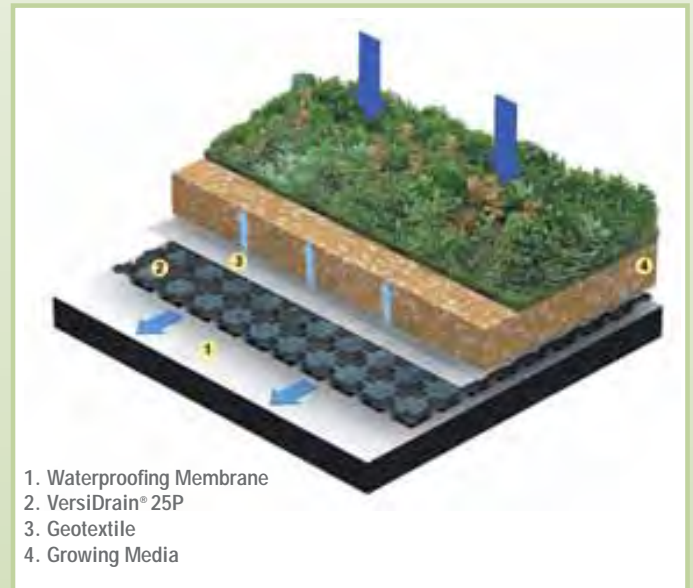
A lightweight, high strength perforated sheet that functions to both store and drain water in extensive roof gardens and planter boxes. Water and soluble nutrients stored in an array of mini reservoirs are returned to soil media, via capillary action, for plant uptake, when required. Perforations in the channels allow excess water to flow to outlets.

### Features & Benefits

- High storage capacity (6.1 l/m<sup>2</sup>)
- High strength
- Effective drainage (1.5 l.m.s)
- Lightweight (0.9 kg/m<sup>2</sup>)
- Facilitates capillary irrigation
- Reduced irrigation frequency
- Enhanced plant vigour
- Reduced stormwater run-off

