

**VALMOND
& GIBSON**

FACADE SYSTEMS

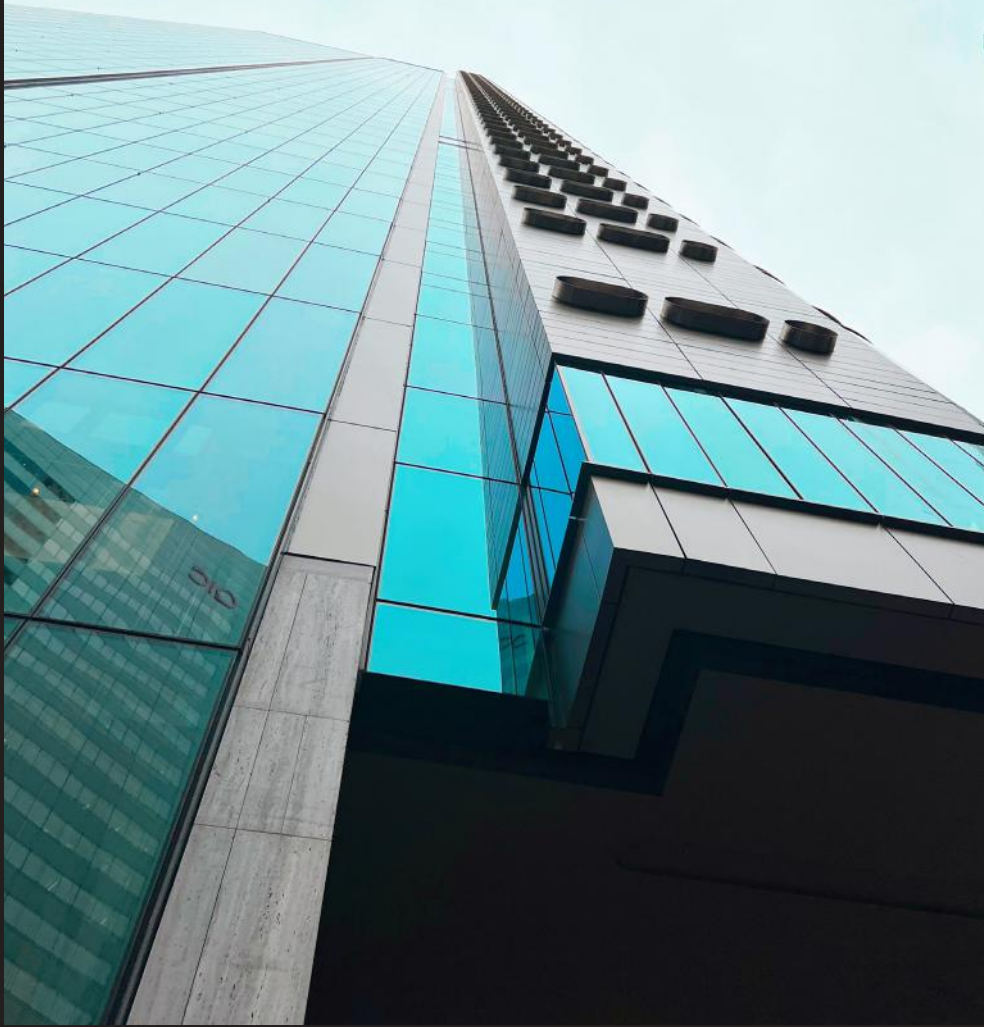
element **13**

Product Introduction

non-combustible • pre-finished • solid aluminium panels



111 Eagle Reclad, Brisbane QLD



FIFE Industrial, Ingleb...



