

Urban Greenery & Architectural Products



We make the difference.
The Elmich Difference.

Elmich in brief

Elmich Pte Ltd is a leading manufacturer and distributor of state-of-the-art and ecologically-minded urban landscaping, drainage, stormwater management, and waterproofing solutions to developers, architects, and contractors around the world.

Elmich prides itself as a professional, responsible, and eco-sensitive company with sound management and quality practices certified under ISO 9001:2015 (Quality Management), ISO 14001:2015 (Environmental Management), and SS ISO 22301:2012 (Business Continuity Management).

As a multi-award-winning company of Enterprise 50, Enterprise Transformation, and the Top Honour recipient of Singapore Business Federation's Sustainability Award, Elmich affirms its commitment to quality, innovation, and resilience.

Everyone who works at Elmich is focused on – enhancing lives for you and future generations.

At Elmich, we are focused on enhancing lives for the present and future generations.



Covering more than 30 countries across the world



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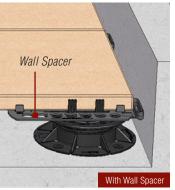
Creating Cities Where Urban Meets Nature

VersiJack® Paver & Deck Screwjack Pedestal





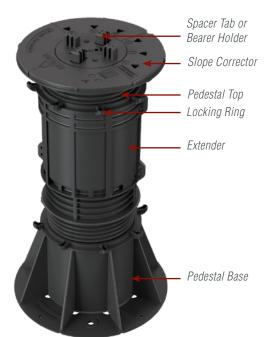












VersiJack® provides the options of both top and bottom slope correction compensating for gradients to create leveled surfaces. Using a Bottom Slope Corrector allows the pedestal to remain firmly upright on an incline.

VersiJack® has a large flat base with rounded edges to prevent compromise of the waterproofing membrane. The perforated base prevents the breeding of insects resulting from ponding. Grooves allow the base to be cut to fit wall corners and edges.

- Height range from 13 mm to 1014 mm
- Progressive height increments
- Optional 0-5% slope adjustment
- Easy access to waterproofing membranes
- Improves insulation and conceals services
- · Lightweight and reusable



Jewel Changi Airport, Singapore

Applicable Areas

Swimming pool surrounds

Concrete ground

Plaza decks

Courtyards

Accessories



Bearer Holder



Concealed Paver Retainer



Exposed Paver Retainer



Vertical Edge Clips



Wall Spacer



Top Slope Corrector



Pedestal Shim



Variable Angle Spacer Tab



Balconies

Verandahs

Water features

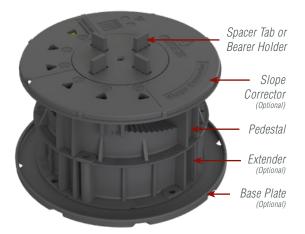
Level decking surface can be achieved by using a combination of pedestals on uneven surfaces.

SpiraPave® Paver & Deck Stepjack Pedestal









SpiraPave® is a height and slope-adjustable pedestal with a unique 'step' design for supporting raised pavers and timber decking.

It provides a cavity to conceal services, improves heat and sound insulation, and facilitates rapid surface drainage whilst allowing waterproofing membranes and services to remain accessible.

Height of SpiraPave® is 12-74 mm, at 1 mm increments. Additional height of 45 mm is obtained with the use of a SP-45E extender.

Applicable Areas

- Balconies, terraces & decks
- Swimming pool surrounds
- Verandahs
- Courtyards

- Low minimum height of 12 mm
- Precise 1 mm height adjustment
- Optional 0-5% slope adjustment
- Easy access to waterproofing membranes
- Improves insulation and conceals services
- Lightweight and reusable



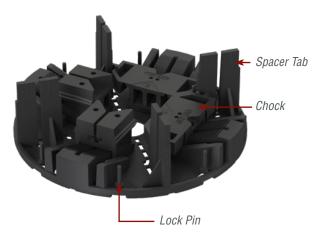
VersiPave® Independent Paver Correction











VersiPave® is a height adjustable pedestal for paver support engineered to provide a cost-effective solution to support raised pavers with inconsistent or uneven thickness.

Height range of VersiPave® starts from 12 mm and can be adjusted in 1 mm increments. Additional height is obtained using 10, 20, 30, 40 and 60 mm Extenders.