### Applications

- Extensive green roofs
- Landscape roof decks
- Planter boxes
- Podiums



1. Waterproofing Membrane
2. VersiDrain® 25P
3. Geotextile
4. Growing Media

## Extensive Green Roof



Holt & Hart Building, Sydney



Amenities block Pasir Ris, Singapore

# VersiDrain® 8 Mesh

Dimpled Plastic Drainage Sheet

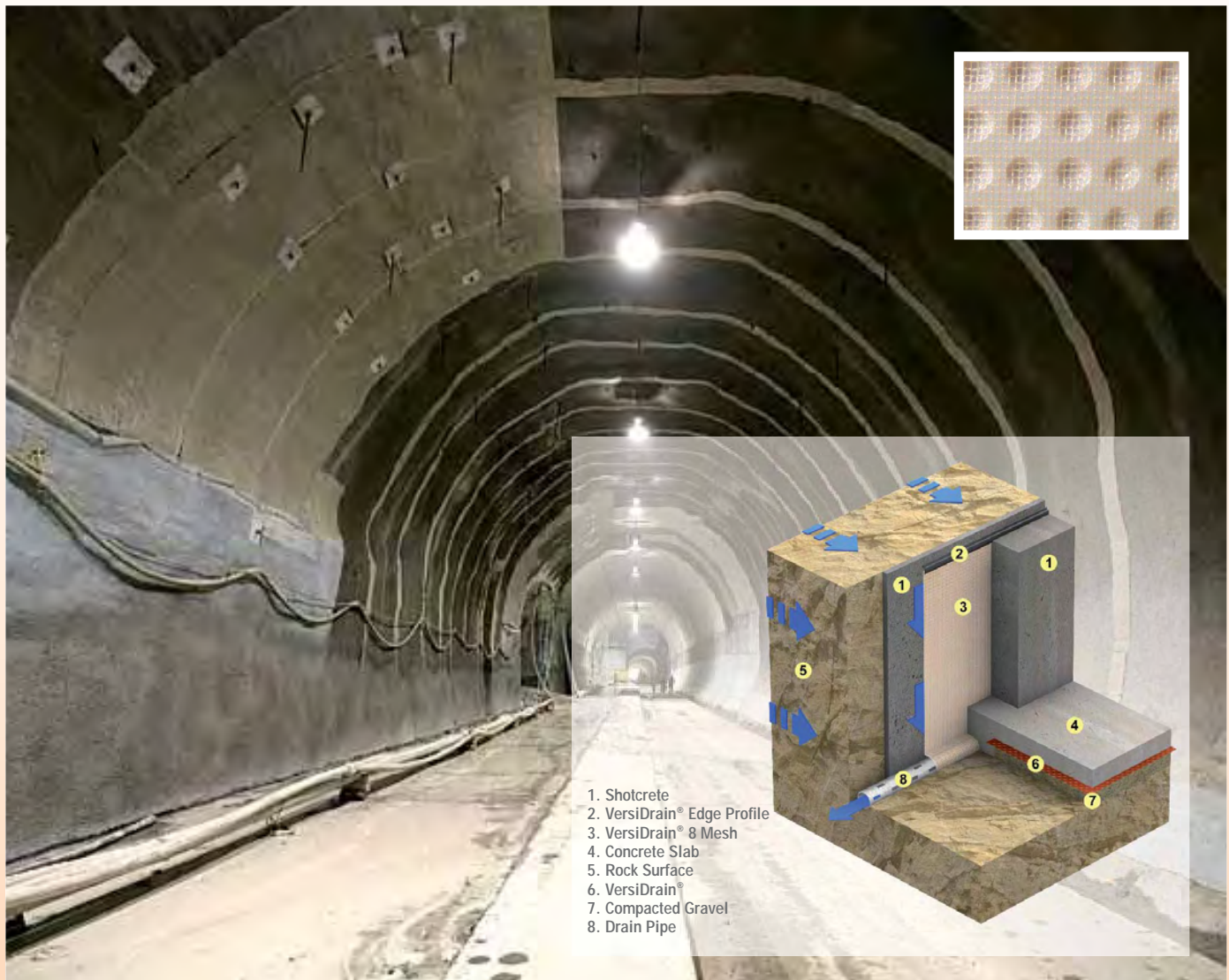
Lightweight, translucent, high strength drainage sheet with an integrated mesh that facilitates adhesion of shotcrete and plaster on rock surfaces and internal basement walls.

## Features & Benefits

- Contains integrated mesh
- Allows shotcrete & plaster adhesion
- Load bearing strength (< 15 t/m<sup>2</sup>)
- Easy to install lightweight rolls
- Drainage capacity (5.0 l.m.s)
- Vapour barrier & drainage void
- Relieves hydrostatic pressure

## Applications

- Internal basement walls
- Rock surfaces
- Tunnels & landfills



1. Shotcrete
2. VersiDrain® Edge Profile
3. VersiDrain® 8 Mesh
4. Concrete Slab
5. Rock Surface
6. VersiDrain®
7. Compacted Gravel
8. Drain Pipe

Sydney Rail Link Tunnel

# VersiDrain<sup>®</sup> 8 Geo

Dimpled Plastic Drainage Sheet

Lightweight, medium strength drainage sheet with an adhered geotextile that provides rapid drainage of foundation walls and other underground structures.

## Features & Benefits

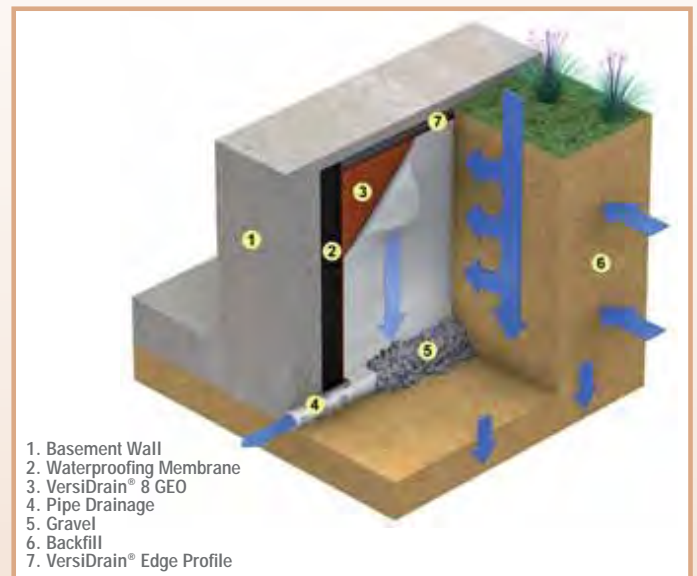
Easy to install lightweight rolls  
Adhered geotextile  
Drainage capacity (4.6 l.m.s)  
Load bearing strength (<25 t/m<sup>2</sup>)  
Waterproofing membrane protection