- Code Compliant**
- Non-Combustible**
- Enduring Style**
- Recyclable**
- Durable**
- Versatile**
- Easy Installation**



element **13**

VALMOND & GIBSON

FACADE SYSTEMS

Specialists in
compliant, durable
and functional
façades

valmondgibson.com



20 year warranty



CODEMARK[®]
Australia

Certificate CM20315



Manufactured under
ISO-9001:2015
quality management
systems



**Certified non-
combustible material**

CSIRO tested to AS1530.1

Colour

Metallic shimmer, contemporary matte or a high gloss finish, element13® can accommodate all in a variety of colours. Special surface effects can also be applied such as wood grain. Custom colour matching can be requested for larger project orders.

Solid - Stock Range *(no MOQ)*


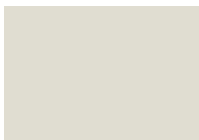






Metallic - Stock Range *(no MOQ)*



The colours on this printed brochure are a guide only. For accurate colour representation please refer to our physical samples.

Solid - Non Stock Range *(MOQ's apply)*

| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| PEARL (G) 1006 | ICE 1003 | IVORY 1004 | CREME 1007 | SAND 1005 |
|  |  |  |  |  |
| ARABICA 2008 | LEAD 2007 | GRAPHITE 1030 | SLATE 2002 | MONUMENT 2001 |
|  |  |  |  |  |
| SAGE 1029 | EMERALD 1024 | COBALT 1026 | RUBY 1022 | MERLOT 9027 |

Metallic - Non Stock Range *(MOQ's apply)*

| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| TIN 3012 | TITANIUM 3011 | IODINE 3013 | ONYX 3010 | JADE 3015 |
|  |  |  |  |  |
| BRONZE 3008 | BRASS 3014 | JASPER 3006 | GOLD 3004 | COPPER 3009 |

Bright - Non Stock Range *(MOQ's apply. Warranties subject to project assessment.)*

| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| ROSE 1021 | PERIDOT 1023 | SAPPHIRE 1025 | SULFUR 1027 | SOLIS 1028 |

The colours on this printed brochure are a guide only. For accurate colour representation please refer to our physical samples.

Colour

Metallic shimmer, contemporary matte or a high gloss finish, element13® can accommodate all in a variety of colours. Special surface effects can also be applied such as wood grain. Custom colour matching can be requested for larger project orders.



Woodgrain- Non Stock Range *(MOQ's apply)*



TAEDA 4001



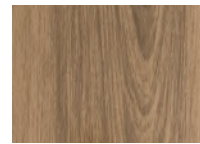
BURMA 4002



BEECH 4003



HICKORY 4004



CHESTNUT 4005



BLOODWOOD 4006

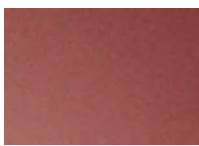
Imitation- Non Stock Range *(MOQ's apply)*



LAVA 5002



JEWEL 5003



BRONZITE 9034



ASH 5004

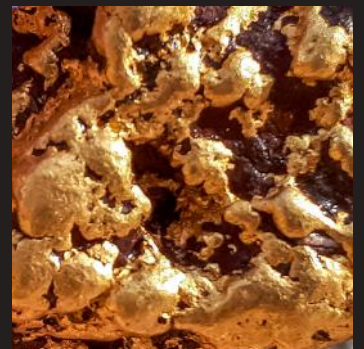


ZINC 5005



RUST 5006

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Product specifications

Dimensions

Standard dimensions (Custom sizes are available on large order requests)

| WIDTH (mm) | LENGTH (mm) | THICKNESS (mm) |
|-------------|-------------|----------------|
| 1250 / 1500 | 3200 | 3 |
| 1250 / 1500 | 4000 | 3 |

