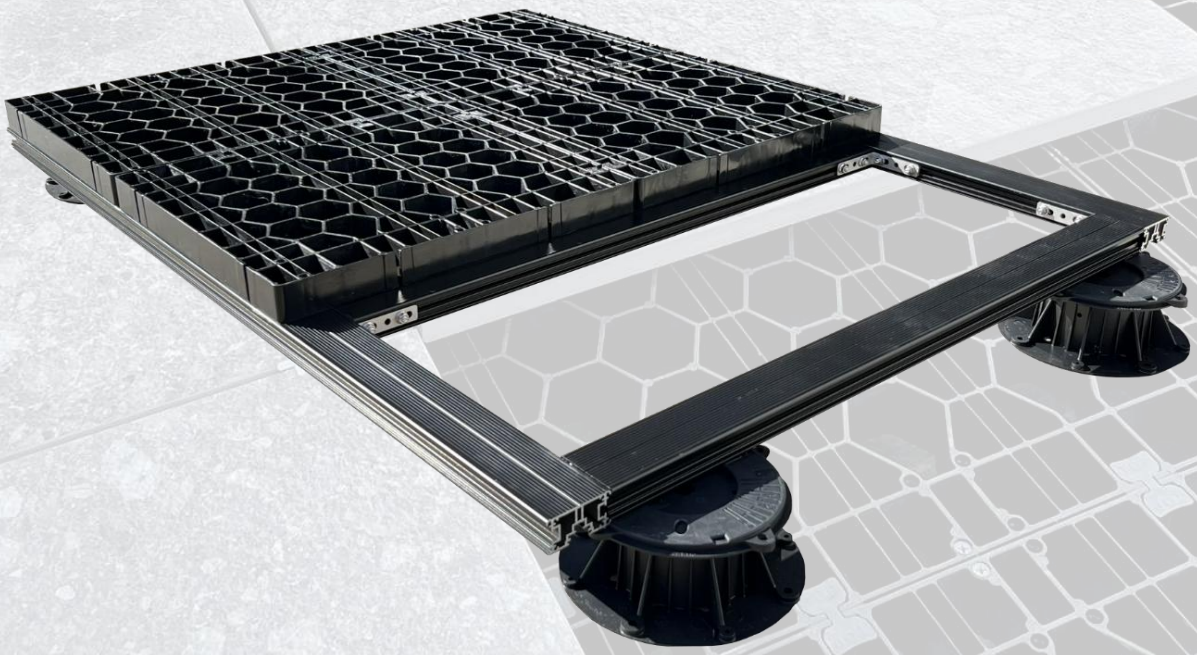
PRODUCT COMBO
SILCA SYSTEM ON ALUMINIUM FRAME
ECCONOSPAN + SUPERSPAN



PRODUCT COMBO - INFORMATION SHEET

Silca System is an interlocking, structural deck grate system, engineered to provide a strong, stable and permeable base for heavy surface finishes over elevated aluminium deck structures.

Manufactured in New Zealand from 100% recycled materials, Silca Grates form a continuous structural platform for natural stone, porcelain tiles, pavers, artificial turf and other heavy finishes at virtually any elevation.

The interlocking grates are securely fastened directly to SuperSpan, EconoSpan, and SuperSpan Plus aluminium framing, creating a level, free-draining substrate without the need for a conventional concrete slab.

Designed for standard elevated decks as well as rooftop, balcony and podium level applications, the open construction allows water to drain freely through the finished surface while maintaining airflow beneath the deck, helping minimise moisture retention and support long-term durability of the decking element.

Silca System provides a practical solution where conventional paving construction is unsuitable or impractical—combining aluminium structural framing, interlocking structural grates and finished surfaces into one durable elevated paving system.

Compliance: B1/VM1 and B2 of AS/NZS 1170.1, with E2/AS1 permeable surface provisions for level-entry threshold.
Suitable for residential and commercial applications.



Balconies / Terrace / Podium OVER MEMBRANE

Transform apartment terraces, balconies, podium level and membrane roof areas into functional, durable outdoor spaces with Silca System.