## Applications

Retaining & basement walls  
Planter boxes  
Landscaped decks



Panorama Village Pymble, Sydney



Resmed Research Centre, Sydney



Townhouse Estate Haberfield, Sydney

# VersiDrain® 10 Geo

## Studded Plastic Drainage Sheet

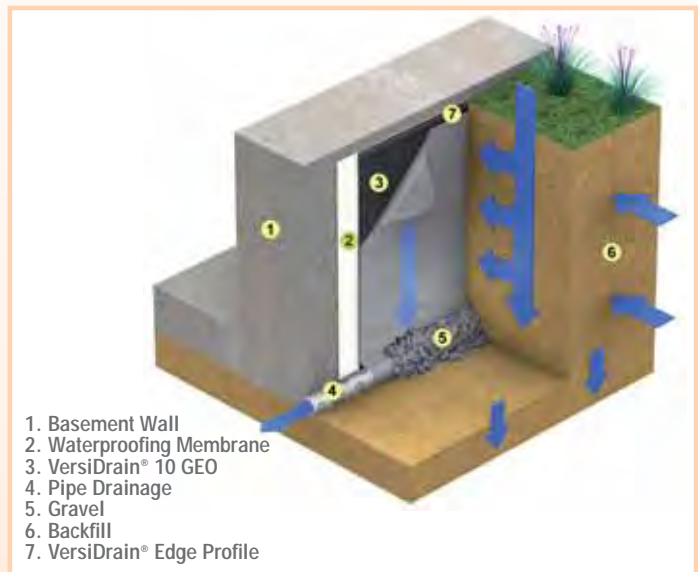
Lightweight, high strength drainage sheet with an adhered geotextile that provides rapid drainage of foundation walls and other underground structures.

### Features & Benefits

- Lightweight and easy to install rolls
- Adhered geotextile
- Drainage capacity (4.8 l.m.s)
- Load bearing strength (<40 t/m<sup>2</sup>)
- Waterproofing membrane protection

### Applications

- Retaining & basement walls
- Planter boxes
- Landscaped decks



Quad Building Homebush, Sydney

# VersiDrain<sup>®</sup> 6P

## Under-Screed Drainage Mat

A lightweight, plastic interlocking drainage sheet positioned between the structural slab and sand or mortar screeds. Moisture and salts in the screed are prevented from migrating upward, via capillary action, to the surface to form efflorescence and algae on tiles and pavers.

### Features & Benefits

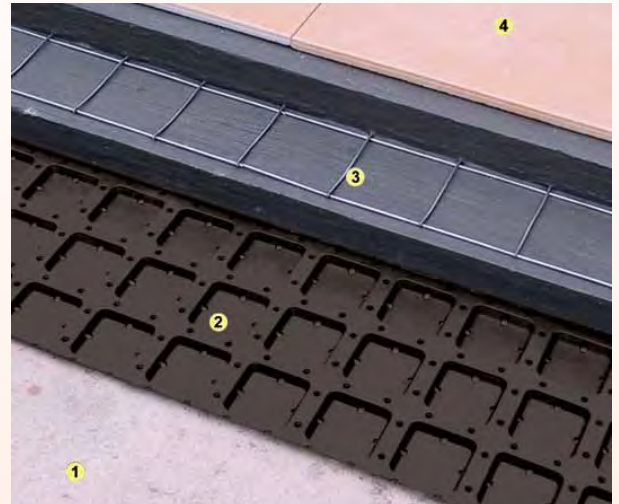
- Efficient drainage under screeds
- Minimises efflorescence & algae
- Reduces surface cracking
- High strength (<math>< 80 \text{ t/m}^2</math>)
- Protects waterproofing membrane

