

PRODUCT INTRODUCTION

vitrastone

NATURAL STONE CLADDING SYSTEM / MANUFACTURED BY FAIRVIEW



ABOUT VITRASTONE

Vitrastone is a natural stone composite panel comprising of a stone veneer on an aluminium honeycomb substrate with aviation grade epoxies. This lightweight option offers increased stability and flexibility compared to solid stone, with the same natural stone appeal.

The fabricated wall cladding system is available in large panel sizes that can be simply installed through mechanical fixing or glazing systems. Vitrastone composite panels are available in a large range of natural finishes and textures that are highly weatherproof and suitable for high impact areas, ideal for interior and exterior use.

KEY FEATURES



LIGHTWEIGHT

Vitrastone is only 1/5 of the weight of its equivalent in dimensional stone. This means that the product is much easier to handle and to ship, and entire wall framing can be substantially reduced.



SIMPLE INSTALLATION

Vitrastone offers far improved attachment over traditional solid stone. The solid stone anchoring system exposes the weakest properties of the stone, whereas the fixing systems offered with Vitrastone are rapid and align with common systems already used in Australia.



FLEXIBILITY

Vitrastone panels, using stone as a veneer over the honeycomb core are much more flexible than dimensional stone. As a result the panels are much less prone to fracturing and cracking and better able to withstand building movement and extreme weather events.



DIMENSIONAL STABILITY The thin stone found on Vitrastone panels lacks the torsional force of the thicker dimensional stone. This means the lightweight Vitrastone system doesn't experience the stability failure that occurs in dimensional stone





FINISH OPTIONS

Fairview offer a wide range of igneous and non-igneous stone in the Vitrastone panels. When used for exterior applications, the stone can accommodate custom finishes and patterns, taking advantage of the different textures that can be present. There are various combinations of three dimensional patterns and carvings available, as well as traditional polished, honed, sandblasted, and other custom textures to make a custom facade feature.

Below is a selection of commonly chosen colours. If you have any particular finish or colouring in mind, please contact our sales team to discuss further.



Please note stone is a natural product. As a result, no two pieces are identical and may vary in markings, colour and texture. In some stones it is common to find spots, fossils or shelly formations, pit holes, open texture streaks, iron spots, and grain formation changes.





MANUFACTURING QUALITY

A dedication to the total fulfillment of our client's and customer's expectations is reflected by a complete quality control system, beginning at the point of specification and continuing through to delivery of the guaranteed products. All activities are carried out in a manner which:

- Uses the framework of ISO9000 Quality Standards to verify the quality of our systems
- Ensures that our products and services are of the highest standards
- Creates continuous improvements to our product through the application of the best quality practices.

WARRANTY

The standard warranty is 10 years.



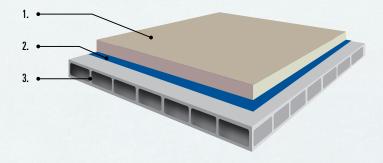


NATURAL STONE CLADDING SYSTEM / MANUFACTURED BY FAIRVIEW

TYPICAL COMPOSITION

- 1. Natural Stone
- 2. Aviation Grade Epoxy
- 3. Vitracore Honeycomb Substrate

This combination results in a high impact strength, high flexural strength, lighter weight and easier to install panel.



SKIN & CORE

Face Skin - 6mm Natural Stone Core - 15mm Vitracore Honeycomb Panel

DIMENSIONS

STANDARD PANEL DIMENSION

Panels up to 3000mm x 1200mm are available depending on type of stone

WEIGHT

THICKNESS	WEIGHT (kg/m²)	
21mm	23 (approx – depending on stone type)	



TECHNICAL DATA

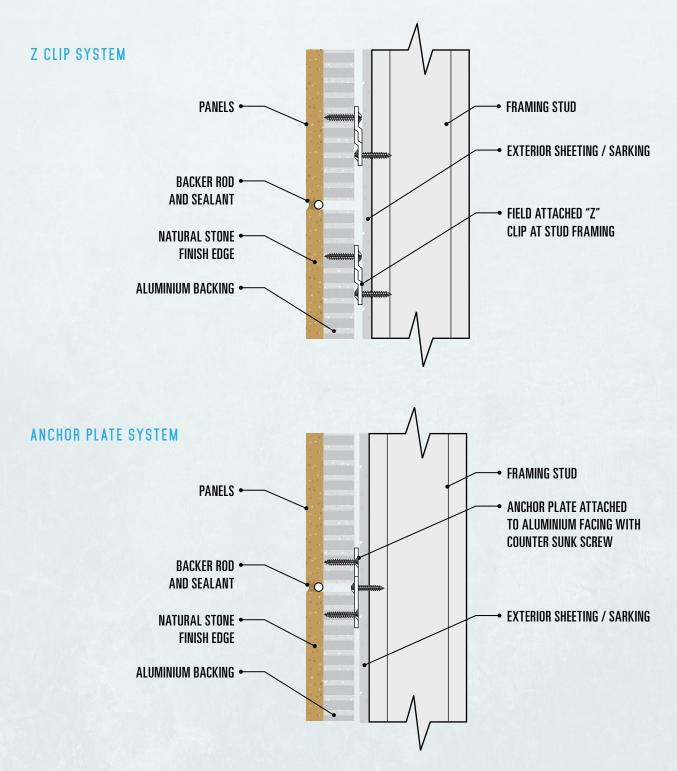
NO.	ITEM	STANDARD	TESTED VALUE
1	Flat Bonding Strength	Average ≥ 1.0 MPa; Minimum ≥ 0.6 MPa	Average 1.31 MPa; Minimum 0.88 MPa
2	Flat Tensile Strength	≥ 0.8 MPa	0.91 MPa
3	Flat Tensile Modulus	≥ 30 MPa	70.7 MPa
4	Flat Shearing Strength	≥ 0.5 MPa	0.54 MPa
5	Flat Shearing Modulus	≥ 4.0 MPa	6.43 MPa
6	Bending Strength	≥ 8.0 MPa	41.0 MPa
7	Bending Rigidity	≥ 1.0 x 10 ⁹ N.mm ²	2.86 x 10 ⁹ N.mm ²
8	Shearing Rigidity	≥ 1.0 x 10 ⁵ N	4.40 x 10⁵ N
9	Climbing Drum Peel Strength	Average ≥ 50N.mm/mm; Minimum ≥ 40N.mm/mm	Average 9.1N.mm/mm; Minimum 42.4NN.mm/mm
10	Fasten Fitter Loading Capacity	≥ 3.2 kN	3.2 kN
11	Thermal Resistance	N/A	0.016m^2.K/W





FIXING SYSTEM

Below are typical details of the two most common installation systems











DEFINING ARCHITECTURE SINCE 1963