VersiPave® is cost-effective and can be quartered or halved for placement along wall edges and corners.

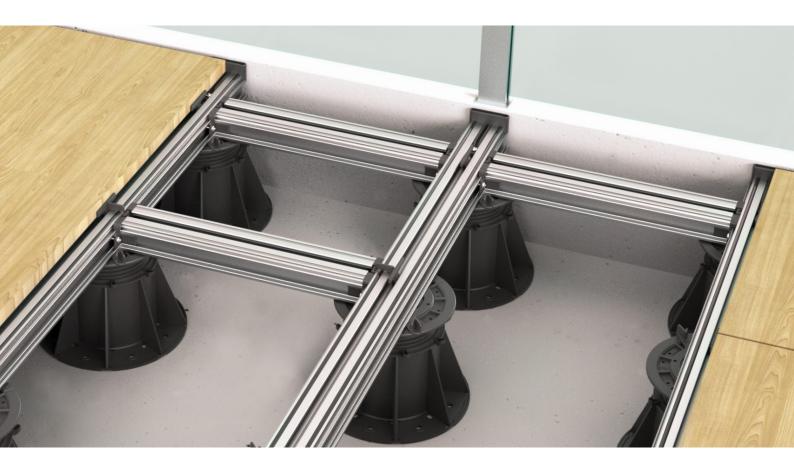
Applicable Areas

- Balconies, terraces & decks
- Swimming pool surrounds
- Verandahs
- Courtyards

- Height range from 24 to 45 mm
- Precise 1 mm height adjustments
- Accommodates pavers of inconsistent thickness
- Easy access to waterproofing membranes
- Improves insulation and conceals services
- Lightweight and reusable



VersiFrame® Aluminium Joist Substructure System

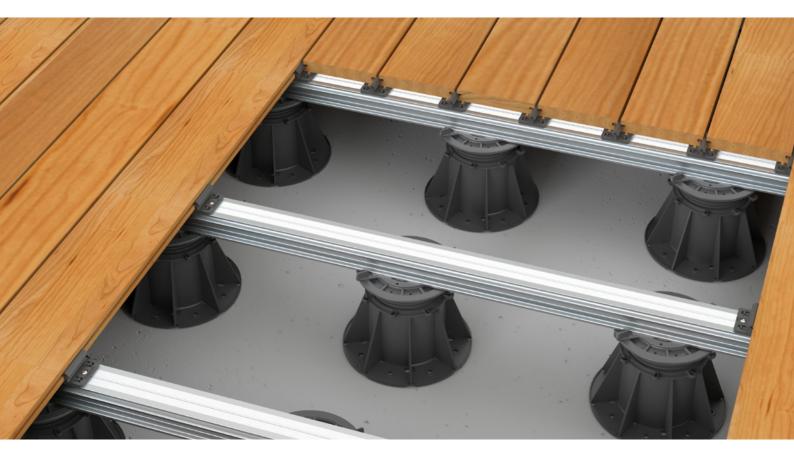


VersiFrame® is an aluminium joist system using VersiJack® pedestals to efficiently and easily establish a rigid and stable raised paving or decking installation. The robust stability of VersiFrame® system prevents displacement of its components when flooring is removed during maintenance of hidden mechanical and electrical services.

With the system's versatility, various design layouts and creative arrangements of pavers, tiles and decks can be achieved.

PAVING





DECKING



- High strength, durable and reliable substructure
- Efficient and uncomplicated installation process
- Versatile with an array of accessories to accommodate various designs
- Locked to VersiJack® pedestals with a Joist Adaptor for increased stability to prevent unintended movement



VersiWall® GP 2060 Wind-Resistant Green Wall Tray







Wind-Resistant version available









VersiWall® GP 2060 (VGP 2060) is an easy-to-install and lowmaintenance modular vertical greening system with a choice of mounting, planting density and growth media options to suit different wall conditions.

Applicable Areas

- Interior walls
- Exterior walls
- Free standing walls
- Building facades

- Allows different spacing for varied plant densities on the wall
- Universal mounting
- Anti-lift arms prevent dislodging of trays
- Proprietary mounting panel reduces number of bolts required
- Certified by independent international test authority to withstand wind uplift from various directions up to 108 km/h

VersiWall® GP 250 Slim Profile Green Wall Tray







VersiWall® GP 250 (VGP 250) is designed with both ease of installation and safety in mind. Trays can be mounted either through direct wall fixing or mounted on a mesh, which includes security clips and a security screw system to prevent the trays from being accidentally dislodged.