Material Weight

| THICKNESS | WEIGHT (kg/m ²) |
|-----------|-----------------------------|
| 3mm | 8.13 |



element13

Technical Data

| | PROPERTIES | UNITS | VALUES |
|------------|-----------------------------|-------------------|-------------------------|
| Physical | Alloy | | 5052 |
| | Temper | | H32 |
| | Material base thickness | mm | 3 ± 0.18 |
| | Raw density | kg/m ³ | 2680 |
| | Coating thickness | micron (μm) | 30.5~38.0 |
| | Painted weight | kg/m ² | 8.13 |
| Mechanical | Hardness, Brinell | HB | 60 |
| | Tensile strength (Ultimate) | MPa | 215~265 |
| | Tensile strength (Yield) | MPa | 160min. |
| | Modulus of elasticity | GPa | 70.3 |
| | Elongation | % | 16 |
| Thermal | Linear thermal expansion | μm/m-K | 2.4 |
| | Melting range | °C | 607-649 |
| | Thermal conductivity | W/m-K | 138 |
| Electrical | Electrical resistivity | ohm(Ω).m | 0.0499x10 ⁻⁶ |
| Acoustic | Acoustic insulation | Rw | 27 |

Testing and assessments

Fire Safety

| TEST STANDARD | TESTING AUTHORITY | TEST REPORT NO. | RESULT | | | | | | | | |
|---|-------------------------|-----------------|---|---------------------------|---|---------------------------|---|------------------------------|---|------------------------------|---|
| AS1530.1: 1994 NCC Vol 1. Specification C1.8 Clause 5(a) Combustibility test for materials | CSIRO | FNC12545 | Non-combustible | | | | | | | | |
| AS1530.3: 1999 NCC Vol 1. Specification C1.8 Clause 5(a) Test for ignitability, flame propagation, heat and smoke release | CSIRO | FNE12552 | <table border="1"> <tr> <td>Ignitability index (0-20)</td> <td>0</td> </tr> <tr> <td>Heat evolved index (0-10)</td> <td>0</td> </tr> <tr> <td>Spread of flame index (0-10)</td> <td>0</td> </tr> <tr> <td>Smoke developed index (0-10)</td> <td>1</td> </tr> </table> | Ignitability index (0-20) | 0 | Heat evolved index (0-10) | 0 | Spread of flame index (0-10) | 0 | Smoke developed index (0-10) | 1 |
| Ignitability index (0-20) | 0 | | | | | | | | | | |
| Heat evolved index (0-10) | 0 | | | | | | | | | | |
| Spread of flame index (0-10) | 0 | | | | | | | | | | |
| Smoke developed index (0-10) | 1 | | | | | | | | | | |
| Resistance to impact NCC Vol 1. Specification C1.8 Clause 5(c) ASTM E695-03 | Ian Bennie & Associates | 2021-083_2 | Pass to C1.8 Clause 3.1(b)(iii) | | | | | | | | |
| Resistance to surface indentation NCC Vol 1. Specification C1.8 Clause 5(d) | Ian Bennie & Associates | 2021-083 | Pass - Immesurable | | | | | | | | |



Weather Proofing

| TEST STANDARD | TESTING AUTHORITY | TEST REPORT NO. | RESULT |
|---|----------------------------|-----------------|-------------|
| AS/NZS 4284:2008 NCC Vol 1. FV1.1 & NCC Vol 2. V2.2.1 Weather performance test | Ian Bennie & Associates | 2022-031-S2 | ±1500Pa SLS |

Structural Performance

| TEST STANDARD | TESTING AUTHORITY | TEST REPORT NO. | RESULT |
|--|----------------------------|-----------------|--|
| AS1562.1: 2008 Part 5.5.1 Resistance to wind pressures - servicability test #1 | Ian Bennie & Associates | 2022-002-S1 | Refer to wind load tables Section 5.2 |
| AS1562.1: 2008 Part 5.5.1 Resistance to wind pressures - serviceability test #2 | Ian Bennie & Associates | 2022-002-S2 | Refer to wind load tables Section 5.2 |