### Applications

- Balconies, terraces & decks
- Swimming pool surrounds
- Change & wash rooms



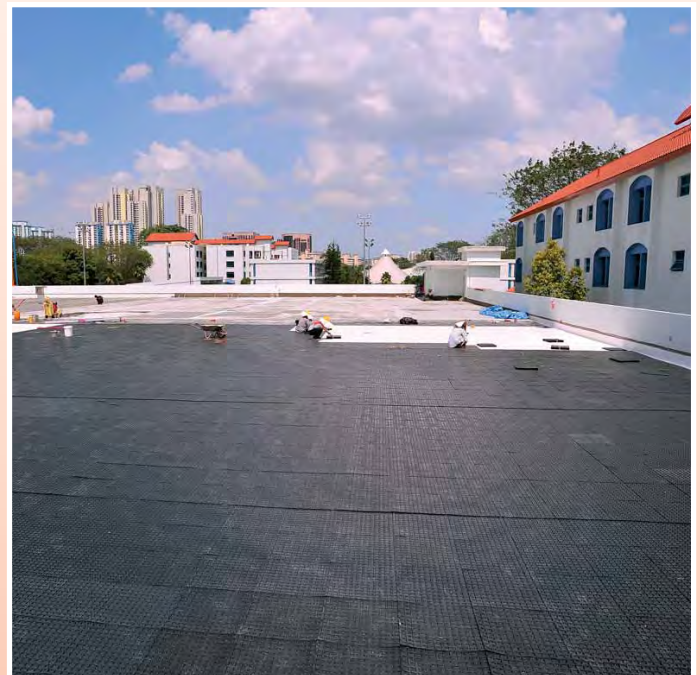
Nanyang Technological University, Singapore



1. Floor Slab
2. VersiDrain<sup>®</sup> 6P
3. Cement and Sand Screed with Reinforcing Mesh
4. Floor Tile



Marina Bay Sands Integrated Resort, Singapore



United World College of South East Asia, Singapore



# CelluTank® & VersiTank®

## Underground Stormwater Tanks

Lightweight modular plastic sub-surface stormwater infiltration or re-use storage tanks. Modules are interlocked to produce maximum stability under high weight bearing load situations.

### Features & Benefits

- Sub-surface infiltration
- Underground water storage
- Ultra high strength (12-40 t/m<sup>2</sup>)
- Cater for all volume requirements

### Applications

- Domestic housing
- Commercial units
- Industrial developments



Bailik College, Melbourne



Holroyd Apartments, Sydney



Kilbreda College, Victoria



Private residence, Melbourne



Residential development Geraldton, WA



City of Mt Hawthorn Perth, WA

# VersiPave® GP

## Paver Support

High strength, lightweight paver support with integrated adjustable chocks that eliminate the need to use bedding sand, facilitate efficient drainage of surface water, eliminate possible efflorescence and algae and improve thermal insulation.

### Features & Benefits

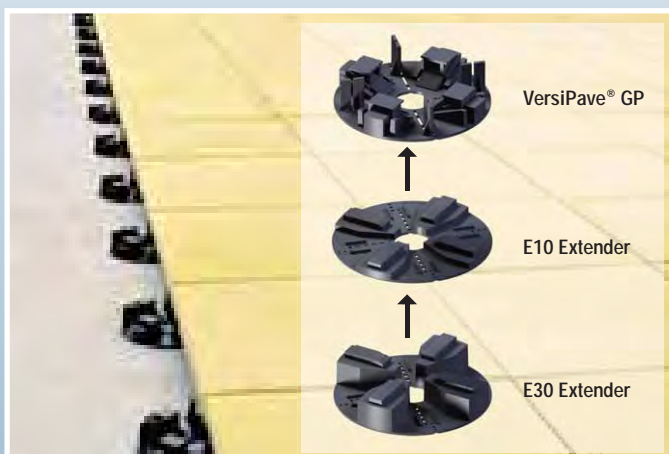
- Height range 24-35 mm & extend to 150 mm using 10 and 30 mm extenders
- No sand beds or screeds
- Reduced paving installation costs
- Efficient drainage of surface water
- Access to waterproofing membranes
- No efflorescence and algae
- Improved thermal and acoustic insulation
- Services concealed under pavers