Applicable Areas

- Interior walls
- Exterior walls
- Free standing walls
- Building facades

- Easily secured directly to the wall or mesh
- A continuous line of planting, even around corners
- Standard pots* (90 mm base diameter) can fit snugly into the engineered rib design of the tray for growing or easy transportation



VersiVall® GT Aluminium Green Wall Tray









VersiWall® GT (VGT) is a modular green wall system which gives architects and builders flexible and cost-effective solutions to create living walls for both indoor and outdoor greenery. Manufactured from aluminium, VGT consists of rows of pilasters attached to a wall, onto which the trays and irrigation system hook on.

The aluminum material is extremely durable and fulfils fire safety requirements for indoor green walls. In addition, the extruded pilasters and trays can be easily cut to any length both on and off-site for a high level of flexibility to allow creativity in design.

Applicable Areas

- Interior walls
- Exterior walls
- Free standing walls
- Building facades

- Fire-resistant
- Fast & simple modular installation
- Durable
- Integrated irrigation
- · Anti-lift screws prevent tray dislodgment
- Fully recyclable

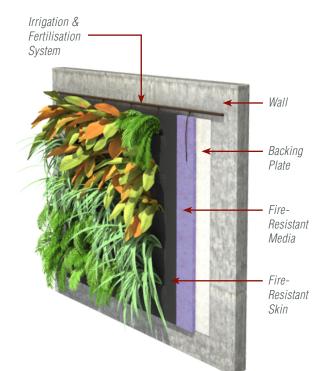


VersiWall® FR Fire-Resistant Green Wall Panel









VersiWall® FR is a fire-resistant modular composite green wall system which gives architects and builders a cost-effective solution for urban greenery. It uses a combination of materials that mitigates the issue of fire safety and allows the elegant articulation of attractive living walls anywhere.

It consists of a backing plate, fire-resistant planting media and skin. Space for the integration of a neatly concealed automated irrigation and drainage system is provided for according to the requirements.

Applicable Areas

- Interior walls
- Exterior walls
- Free standing walls
- Building facades

- Fire-resistant
- Flexible can be modified on site
- Cost-effective
- Fast installation times with modular pre-fab system
- Concealed irrigation

VersiWall® GM

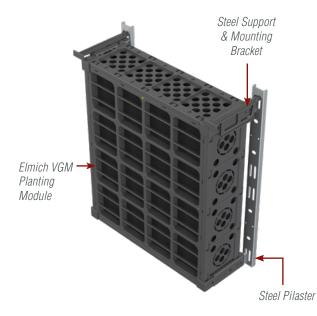












VersiWall® GM (VGM) offers architects and developers a complete and durable solution for turning heat-absorbing and often dull and monotonous walls into cool and attractive living green walls that assimilate easily into a natural or garden environment.

It protects a building from the harmful effects of sunlight and UV exposure, and provides an insulating barrier against noise and extreme temperatures.

Applicable Areas

- Interior walls
- Exterior walls
- Free standing walls
- Building facades

- Modular, robust and easy to install
- · Large media holding capacity permits plant selection flexibility
- Easy maintenance and design
- Reduces sound transmission, airborne pollutants and stormwater run-off
- Enhances air quality
- Certified by independent international test authority to withstand wind uplift from various directions, up to 108 km/h



Pre-Planted Modular Planting System

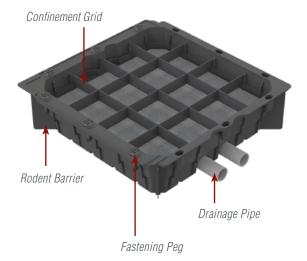












Modular Extensive Planting (MEP®) Tray has water storage compartments, integrated capillary wicks and other unique features that provide a quick and simple solution to transform dull conventional roofs into green and beautiful roofs.

The self-contained MEP® Tray may be pre-planted in a nursery prior to installation to achieve instant greening of rooftops.