Designed for residential and commercial applications, Silca provides a secure base with proven structural and wind uplift performance, enabling level entry through threshold and support for a wide range of finished surfaces.

In this use case - Silca Grates are mechanically fixed directly to the proprietary aluminium framing system using stainless steel self-drilling WingTek screws, creating a secure, free-draining platform that maintains ventilation beneath the deck and supports long-term structural integrity.



Pool Decks FREE DRAINING + NON-SLIP

Ideal for both in-ground and above-ground pools, the Silca System enables construction of durable, free-draining pool surrounds that perform under constant exposure to moisture and heavy foot traffic. Create resort-style, low-maintenance patios finished in natural stone or porcelain tiles, delivering long-term durability, slip resistance, and architectural appeal to improve the value of your project.



Elevated or Raised Decks GAME CHANGER

Transform sloping sites or upper-level living areas into robust, functional outdoor spaces with the Silca System. Ideal where ground-level slabs or traditional decking methods are impractical, Silca provides a structurally compliant, architectural solution for tiles, pavers, or stone finishes, delivering a durable, modern alternative.



Silca Grates
The key element to the Patented Silca System is the Grate. This is the 400x450x38mm structural component that screws direct to the timber or aluminium deck frame and provides the solid flat surface on which to lay almost any kind of paving.
(5.5 per sqm)
Features:
a) strengthening ribs and hex cells to spread and transfer load across the decking element and down onto the joist.
b) pre-formed countersunk holes designed to guide the screws into the joist at the correct position.
c) a second row of fixing so grates can be uniformly trimmed to slot in between joists should more height clearance be required.
d) free draining design for minimum moisture retention and maximum airflow.
e) micro flex to absorb any movement within the decking element and reduce risk of any tile or grout disturbance
f) UV stable
g) manufactured from 100% recycled materials. Green Building Product



Silca Connectors
Lock Connectors specifically designed for use with the Grates.
(3.3 per grate)
These interlock each Silca Grate to the next on all four sides. X2 Connectors per side and greatly increase rigidity and consistency across the system, resulting in an incredibly strong, continuous decking element.
They also provide some added spot adhesion points for during tile install.



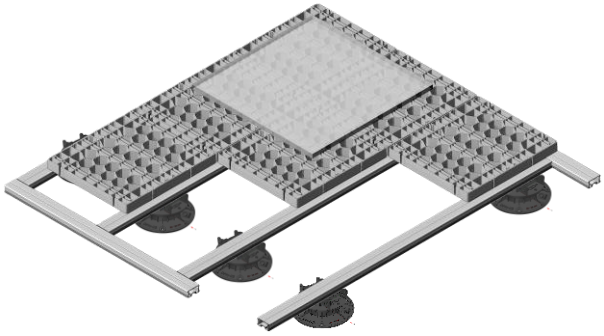
Aluminium Frame
EconoSpan™ & SuperSpan™ & SuperSpan Plus aluminium joist systems provide the structural framework for elevated paving assemblies where rigidity, durability and span performance influence the preferred structural methodology.
EconoSpan and SuperSpan integrate with Buzon adjustable pedestal and Silca System Support Grates to create stable structural assemblies for high use residential and commercial applications.