### Applications

- Balconies, terraces & decks
- Swimming pool surrounds
- Change & wash rooms



Beaumonde Apartments, Sydney



Greenslopes Hospital Brisbane, QLD



Burger Retirement Centre, Sydney

# VersiJack<sup>®</sup> 75

## Paver & Beam Support

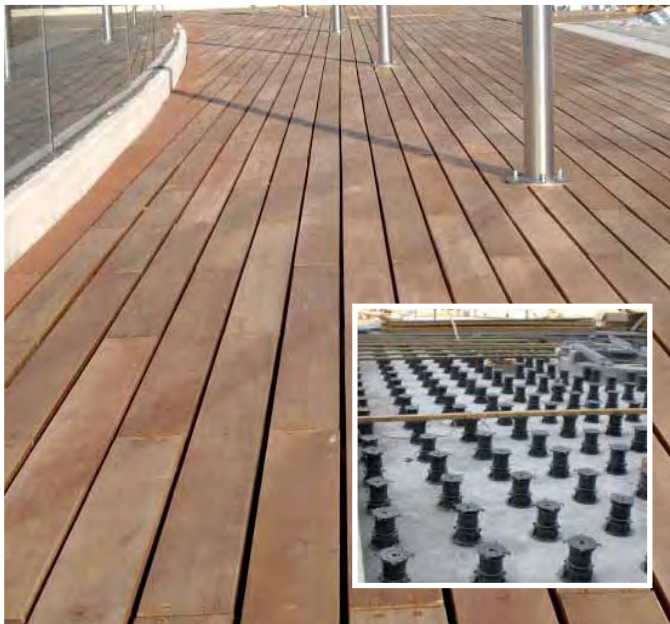
High strength, heavy duty telescopic adjustable paver, beam and decking support that eliminates the need to use mortar or sand beds, brick or metal piers. Units incorporate an integrated 0-5% slope corrector and extend to 1000 mm using proprietary extenders.

### Features & Benefits

- Height adjustment 75-1000 mm
- Support < 3.0 tonnes
- 0-5% slope adjustment head
- Eliminate bedding sand and screeds
- Rapid drainage of surface water
- Access to waterproofing membranes
- No efflorescence and algae
- Improved insulation
- Services concealed under pavers
- Lower cost than brick & metal piers

### Applications

- Plaza decks
- Balconies
- Swimming pool surrounds
- Verandahs & courtyards



Science Technology Park, Hong Kong



Angel Place, Sydney



"Waterplay", Brisbane



Alexandra Arch, Singapore



Canon Headquarters, Sydney

# VersiJack® LH

## Paver & Bearer Support

High strength, low height stackable paver, beam and decking support that eliminates the need to use bedding sand, brick or metal piers. Units incorporate an integrated 0-5% slope corrector.

### Features & Benefits

- Height adjustment 22-75 mm
- Support <3.0 tonnes
- 0-5% slope adjustment head
- Eliminate bedding sand and screeds
- Rapid drainage of surface water
- Access to waterproofing membranes
- No efflorescence and algae
- Improved insulation
- Services concealed under pavers
- Lower cost than brick & metal piers

### Applications

- Plaza decks
- Balconies
- Swimming pool surrounds
- Verandahs & courtyards



# SpiraPave®

## Paver & Bearer Support

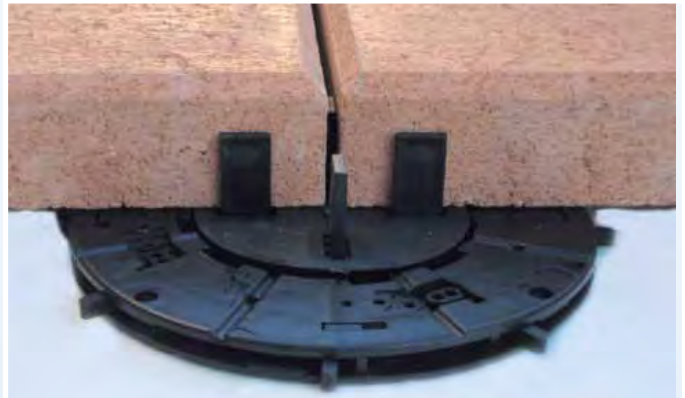
A new generation pedestal for paver and decking support consisting of separate components paired to create pedestals of different heights, each capable of stepping up or down for fine height adjustments. A minimum height of 12 mm makes it ideal for installations where conventional height-adjustable pedestals are generally too high to be used.