Applicable Areas

- Rooftops
- Metal decks
- Concrete decks
- Patios
- Walkways

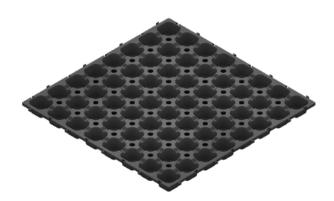
- Established green roof upon installation
- Modular, lightweight and portable
- Integrated capillary wick links to reservoir
- Closed drainage system
- Watertight pipe and connector joints
- Non-clogging reservoir and drainage channels
- Spill-proof planting media containment



VersiDrain® 30

Planting Tray





VersiDrain® 30 is a lightweight interlocking modular green roof tray designed for versatility. Its flexibility allows it to be easily cut to fit different shapes and conforms with ease to curved surfaces. Its easy-to-interlock feature facilitates connecting adjacent trays together for stability.

VersiDrain[®] 30 comprises a network of reservoirs that stores over 11 litres of rainwater per square metre for irrigating the plants, thus reducing watering requirements and costs, and promoting plant growth in a sustainable manner.

Applicable Areas

- Extensive green roofs
- Planter boxes
- Roadside turfing

- Provides efficient drainage
- Reduces irrigation requirement
- Protects waterproofing membrane
- Enable on-site rainwater retention
- Lightweight and flexible
- Recyclable
- Suitable for retrofitting and/or new projects
- Mitigate urban runoff
- · Can be cut to fit any shaped green roof

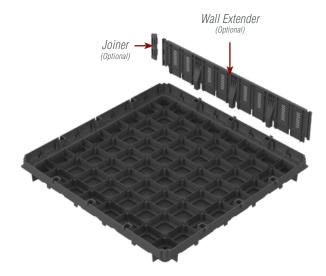


VersiDrain® 60

Extendable Wall Planting Tray







VersiDrain® 60 is a lightweight interlocking modular green roof tray designed for versatility. It allows the addition of optional Wall Extenders to increase the planting depth up to 100 mm and for off-site planting to achieve instant greening of rooftops.

VersiDrain® 60 comprises a network of reservoirs that stores 18 litres of rainwater per square metre for irrigating the plants, thus reducing watering requirement and costs, promoting plant growth in a sustainable manner. The Wall Extenders between trays can be easily removed where desired to form a monolithic planting surface.

Applicable Areas

- Extensive green roofs
- Planter boxes

- Provides efficient drainage
- Reduces irrigation requirement
- Protects waterproofing membrane
- Enable on-site rainwater retention
- Lightweight and durable
- Recyclable
- Suitable for retrofitting and/or new projects
- Mitigate urban runoff
- High water storage capacity



VersiDrain® 150

Pre-Planted Modular Planting Tray





VersiDrain® 150 is a lightweight interlocking modular green roof tray with high walls, suitable for pre-planting off-site.

It comprises a network of reservoirs that stores 32 litres of rainwater per square metre for irrigating the plants, thus reducing watering requirement and costs, promoting plant growth in a sustainable manner.

Applicable Areas

- Extensive green roofs
- Planter boxes

- Provides efficient drainage
- Reduces irrigation requirement
- Protects waterproofing membrane
- Enable on-site rainwater retention
- · Lightweight and durable
- Recyclable
- Suitable for retrofitting and/or new projects
- Mitigate urban runoff
- High water storage capacity



EnviroMix® PB

Nutrient-Infused Lightweight Media Board







EnviroMix® PB is a lightweight organic planting board manufactured from environmentally sustainable materials enhanced with additives, including nutrients beneficial for healthy plant growth. It is made up of primarily recycled organic products that has undergone microwave sterilisation. It is an ideal planting medium for green roofs where weight is a major consideration.

It has the ability to absorb and retain water 3 times its weight and yet remain lighter than conventional media which holds much lesser water when saturated.

Applicable Areas

- Rooftops
- Extensive green roofs

- Stackable for on-site storage
- Not messy and non-staining
- Easily cut for flexible design and layout
- · Minimal backfill of soil required
- Retains water for plant growth during short drought periods

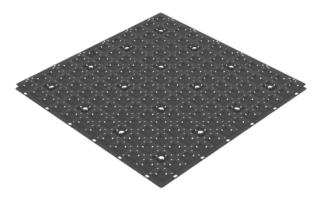
VersiDrain® P-Anchor® Under Screed Efflorescence Drainage Mat











VersiDrain® P-Anchor® is a lightweight drainage sheet that is positioned between the structural slab and topping screed for laying

It acts as a separation layer between the cement, sand screed, and the floor slab, creating a drainage and ventilation cavity that allows entrapped water in the screed to escape via perforations in the sheet.