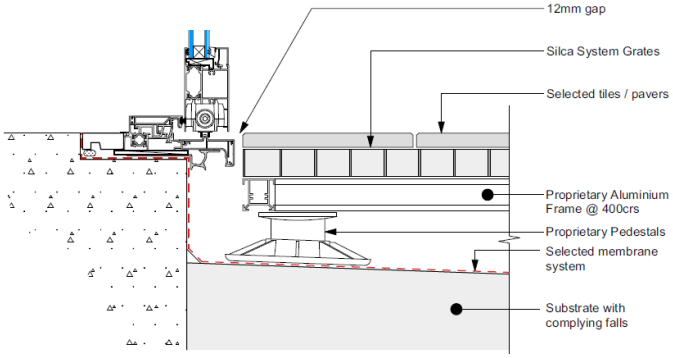


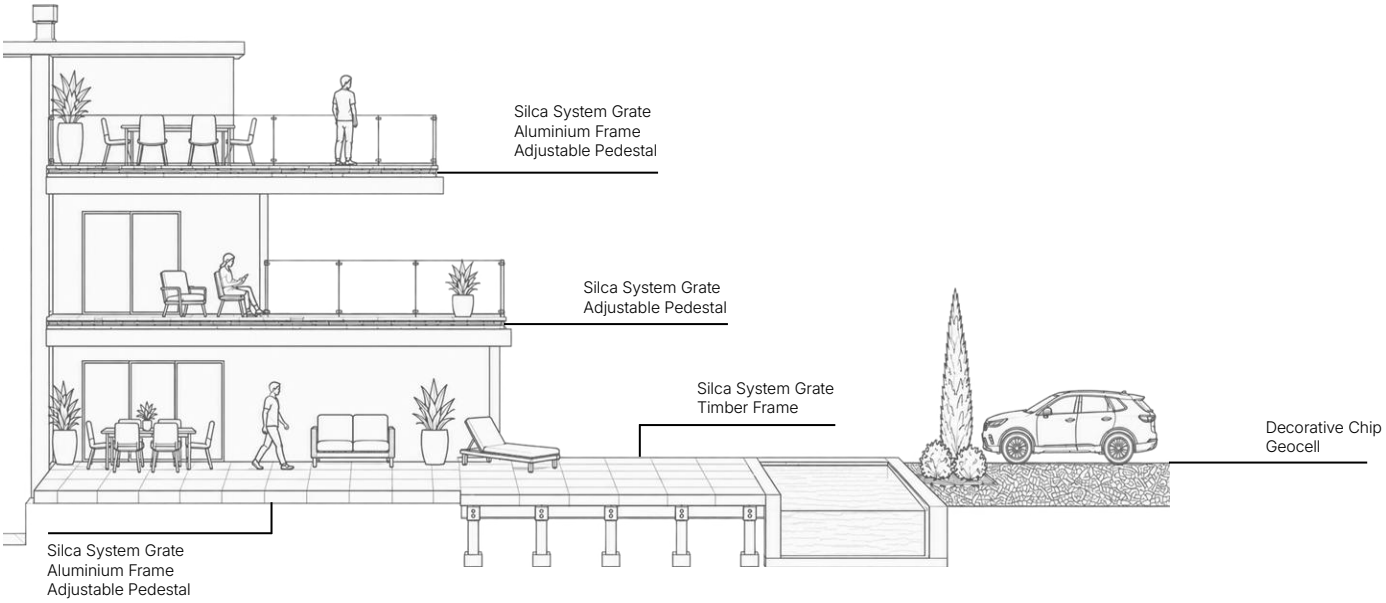
Adjustable Pedestals
Buzon® adjustable pedestals provide precision height adjustment for elevated paving systems constructed above waterproof membrane. The modular pedestal range supports both direct paving on Silca Grate assemblies and aluminium joist systems while maintaining access beneath the finished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



Screw Fixings Aluminium
Stainless Steel self-drilling WingTek screws for fixing the grates to the aluminium joists.
(x6 Screws per Grate)
Designed to seat perfectly into the predesignated, countersunk holes at the edges of the Silca Grates. No pre-drilling required.







APPLICATIONS

ROOFTOPS & PODIUM OVER MEMBRANE

Create usable outdoor spaces over waterproof membrane — rooftops, terraces, balcony, podium level.

ELEVATED DECKS OVER SLAB

Extend living over existing slab with an elevated structure – level entry through threshold – multiple surface finish options.

NATURAL STONE & PAVERS

Accommodate non-structural stone finishes including granite, limestone, travertine, natural stone and heavy-format pavers.

PORCELAIN TILE

Large-format porcelain to achieve contemporary architectural finishes across elevated outdoor areas - ideal for hard use areas.

ARTIFICIAL TURF

Support artificial turf applications with a stable, free-draining elevated system — ideal for low-maintenance outdoor spaces.

HYBRID APPLICATIONS

Combine different surface finishes within a single project — creating varied outdoor spaces without changing the underlying system.

Contact Silca System NZ

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