Material Performance

| TEST STANDARD | TESTING AUTHORITY | TEST REPORT NO. | RESULT |
|---|-------------------------------|------------------|----------------------------|
| AAMA 2605:2020 Performance requirements for superior organic coatings | Intertek - Shanghai | 210203002SHF-001 | Sample meets specification |
| ANSI FM 4473 Hail impact resistance test | Ian Bennie & Associates | 2020-090_S1-2 | Sample meets specification |
| AS 1734:1997 Material identification test | MECHTEST - Archerfield QLD | RB21-5523-01 | Sample meets specification |
| AS 1391:2020 Material tensile test | MECHTEST - Archerfield QLD | RB21-5523-01 | Sample meets specification |
| AS 1734:1997 Material identification test | LMATS | LS20-2252-01_MA | Sample meets specification |
| AS 1391:2020 Material tensile test | LMATS | LW21-0151_MI | Sample meets specification |

Product quality and tolerances

Each Valmond & Gibson product is made from the highest quality raw materials and are put through a rigorous auditing process that ensures we consistently deliver an unprecedented level of quality, durability and reliability.

Tolerances

The below tolerances are based on 3mm coil sheet

| ASPECT | SPECIFIED WIDTH (mm) | SPECIFIED LENGTH (mm) | TOLERANCE |
|-----------------|--|-----------------------|-----------|
| WIDTH | >1200 & ≤1500 | - | ± 2.0mm |
| | - | >3000 & ≤3600 | ± 4.0mm |
| LENGTH | - | >3600 & ≤4500 | ± 4.0mm |
| | >1200 & ≤1500 | - | ± 0.18mm |
| THICKNESS | >1200 & ≤1500 | - | ± 0.18mm |
| * BOW | >300 | * 1800 | 5.0mm |
| ** SQUARENESS | >1200 & ≤1500 | ≤3600 | 11.0mm |
| | >1200 & ≤1500 | >3600 | 14.0mm |
| SURFACE DEFECTS | The surface shall be free from defects such as dents, scratches and contaminants effecting it's processing and end use | | |

