

Specification, Supply & Delivery of

Architectural Paving Systems



merx
pacific®

Design-Led Specification & Supply

Specialist guidance from concept through to completion.

We work alongside architects, developers and contractors to specify, quantify and supply the most appropriate architectural paving system for each project.

From ground-level landscape applications through to elevated paving and over-membrane construction, we provide technical guidance, reliable procurement and coordinated project delivery across every stage of the project.





Applications Determine Methodology.

Every project begins with understanding the application. Structural methodology is selected first, followed by the most appropriate support systems and components.

Non-structural Natural Stone Paver on
Support Grate on Adjustable Pedestal
Above Membrane

Applications

On Ground



Decorative Chip
Geocell

Above Ground



Natural Stone
Support Grate
Timber Frame

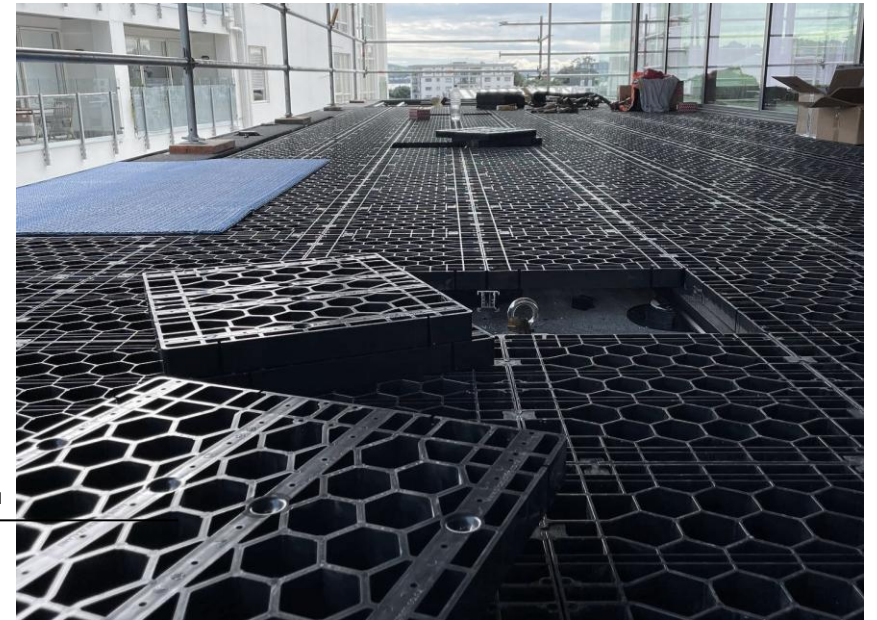
Above Membrane



Natural Stone
Support Grate
Aluminium Frame
Adjustable Pedestal



Support Grate
Aluminium Frame
Adjustable Pedestal



Above Membrane

Structural methodology is determined by loading requirements, build-up tolerances, waterproofing interfaces, E2/AS1 compliance and the selected surface finish. Support Grates form the primary structural platform for natural stone, porcelain and artificial turf, while adjustable pedestals provide load transfer, height adjustment and membrane protection. Where greater spanning capability or structural performance is required, aluminium framing supported on adjustable pedestals provides increased flexibility for thresholds, wind restraint, balustrades, stairs and edge detailing.

Hybrid Assemblies

Project-specific combinations of Support Grates, adjustable pedestals and aluminium framing developed to suit complex structural requirements or multiple surface finishes.

Natural Stone
Support Grate
Aluminium Frame
Adjustable Pedestal



Above Ground

Above ground assemblies utilise a structural subframe to elevate the finished surface while allowing natural drainage and ventilation beneath. Methodology is determined by structural spans, build-up height, loading requirements and the selected surface finish. Support Grates form the structural interface between the frame and natural stone, porcelain or other architectural surfaces, distributing loads uniformly across the supporting structure. Depending on project requirements, the subframe is constructed from either timber joists or aluminium framing, with aluminium preferred where dimensional stability, moisture resistance or low-height thresholds are critical.

