

### PANEL DESCRIPTION / COMPOSITION

CEMINTEL TERRITORY™ PANELS ARE CEMENT BONDED FIBROUS WOOD PARTICLE CLADDING PRODUCTS THAT ARE PRESSED WITH SURFACE TEXTURE AND PREFINISHED USING A DURABLE MULTI-LAYER PAINT PROCESS TO ACHIEVE A RANGE OF TEXTURES, FINISHES AND DESIGNS. THE LONG HORIZONTAL EDGE OF THE PANEL IS MACHINED WITH A COMPLEMENTARY TONGUE AND GROOVE PROFILE AND A COMPRESSIBLE SEALING STRIP IS BONDED ONTO THE TONGUE WHICH ENABLES THE PANELS TO FIT NEATLY TOGETHER TO FORM A WEATHER RESISTANT JOINT.

# TERRITORY™

Cemintel Territory panels are manufactured in Japan to the Japanese Industrial Standard JIS A 5422 (fibre reinforced cement sidings) and are classified as a Type A, Grade 2 (fibre cement) sheet in accordance with ASTM C1186.

| APPLICATIONS               |  |
|----------------------------|--|
|                            | Result   |
| Applications               | Façades & Cladding, Internal Linings   |
| Type of Building Structure | Residential Housing Buildings within the scope of AS4055, Commercial & Other |
| Wet Areas                  | No   |

| PANEL - DIMENSIONAL & GEOMETRICAL CHARACTERISTICS |   |                            |                      |
|---|---|----------------------------|----------------------|
| Dimensional/<br>Geometrical Characteristic        | Specification   | Manufacturing<br>Tolerance | Relevant<br>Standard |
| Panel Width                                       | 455mm (effective cover)   470mm (overall width)   | +/- 1mm                    | JIS A 5422           |
| Panel Length                                      | 3030mm  | +/- 1mm                    | JIS A 5422           |
| Panel Thickness                                   | 16mm  | +/- 1.2mm                  | JIS A 5422           |
| Profile   | Tongue & Groove   |                            |                      |
| Perpendicularity/squareness of edges              |   |                            |                      |
| Weight (typical)                                  | 17.9 - 21.8kg/m <sup>2</sup> Based on dry weight. 24.6kg to 30kg per sheet (or 17.9 to 21.8kg per m <sup>2</sup> ) depending on sheet design (NB 2 x panels per pack) |                            |                      |
| Layout Options                                    | Horizontal, Vertical (NB not all panels have matching preformed vertical corners - check Design and Installation Guide for details)                                   |                            |                      |
| Jointing  | Concealed   |                            |                      |

| PANEL - OTHER DURABILITY / WEATHER RESISTANCE INDICATORS |                    |                   |
|--|--------------------|-------------------|
| Test   | Result             | Relevant Standard |
| Heat Rain  | PASSED (25 Cycles) | ASTM C 1186       |
| Freeze Thaw  | PASSED (50 Cycles) | ASTM C 1186       |
| Warm Water Resistance                                    | PASSED (56 days)   | ASTM C 1186       |
| Soak Dry   | PASSED (50 cycles) | EN 12467          |

PANEL STRENGTH & MOISTURE RELATED PROPERTIES

| Physical Property                    | Result                          | Relevant Standard |
|--------------------------------------|---------------------------------|-------------------|
| Modulus of Rupture (Wet)             | >7MPa                           | ASTM C 1186       |
| Modulus of Elasticity (Wet)          | 2.2 to 3.35GPa                  | EN 12467          |
| Density (Oven Dry)                   | 1191kg/m <sup>3</sup> (Average) | ASTM C 1186       |
| Water Vapor Diffusion                |                                 |                   |
| Water Tightness (24hrs)              | No water droplet                | ASTM C 1186       |
| Water Absorption (Saturated - 48hrs) | 13.9% (Average)                 | ASTM C 1186       |
| Moisture Content (EMC)               | 7-9%                            | ASTM C 1186       |
| Moisture Movement                    | 0.07% (Average)                 | ASTM C 1186       |

NB/ The above test results relate to coated panels unless otherwise specified (ie edges are sealed for testing to reflect the characteristic of sheets as delivered & in accordance with installation instructions) In-house testing as per ASTM C 1186.

PANEL - FIRE RESISTANCE, THERMAL & ACOUSTIC PROPERTIES

| Characteristic                            | Results  | Relevant Standard |
|---|--|-------------------|
| FIRE RESISTANCE                           |  |                   |
| Combustibility                            | Suitable for use in applications where non-combustible materials are specified by the Deemed to Satisfy Provisions of the 2016 BCA Vol 1 Amendment 1 Clause C1.9 (2015 BCA Vol Clause C1.12) |                   |
| Fire Hazard Properties                    | Group 1 Av Specific Extinction Area <250   | AS 5637.1         |
| Classification                            | 1  | AS/NZ 3837        |
| THERMAL CONDUCTIVITY                      |  |                   |
| Thermal Conductivity (λ-Factor)           | 0.26 W/mk (average)  | JIS A 1412        |
| Thermal Expansion Co-efficient            |  | N/A               |
| ACCOUSTIC VALUE                           |  |                   |
| Sound reduction (depends on construction) | N/A  | N/A               |