### Features & Benefits

- Minimum height of 12 mm
- Uninterrupted progressive height increase
- Easy precise 1 mm height adjustments
- Easy-to-install, cost effective and lightweight
- Incorporates a 0-5% Slope Corrector and 45-80 mm width Bearer Holder
- High compressive strength
- Made from 100% re-cycled plastics
- Supports Green Building certification

### Applications

- Balconies, terraces & decks
- Swimming pool surrounds
- Verandahs & courtyards
- Changing and wash rooms



# Elmich Green Wall

A system incorporating robust modules assembled using high strength structural panels and a geotextile liner filled with lightweight growth media. The modules are pre-planted in a nursery environment to allow plant establishment and then installed onto walls using proprietary support frames and anchoring pilasters.

## Features & Benefits

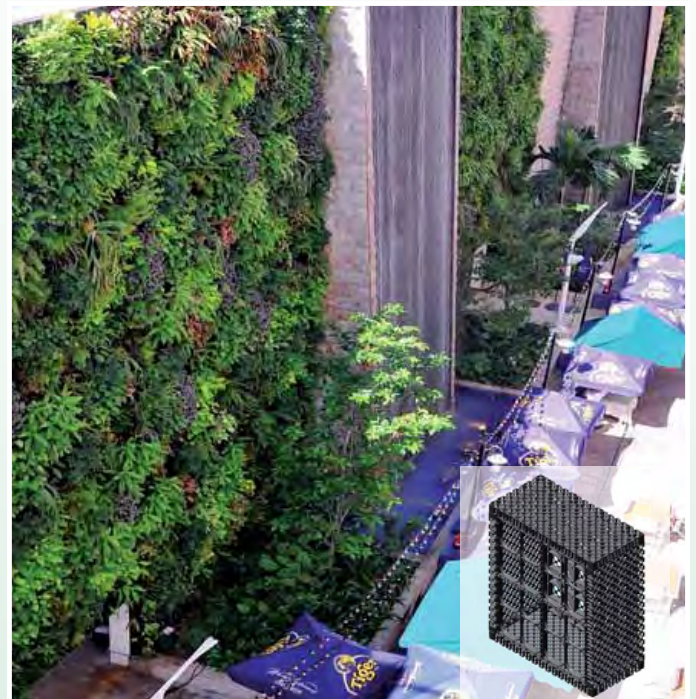
- High strength
- Easy to assemble and install
- Facilitates active plant growth
- Modules easily replaced
- Enhanced site and building value
- Heat insulation of building structures
- Improved sound insulation
- Enhanced air quality

## Applications

- Building facades
- Screen walls
- Walkways
- Feature walls



"Houses of the Future" Exhibition, Sydney



Hotel Michael Resort World Sentosa, Singapore



Orchard Central Mall, Singapore



Moonee Ponds Recycling Station, Melbourne



Curzon Hall, Sydney



Zenith Building, Sydney



Custom House, Singapore



Commercial Hotel Parramatta, NSW

# Elmich Green Roof System

A system that incorporates a wide range of proprietary products to suit virtually any design requirement for both intensive and extensive roof garden applications. Drainage cells, water retention and drainage trays, geotextile and cellular confinement cells in addition to paver and decking support products all may be incorporated to create functional green roof garden areas.

## Features & Benefits

- Efficient water retention and drainage
- Lightweight and easy to install
- Facilitate active plant growth
- Waterproof membrane protection
- Reduced irrigation frequency
- Reduced weight on building structure
- Improved sound insulation