Permeable Construction

The structural assembly remains fully permeable, allowing water to drain freely through the finished surface while promoting ventilation and drying throughout the supporting structure. This methodology separates drainage from the finished surface and complies as a permeable surface under E2/AS1

Natural Stone
Support Grate
Timber Frame





Decorative Chip Geocell

On Ground

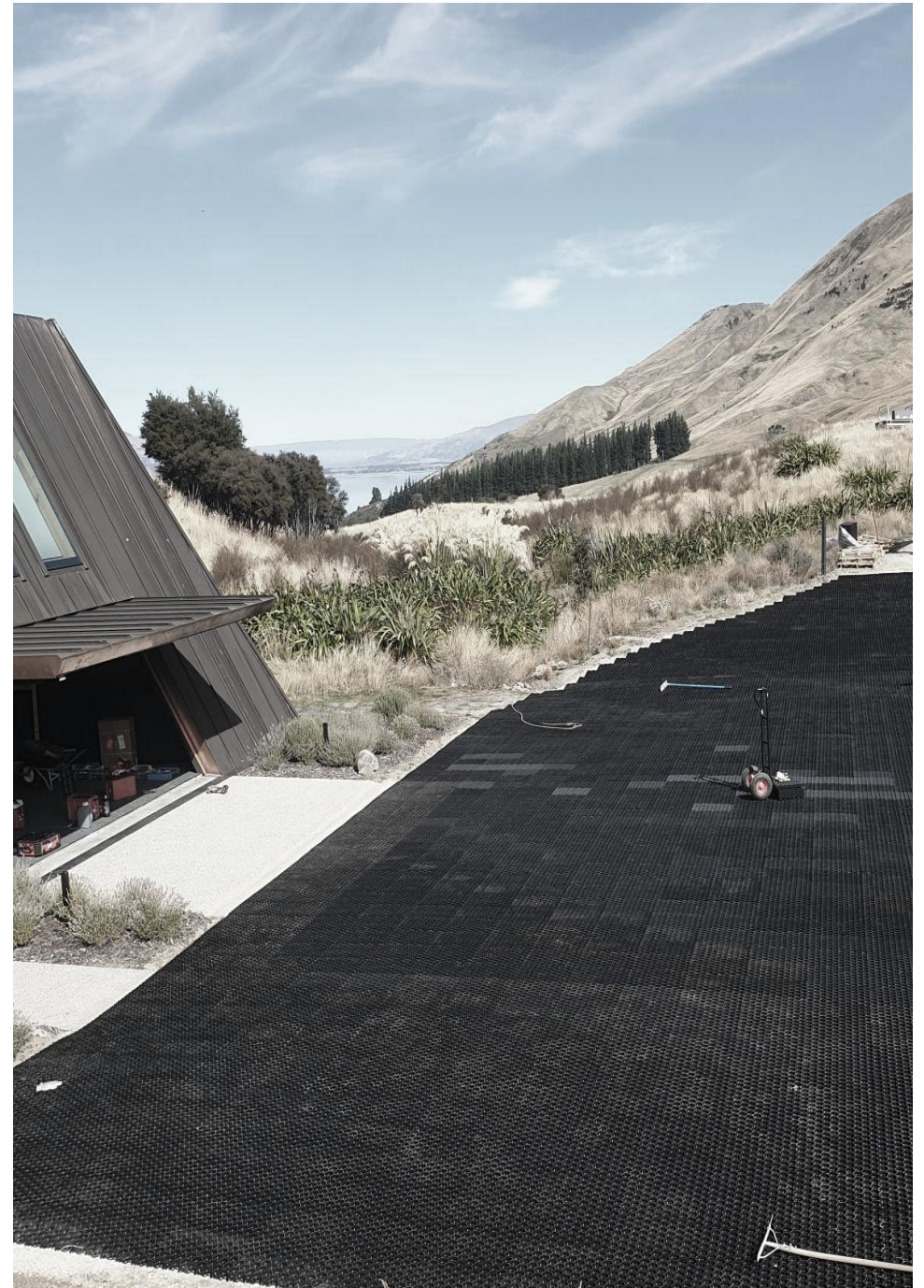
Ground stabilisation methodology is determined by ground conditions, loading requirements, drainage performance and the selected surface treatment. Geocell forms the primary stabilisation system, confining aggregate within an interconnected cellular structure to improve load distribution, reduce material migration and minimise long-term surface deformation. Suitable for decorative aggregate, permeable gravel, grass reinforcement and landscape applications where surface stability, drainage performance and reduced maintenance are key project requirements.

Permeable Construction

Geocell assemblies remain fully permeable, allowing water to infiltrate naturally through the finished surface while contributing to E2/AS1 drainage objectives and permeable site coverage.