Applicable Areas

- Balconies & terraces
- Podium decks
- Swimming pool decks
- Patios
- Changing & wash rooms

- Minimises efflorescence & algae
- Reduces surface cracking & frost expansion
- Protects waterproofing membranes
- Efficient drainage under screeds



VersiCell® Sub-Surface Drainage Cell

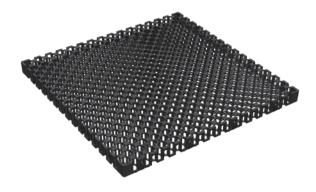












VersiCell® is designed and engineered for sub-surface drainage, heat and sound insulation, as well as providing waterproofing membrane protection.

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

Applicable Areas

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

- High internal void
- High compressive strength
- Lightweight
- Modules interlock for stability and easy installation
- Protects waterproofing membranes



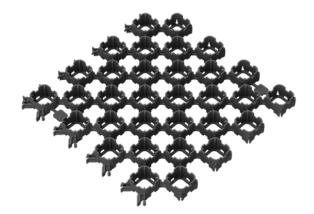
TurfPave® XD Grass & Gravel Paver











TurfPave® XD is a high strength stabilisation module designed to contain grass or decorative gravel for emergency vehicular access ways and occasional vehicular traffic.

It replaces asphalt and concrete to create permeable surfaces thereby enabling these areas to blend into the aesthetics of their surroundings.

Applicable Areas

- Fire engine access lanes
- Overflow & street shoulder parking areas
- Private house driveways
- Pedestrian pathways

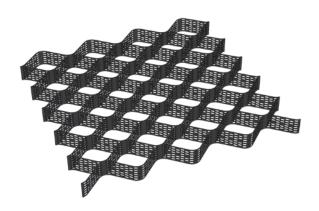
- Distributes vehicle weight on turf surfaces
- Able to support heavy vehicles
- Allows water infiltration
- Does not hinder root and runner growth



VersiWeb® Soil Confinement Cell







VersiWeb® is a cellular confinement system incorporating ultrasonically bonded flexible thermoplastic strips that form a strong and dimensionally stable honeycombed structure which controls erosion by limiting movement of infill within its individual cells.

It offers architects and developers a comprehensive solution to long term slope and channel protection and stabilisation.

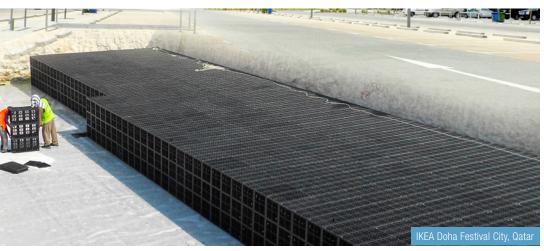
Applicable Areas

- Slope stabilisation & protection
- Earth retention
- Load support
- Channel & shoreline protection
- Planting media containment

- Long-term slope/channel stabilisation and protection
- · Conforms to most terrain profiles
- Easily transported and handled on-site
- Quickly dismantled for re-use



VersiTank® On-Site Soak Away Module













VersiTank® sub-surface water infiltration storage tank provides an efficient, cost-effective, and ecologically sustainable solution for stormwater control and management. It restores on-site natural water filtration, controls the release of surface run-off, and harvests water for on-site reuse.

It can be conveniently installed and is available in several sizes to suit specific installation requirements. When required, tanks can be joined horizontally and vertically, sharing a common panel resulting in cost savings and efficiency.