## Applications

- Roof gardens
- Podiums and decks
- Courtyards
- Planter boxes



Holt & Hart Building, Sydney



Holland Drive Public Housing Car Park, Singapore



Westbury Apartments, Sydney



131 Queen Street, Melbourne





Singapore Flyer, Singapore



Aramsa Spa, Singapore



Universal Studios, Singapore



Republic Polytechnic, Singapore

# TurfPave® XD

## Turf Stabilisation

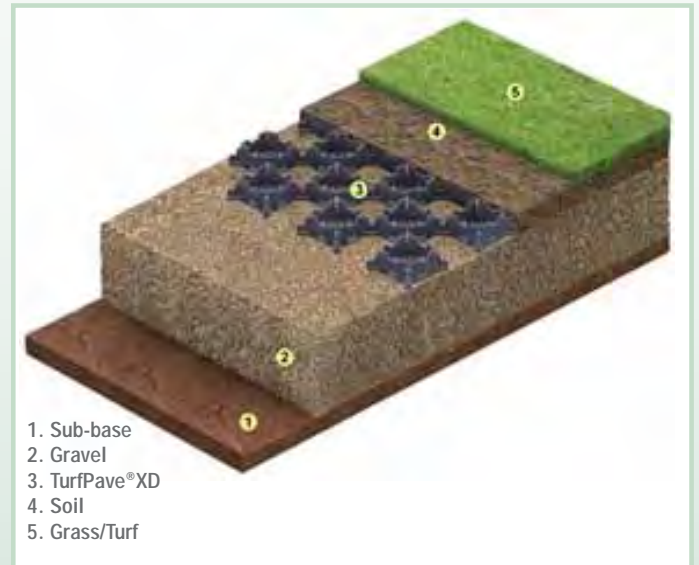
Lightweight, durable plastic interlocking grid that stabilises turf and decorative gravel and provides an environmentally practical alternative to impermeable surfaces. TurfPave is positioned under the grass surface and minimises grass and root compaction.

### Features & Benefits

- Installed under turf surface
- Distributes vehicle weight
- Supports heavy vehicles (<2,000 t/m<sup>2</sup>)
- Allows water infiltration
- Conforms to uneven surfaces
- Lightweight & easy to install
- Promotes vigorous root development

### Applications

- Overflow car parking
- Homeowner driveways
- Street shoulder parking
- Pedestrian walk areas



Sydney Academy of Sports, Narrabeen



Sydney Olympic Village, Homebush Bay

# VersiWeb®

## Cellular Confinement Cells

High strength soil and growth media confinement cells that reduce erosion and restrict soil movement on sloped areas such as green roofs, free standing walls, embankments and barriers.

### Features & Benefits

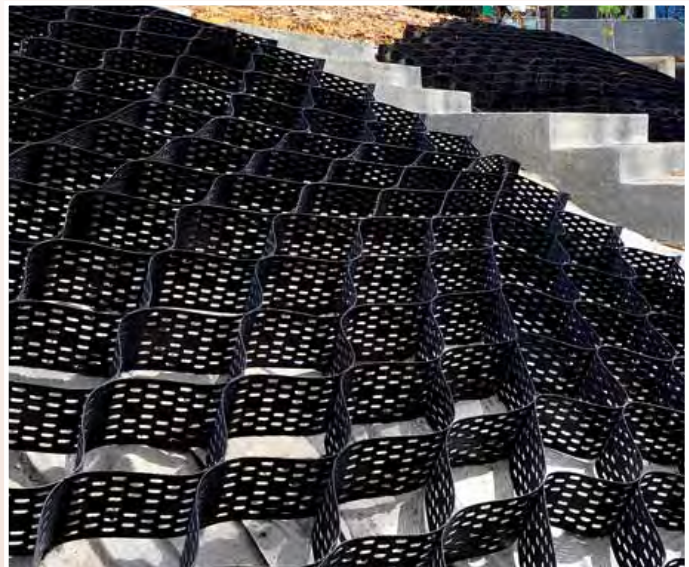
- Minimizes soil erosion
- Retention of infill
- Supports heavy vehicle weights
- Improved drainage
- Reduced hydrostatic pressure
- High seam strength (>560 N)
- Cell heights from 50-200 mm

### Applications

- Slope and channel protection
- Soil retention
- Embankment stabilisation
- Green roof growth media stabilisation



Amenities block Pasir Ris, Singapore



Novena Church, Singapore



Mass Rapid Transit (MRT) Train Depot, Singapore

Elmich an Australian company is a leading manufacturer of Landscape Engineering & Construction products



## Elmich offers customised “total solutions”

We provide advice on the most cost-effective solutions, specifications and technical installation details. Our staff, having technical expertise and in-depth knowledge of local environmental conditions and work practices, ensures that unsurpassed service is provided to satisfy clients’ most rigorous needs.

Elmich has supplied a wide range of products on numerous international residential, commercial, infrastructural and industrial projects.

Major projects in Australia include:

The Sydney Olympic Village, Melbourne Cricket Ground, The Sydney Conservatorium of Music, Green Slopes Hospital in Brisbane, Burswood Casino in Perth and the Chatswood to Epping Rail Link.



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**TEL: 1300 ELMICH**  
**[www.elmich.com.au](http://www.elmich.com.au)**