Ground Performance

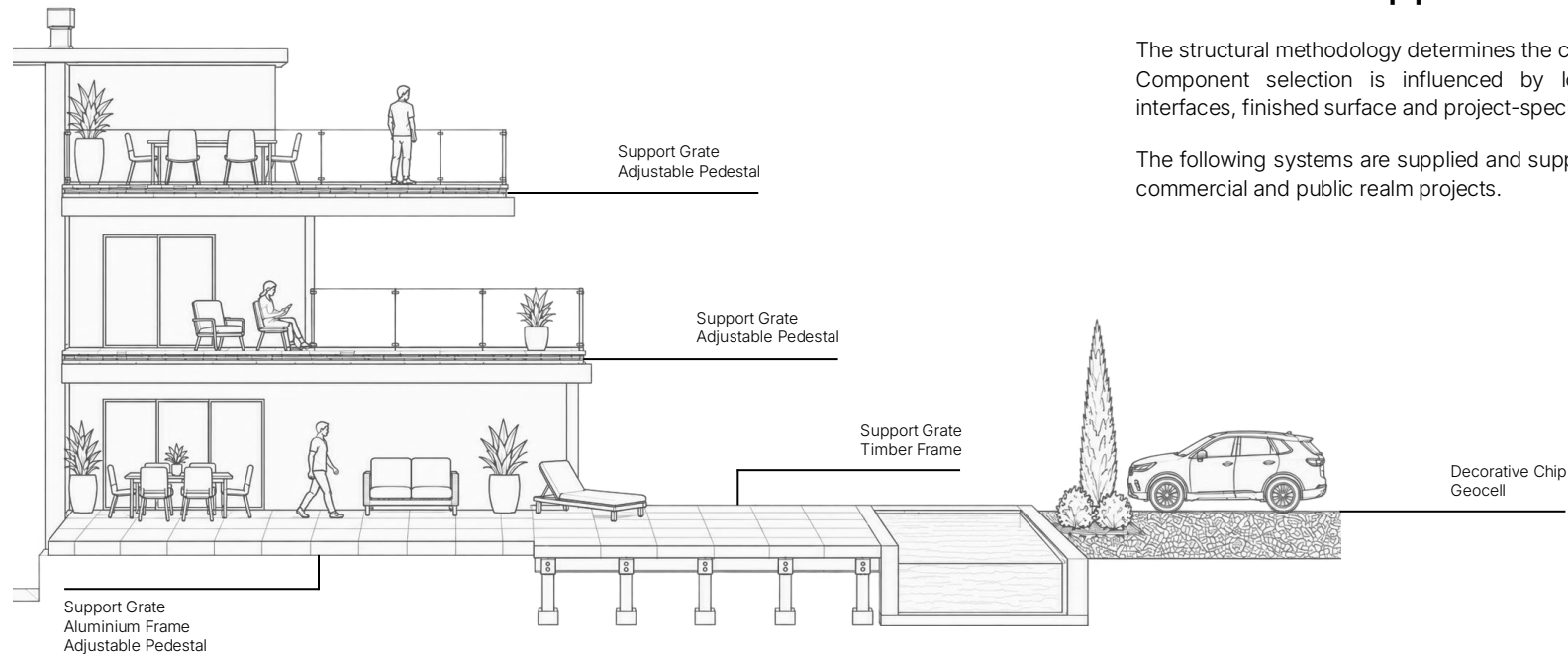
By confining surface material within a continuous cellular structure, Geocell improves stability under pedestrian and vehicular loading while reducing rutting, material loss and ongoing maintenance.



Structural Support Components

The structural methodology determines the components required for each application. Component selection is influenced by loading, build-up depth, waterproofing interfaces, finished surface and project-specific requirements.

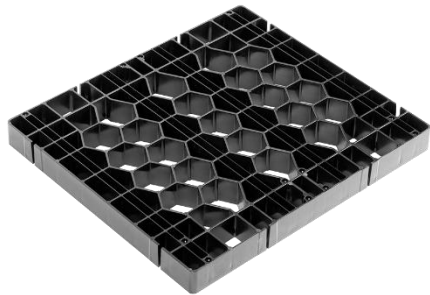
The following systems are supplied and supported by Merx Pacific across residential, commercial and public realm projects.



Support Grate

Silca System® is an interlocking structural Support Grate used within elevated paving systems supporting non-structural or high load external finished surfaces. The grate distributes imposed loads across the supporting structure while maintaining a permeable construction that allows water to drain freely and promote airflow and drying of the structural assembly.