- Reduces stormwater run-off
- High compressive strength
- Less costly than concrete and metal systems
- Low storage and transport costs
- · Easy assembly and installation
- Improves quality of stormwater run-off
- Discharge to main sewer system





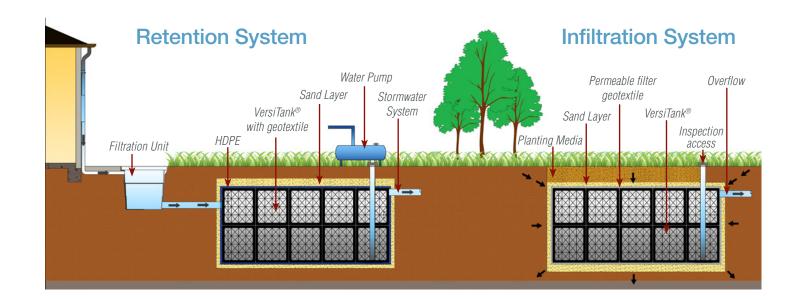




Applicable Areas

- Green parks
- Sports fields
- Swales

- Home gardens
- Green open spaces
- Rain gardens

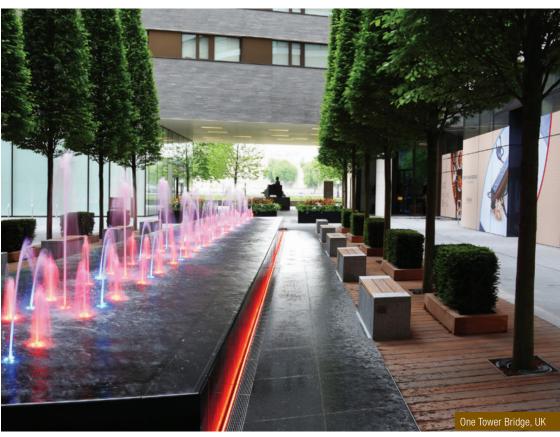


TreeGripTM Rootball Anchoring System









TreeGrip™ provides strong and secure root support for planting lush trees on roofs and terraces in the urban environment. It provides flexibility for root growth, making your terrace garden appear natural and beautiful. This system of securing trees has many advantages over staking and is suitable for large root-balled trees.

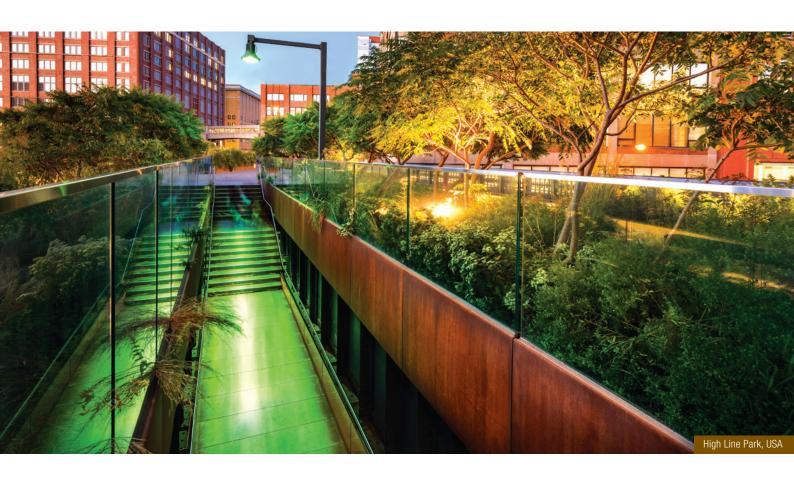
Benefits

- Out of sight anchoring
- Low profile anchor eliminates further excavation

Steel Plate Anchor



Designed as the lowest profile 'deadman' anchor system available and provides a complete package - no further parts required. It consists of three high strength steel anchor wires and single piece anchor strap for fast installation.



D-Man® Anchor



D-Man® Rootball Anchor is a Platipus® tree anchoring system designed to anchor trees in challenging urban environments and roof gardens where planting pits or planters are too shallow to provide sufficient anchoring efficacy or have services buried underneath which hinder tree anchoring.