SYSTEM SOLUTIONS

| Characteristic  | Results   | Relevant Standard               |
|---|---|---------------------------------|
| Within Scope of AS4055?   | Yes   |                                 |
| Wind Loading - Residential housing buildings within the scope of AS4055 | N1, N2, N3, N4, N5 (horizontal), N6 (horizontal), C1, C2, C3 (horizontal), C4 (horizontal steel frame only)   |                                 |
| Weatherproofing   | When installed horizontally - has passed testing at a serviceability wind pressure of +3.72kPa and -3.72kPa, and an ultimate wind pressure of +6kPa and -6kPa. When installed vertically - has passed testing at a serviceability wind pressure of +1.6kPa and -2.2kPa, and an ultimate wind pressure of +2.6kPa and -3.3kPa. | AS 4284                         |
| Cyclonic Conditions   | Horizontal installation/ tested which passed at 4.5kPa (using long clip) and 2.7kPa (using short clip).   | AS 4040.3                       |
| Fire Resistance Limits (FRLs)   | Up to 90/90/90  | Refer to Gyprock® The Red Book™ |
| Bushfire Construction   | BAL 40 (Construction for Bushfire Attack Level 40 for an external wall)   | AS 1530.8.1                     |
| Acoustic  | Acoustic solutions of up to RW/RW+CTR 52/43 are detailed  | Refer to Gyprock® The Red Book™ |
| Thermal   | Thermal solutions of up to RT(sum)/RT(win) 2.8/3 are detailed   | Refer to Gyprock® The Red Book™ |

| PANEL - FINISH CHARACTERISTICS |   |                    |              |                   |
|--------------------------------|---|--------------------|--------------|-------------------|
| Characteristic                 | Results   |                    |              | Relevant Standard |
| Finish                         | Prefinished   |                    |              |                   |
| Coating Type                   | Nichiguard Coating - applied to all panels with the exception of Savanna Mist and Savanna Shade. Provides an anti-staining, self cleaning function. Silica particles in the coating attract water from the atmosphere to form a thin molecular film, so that airborne contaminants do not reach the panel surface itself. Rain water that runs down the wall washes contaminants away. (Platinum Coating) |                    |              |                   |
| Colour Bodied                  | No  |                    |              |                   |
| Paint Type                     | Silicon Acrylic Emulsion  |                    |              |                   |
| UV Resistance                  | N/A   |                    |              | N/A               |
| Formaldehyde Emission Rate     | Meets Green Building Council Office Design IEQ-14 Requirements for <0.1mg/m2/hr*<br>*Refers to results obtained for Woodlands Teak  |                    |              | ASTM D5116        |
| VOC Emission Rate              | Meets Green Building Council Office Design IEQ-14 Requirements for <0.5mg/m2/hr*<br>*Refers to results obtained for Woodlands Teak  |                    |              | ASTM D5116        |
| SPECTRAL REFLECTIVITY VALUES   | SOLAR REFLECTANCE %   | SOLAR ABSORPTION % | BASIX COLOUR | RELEVANT STANDARD |
| WOODLANDS Teak                 | 17.2  | 82.8 ±0.5          | Dark         | ASTME 903         |
| WOODLANDS Smoked               | 8.5   | 91.5 ±0.3          | Dark         | ASTME 903         |
| WOODLANDS Limed                | 51.5  | 48.5 ±1.5          | Light/Medium | ASTME 903         |
| WOODLANDS Ebony                | 7.7   | 92.3 ±0.6          | Dark         | ASTME 903         |
| WOODLANDS Birch                | 39.5  | 60.5 ±1.2          | Medium       | ASTME 903         |
| WOODLANDS Grey Gum             | 23.0  | 77.0 ±0.7          | Dark         | ASTME 903         |
| WOODLANDS Kwilla Slats         | 8.1   | 91.9 ±0.2          | Dark         | ASTME 903         |
| RIDGE Black                    | 5.1   | 94.9 ±0.2          | Dark         | ASTME 903         |
| RIDGE White                    | 52.9  | 47.1 ±1.6          | Light/Medium | ASTME 903         |
| QUARRY Urban Grey              | 36.7  | 63.3 ±1.9          | Medium       | ASTME 903         |
| QUARRY Concrete                | 35.6  | 64.4 ±1.1          | Medium       | ASTME 903         |
| BRICK Red Rustic               | 27.4  | 72.6 ±0.8          | Dark         | ASTME 903         |
| BRICK Grey Rustic              | 17.1  | 82.9 ±0.5          | Dark         | ASTME 903         |
| BRICK White Rustic             | 52.6  | 47.4 ±1.6          | Light/Medium | ASTME 903         |
| BRICK Black Modern             | 9.5   | 90.4 ±0.3          | Dark         | ASTME 903         |

| FIXING                       |               |
|------------------------------|---------------|
| Characteristic               | Results       |
| Maximum Span (Stud Spacing)  | Up to 600mm   |
| DIRECT FIX                   |               |
| Nail to Timber Frame         | No            |
| Screw to Timber Frame        | No            |
| Screw to Steel Frame         | No            |
| CAVITY FIX                   |               |
| Timber Frame                 | Yes           |
| Steel Frame                  | Yes           |
| Masonry Frame                | Yes           |
| EXPOSED FASTENERS            |               |
| Screw                        | Yes (limited) |
| Rivet                        | No            |
| Nail                         | Yes (limited) |
| CONCEALED FASTENERS          |               |
| Clip                         | Yes           |
| Countersunk Screw/Nail       | No            |
| Adhesive, Split Batten, etc. | No            |
| Hidden by Overlapping Panel  | No            |
| Flush Jointed (Taped)        | No            |

| WARRANTY |          |
|----------|----------|
| Warranty | 10 Years |