* Measured 1800mm from a straight side edge

** Allowable difference between diagonals

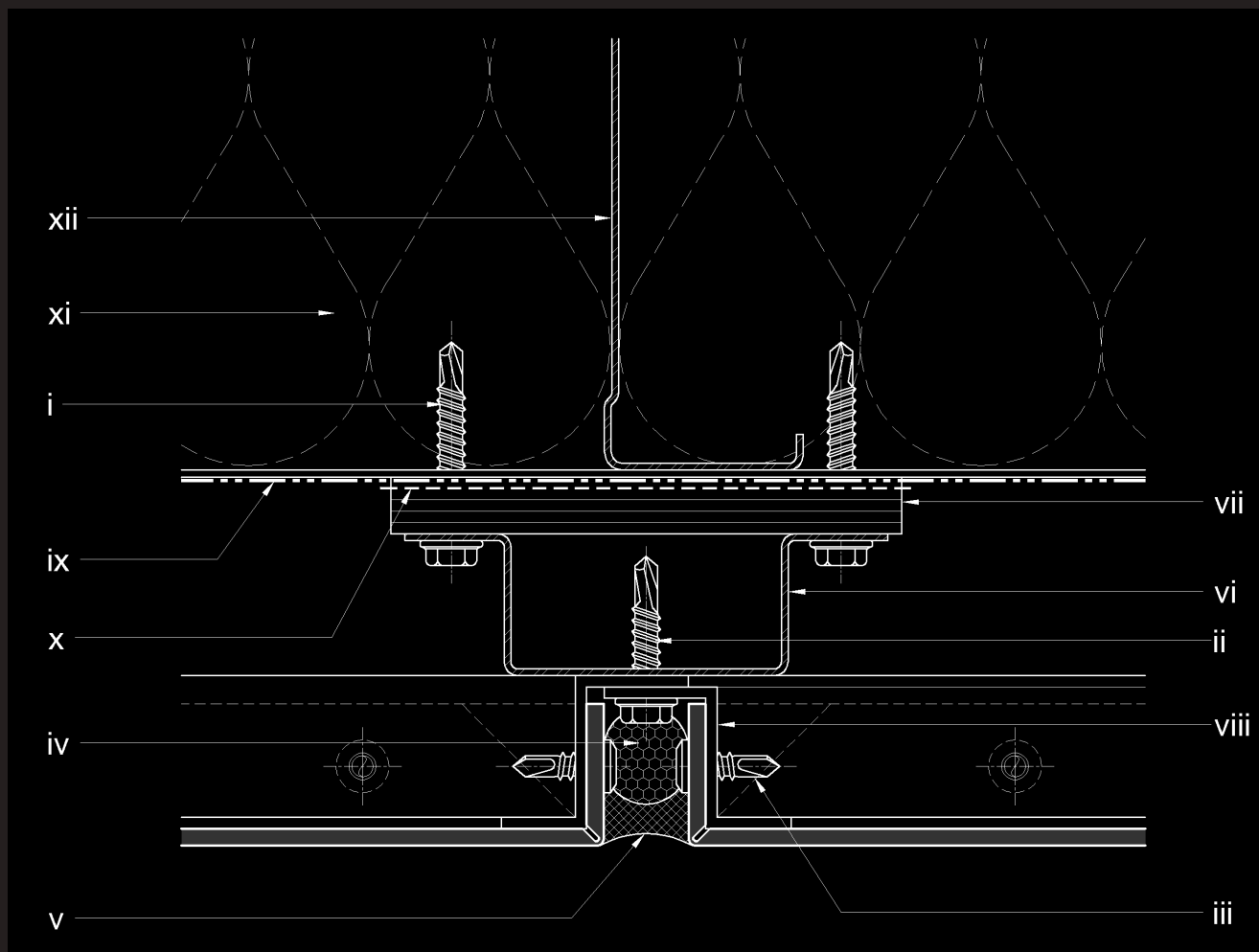
Coating specifications

DURANAR PVDF – in compliance with AAMA 2605:2020

| COATING PROPERTIES | TEST STANDARD | COMPLIANCE |
|------------------------------|---|--|
| Dry Film Thickness (nominal) | ASTM D1400 | 0.20-0.30 mil primer 0.70-0.80 mil color/metallic 0.30-0.40 mil clear topcoat |
| Gloss | ASTM D523 | Standard @ 60°: 25 – 35 DURANAR LG @ 85°: <10 |
| Pencil Hardness | ASTM D3363 | F-2H |
| Flexibility | T-bend, ASTM D4145 | 0-2 T-bend; No pick-off |
| Adhesion | ASTM D3359 Reverse impact 1/16" crosshatch | No adhesion loss |
| Reverse Impact | ASTM D2794 | 1.5 x metal thickness (aluminum): No cracking or adhesion loss |
| Acid Resistance | ASTM D1308 | 10% muriatic acid – 24 hrs.: No effect 20% sulfuric acid – 18 hrs.: No effect |
| Acid Rain Test | Kesternich SO ₂ , DIN 50018 | 15 cycles min.: No objectionable color change |
| Alkali Resistance | ASTM D1308 | 10%, 25% NaOH, 1 hr.: No effect |
| Salt Spray Resistance | ASTM B117 | 5% salt fog @ 95°F: Passes 4000 hrs. Less than 1/16" avg. creepage from scribe; None or few #8 blisters |
| Humidity Resistance | ASTM D714 ASTM D2247 | 100% relative humidity @ 95°F: Passes 4000 hrs. No #8 blisters |
| Exterior Exposure | ASTM D2244 ASTM D4214 | 10 yrs. @ 45°, South Florida: Max. 5 fade, Max. 8 chalk |

System Hardware

The following hardware items are the minimum expected materials and performance levels in order to comply with the Valmond & Gibson element13 Cladding System as tested in section 3.0 of the element13 technical manual. It is our expectation that any substitution to the following is of equal or greater performance.