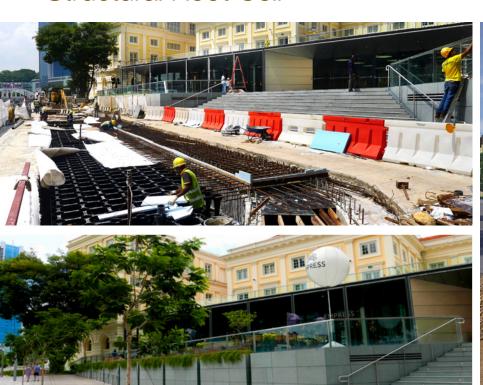
E-Bolt Anchor



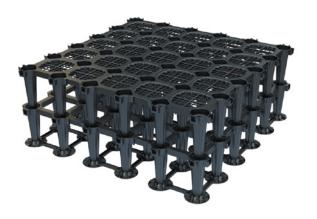
E-Bolt Rootball Anchor is a Platipus® tree anchoring system that uses expanding eyebolts to stabilise trees without earth anchors in very shallow concrete podiums, on roof gardens or unusual urban sites.

StrataVault®

Structural Root Cell







StrataVault® advanced structural root cells are engineered to keep trees healthy, ensuring the long term success of urban trees. StrataVault® tree pits allow root systems to overlap and share space, reducing installation times and costs while promoting healthy root growth.

The system provides quality soil for healthy tree roots in built-up areas by preventing soil compaction caused by building structures, vehicular traffic, and heavy pedestrian footfall. Strong in compression and durable over time, StrataVault® boasts fast set-up time and is a cost-effective solution to enhance urban landscapes.

Applicable Areas

Carparks

Pedestrian Pathway @ Asian Civilisation Museum, Singapore

- Roadways
- Footpaths
- Plazas
- Medians

- Lower cost installation
- Economical shipping
- High compressive load
- Strong structure
- Environmentally friendly

TrackGard® Modular Roadway System









TrackGard® has excellent slip-resistance surface and its contiguous installation ensures a safe walkable path for pedestrians and for wheelchairs. Each UV-stabilised module is lightweight allowing for fast installation and dismantle times, requires minimal maintenance and is easy to clean using a high pressure washer.

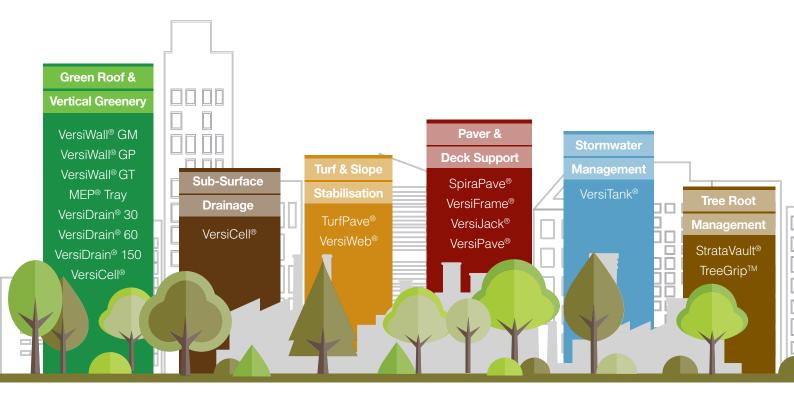
Applicable Areas

- Access roads
- Construction sites
- Sports fields
- Event flooring
- Beach access
- Race courses

- The perfect solution for portable flooring, temporary roads and ground protection
- Hexagonal design of the modules offers robust strength
- Modules interlock securely without any tools or fasteners
- Modules are completely interchangeable and expandable
- Made from UV-stabilised thermoplastic for additional durability
- Easily installed and removed by unskilled labour

Sustainability In Our Products

Elmich urban greenery products help our customers achieve their eco-friendly goals in every phase of a building's lifecycle - from design to maintenance. Our products contribute to green building certifications as we strive towards sustainable growth and modernisation.



What Sets Us Apart From The Rest?



Product Management

Elmich aims to deliver environmentally-safe, innovative, and cost-effective urban greening solutions to our customers worldwide.

Every aspect of our business, from research and development to supply chain management is centrally coordinated, ensuring the delivery of a well-engineered and tested product.



Innovative Spirit

Our commitment towards sustainable green building drives us towards constant innovation and improvement of our products to deal with the ever-changing requirements of the industry.



to measure according to the height required to support the boardwalk.

"Concrete was heavy and you needed to cast it, and it had to be perfectly cast. With our product you could easily adjust when required," he says: saves manpower, materials and costs. That's sustainable."