Manufactured in New Zealand, Silca System integrates with timber joists, aluminium joists, adjustable pedestals and hybrid structural assemblies.



Applications	Above membrane, above ground and hybrid structural assemblies.
Finished Surfaces	Natural stone, porcelain tile, concrete pavers, artificial turf.
Material	UV-stabilised PCABS. 100% Recycled material.
Key Characteristics	Interlocking Support Grate • Engineered structural component • Made in NZ from 100% Recycled materials Compatible with timber, aluminium and pedestal-supported assemblies •
Technical Resources Available	Technical Data Sheets • Architectural Details • Design Statement & Span Tables • Compliance Pathway • Wind Uplift Summary • Environmental Statement

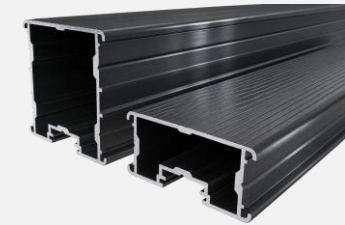


Adjustable Pedestals

Buzon® adjustable pedestals provide precision height adjustment for elevated paving systems constructed above waterproof membrane. The modular pedestal range supports both direct paving on Silca Grate assemblies and aluminium joist systems while maintaining access beneath the finished surface for drainage, waterproofing inspection and services.

Buzon pedestals are used extensively across commercial, residential and public realm projects where adjustability and durability are required.

Applications	Roof terraces • Podiums • Balconies • Commercial landscapes • Public spaces
Compatibility	Silca Grate • Porcelain • Aluminium joists • Timber joists
Material	Copolymer Polypropylene (CPP) 80% Recycled first grade.
Key Characteristics	Adjustable height • Integrated slope correction • High compressive capacity • Modular accessory range

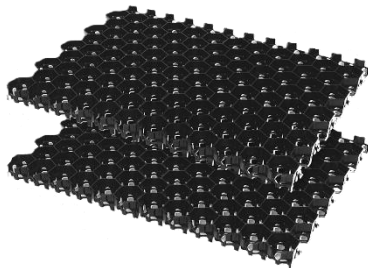


Aluminium Frame

EconoSpan™ & SuperSpan™ aluminium joist systems provide the structural framework for elevated paving assemblies where rigidity, durability and span performance influence the preferred structural methodology.

EconoSpan and SuperSpan integrate with Buzon adjustable pedestal and Silca System Support Grates to create stable structural assemblies for high use residential and commercial applications.

Applications	Above membrane and above ground structural assemblies.
Profiles	60W x 30H • 60W x 60H • 60W x 120H
Compatibility	Adjustable Pedestals • Support Grates • Timber Decking
Material	Extruded structural aluminium and stainless-steel bracketry
Key Characteristics	Lightweight • Corrosion resistant • Multiple profile options • Compatible with pedestal-supported assemblies • Engineered for external applications



Geocell

JakMat® Geocell provides cellular confinement for stabilising granular pavement structures beneath permeable external surfaces. The system improves load distribution by reducing lateral movement within the base course, assisting in the construction of durable permeable paving assemblies.

The confinement system is suited to applications where drainage, excavation depth and ground conditions influence pavement design.

Applications	Pathways • Accessways • Driveways • Landscape paving • Service areas
Finished Surfaces	Gravel • Decorative aggregate • Grass • Permeable paving
Material	100% recycled, UV-stabilised, High-density polyethylene (HDPE).
Key Characteristics	Cellular confinement • Load distribution • Reduces lateral movement • Supports permeable construction • Flexible installation • Prevents settlement or cell exposure



Robust.
Versatile.

Natural Stone
Support Grate
Timber Frame

Industry Proven. Trusted Supply.

Since 2013, Merx Pacific has supplied specification-led architectural paving systems throughout New Zealand and Australia. The Silca System Support Grate remains the cornerstone of our product offering—an industry-proven structural support system specified on projects ranging from residential decks to large-scale commercial developments, backed by an international product heritage dating to 2003.

Today, Merx Pacific complements this proven foundation with a carefully selected portfolio of components, enabling us to provide specification support, technical guidance, reliable procurement and coordinated project delivery across a broader range of project requirements.

13+ years

Supplying New Zealand & Australia

20,000+ m²

Support Grate Projects Supplied

2003

International Product Heritage



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