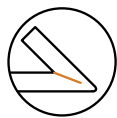
- | | |
|--|---|
| <p>i. 12G x 35mm class 4 hex head tek screws to intersecting stud framing & @ 600mm ctrs</p> <p>ii. 12G x 25mm class 4 hex head tek screws @ 600mm ctrs</p> <p>iii. 10G x 16mm class 4 wafer head tek screws @ 200mm ctrs to perimeter of panel</p> <p>iv. Open cell backing rod</p> <p>v. Neutral cure silicone weatherseal</p> <p>vi. Galvanised top hat battens nominal 25 x 50 x 1.15mm BMT @ maximum 600mm ctrs</p> | <p>vii. Solid packing</p> <p>viii. Continuous aluminium Z-section cassette frame fully bonded and mechanically fixed to perimeter of panel</p> <p>ix. Compliant high performance vapour permeable membrane</p> <p>x. Compliant self sealing tape strip</p> <p>xi. Non combustible insulation to meet project thermal specification</p> <p>xii. Galvanised steel stud framing to meet project wind loading</p> |
|--|---|



Assembly



element13® can be roll bent to create curved panels. Ensure rollers are clean and free of imperfections. The minimum bending radius must be no more than 15 times the material thickness.



element13® can be hand folded along the V-groove routed fold lines using a portable folding tool. Large format panels may require the aid of a sheet metal folding machine. Best results are achieved by folding element13® in one movement with the fold angle slightly greater than the angle required.



element13® can be fixed with rivets or screws depending on the required specifications. Select the fixings' material to suit the application and consider thermal expansion and building movement.





VALMOND & GIBSON

FACADE SYSTEMS

For information about
Valmond & Gibson contact:
sales@valmondgibson.com
1300 097 999

Disclaimer

While the information provided concerning Valmond & Gibson products is accurate according to the tests and measures available to us, the details shared in this document are general in nature and do not constitute project-specific building, construction, or fire-safety advice. Before acting on any information within this document, you should assess its suitability in relation to your project's specific parameters and requirements. Valmond & Gibson products are considered suitable or compliant only after approval from building and construction professionals associated with the relevant projects and developments. For further insight on this topic, please contact Valmond & Gibson at 1800 007 175 or email sales@valmondgibson.com. We're here to assist with any questions or concerns.

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Or visit valmondgibson.com where you'll find resources detailing:

- Architectural details
- Finishing options and colour selections
- Valmond & Gibson technical data
- Product brochure downloads
- Machining & installation guides
- Specifiers kit
- Warranty information
- Contact information

All colours represented in all imagery have been reproduced as a guide only.

For precise colour representation please refer to physical product samples.

You can order Valmond & Gibson samples online at valmondgibson.com

This brochure has been designed and printed in Australia.

element
VALMOND GIBSON
NON-COMBUSTIBLE SOLID ALUMINIUM PANEL
AS DEFINED IN THE NCC
1300 097 999
TESTED TO AS1530.1 & AS1530.3
ISO-9001 CERTIFIED



ATTENTION
HANDLE PRODUCT CAREFULLY WHILE TRANSPORTING AND INSTALLING AS SHARP EDGES
CAN DAMAGE THE SURFACE FINISH THROUGH THE PROTECTIVE FILM.
INSTALL THE PANELS ACCORDING TO THE DIRECTION OF THE ARROWS SHOWN TO ENSURE
A UNIFORM SURFACE APPEARANCE.
FOR OPTIMUM RESULTS REMOVE THIS PROTECTIVE FILM WITHIN 45 DAYS OF INSTALLATION.
WHEN FABRICATING AND INSTALLING ALWAYS FOLLOW THE ELEMENTS FABRICATION AND
INSTALLATION GUIDE ISSUED BY VALMOND & GIBSON.



element **13**