Elmich was silven the Top Honour

are at the Green Technology Awards year for its contributions to the in stry. The corropany has put in grufers to develop innovative good tholding more than 130 patents. If has also ensured that the firm own swith buy only from its proved suppliers, ensuring both ity as well as sustainability.

ther example is the boardwalk Sentosa to VivoCity. Initially, ins had stipulated concrete to support the structure. But is s proposal was to put pedeside of playir that could be fit rt the coulterwale.

In had to be perfectly had be perfectly conduct you could assert a fairs can be problems for their cleans. If had to be perfectly conduct you could assert a fair can be problems for their cleans. If he also no notes that it in max repeat countries such as Centre property countries such as Centre products such as Centre for these products. Here, is less willingness for customer for the products are "and cleans".

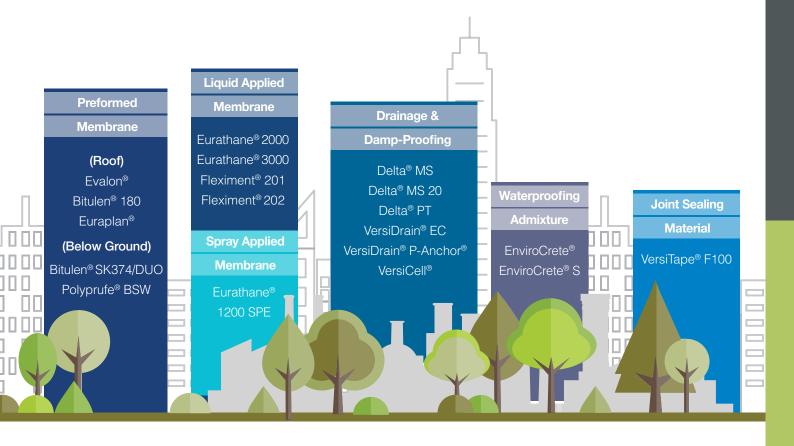
tinational, gave us nearly perfect scores in their assessment of supply ers, except for one category: price he says. They said the price can be bit better. We got eight out of 10 That's peetry good I think."

Still, Mr Lee believes that the sur tainable way of doing business has be

Still, Mr Lee believes that the a tainable way of doing business has come mainstream and bodes well companies like his. "This is no fi in the pan. This way of doing bu

"A world where all cities are

environmentally-responsible"



Green Today for a Better Tomorrow

We are conscious and proud of our unique role in co-creating a sustainable planet. Our urban greenery products use 100% recycled plastics whenever possible is just one of the ways we reduce our carbon footprint.



Green Certifications

Elmich's products are awarded with Green accreditation from Singapore Green Building Council, as well as Australia's Ecospecifier accreditation.

ISO 9001 Certification

Elmich assures its clients of high quality products and services.





Business Continuity Management

Elmich has been certified Business Continuity Management (BCM) ready according to ISO 22301 standard since November 2011. This means business as usual for our customers even in the event of a crisis.

Member of Green Building Councils

Elmich affirms its commitment towards green and sustainable building efforts through its membership in both the US and Singapore green building councils.



Elmich: Singapore Brand. International Network.

We are a leader in ecologically-minded urban landscaping, waterproofing and stormwater management solutions. Through a network that spans 30 countries in 6 continents, Elmich is committed to delivering innovative and sustainable building solutions to developers, architects and builders worldwide.

Since our founding, Elmich has always understood that every project and customer is different. To achieve this, we have established a dedicated research team focused on the design and testing of highly-customised solutions for the built environment. We have accumulated numerous registered designs and patents for proprietary Elmich products through the years – a testament to our expertise and technical know-how. In spite of this, Elmich quality assurance processes are still continuously reviewed and refined for our customers, partners and the communities that we serve.

As we embrace innovation and technology, Elmich also pledges to give back to the global community by managing and containing climate change in ways that we can. We believe that this is our responsibility as citizens of the world.

So what makes Elmich different?

The answer is our unwavering commitment to providing quality green building solutions, through precision, excellence, expertise and the synergies working alongside our global network of partners; to construct the cities of tomorrow. This, is what makes the Elmich Difference.

ELMICH PTE LTD

15 Joan Road Singapore 298899 Tel: +65 6356 2800 Fax: +65 6353 0220

Fax: +65 6353 0220 Email: info@elmich.com

www.elmich.com

Singapore | Malaysia | Australia | Switzerland | Germany | USA











