

## BUILDING PRODUCT INFORMATION SHEET—CLASS 2

### COMPANY NAME AND ADDRESS:

**Contour Roofing Nelson Limited, 41 Venice Place, Stoke, Nelson, 7011— Ph (03) 538 0824—NZBN 9429038730085**

**Contour Blenheim Limited, 35 Kinross Street, Blenheim, 7201— Ph (03) 577 7720—NZBN 9429031587600**

**Stratco (N.Z.) Limited, 55 Hands Road, Middleton, Christchurch, 8024—NZBN 9429040814629** (Ultimate holding Company)

**ADDRESS FOR SERVICE: Nexia Christchurch Limited, Level 4, 123 Victoria Street, Christchurch, 8013**

**WEBSITE: [www.contour.nz](http://www.contour.nz)**

**PRODUCT: Contour Window & Door Systems**



### DESCRIPTION

Contour Window & Door Systems are high quality, lightweight aluminium and uPVC systems that offer versatility and style, broadening the design options available to builders, designers and architects.

Contour fabricate a comprehensive range of contemporary residential, architectural, and commercial window & door systems that will enhance any building. With full technical support and excellent quality control systems to ensure a hassle free customer experience, our Team can assist with intelligent solutions to understand and meet your design criteria.

#### Contour aluminium window & door range:

Thermal Suite enhances the benefits of double glazing. Clever design in thermal break technology, reduces conductivity and significantly minimises the chance of condensation by reducing the transfer of heat or cold through the aluminium frame, in turn, requiring less energy to cool or warm the home.

Contour offer a retrofit service to update existing aluminium joinery. The range also includes insert joinery options for use with timber joinery, to update the appearance and reduce maintenance of your home. Upgrade to improve the thermal performance and noise transmission in your home through retrofit double glazing, or gain instant benefits of aluminium joinery by replacing your old timber joinery with new aluminium insert windows.

Contour Commercial joinery range includes curtain wall façades, architectural & thermal windows & doors to frameless glass entrances foyers. This extensive range is ideal for any commercial application, be it an office or retail complex, industrial buildings, and public sector facilities such as schools, civic buildings, and hospitals.

#### Contour uPVC window & door range:

This range takes thermal efficiency to another level. Using Starke Ambiance uPVC systems that are designed and manufactured in New Zealand, this system is 38% more thermally efficient than thermally broken aluminium joinery and exceeds the requirements of NZ Building Code H1. Because of its design and the way the system is installed, it will also reduce noise transmission resulting in a quieter interior environment.

Whether your project is focused on visual impact, energy efficiency utilising thermal frame options and thermally efficient glazing or seeking an economical solution, the Contour Team can guide you through the design & selection process, to provide the best solution.

### PLACE OF MANUFACTURE—WINDOW & DOOR SYSTEMS

- Nebulite—New Zealand
- Starke uPVC—New Zealand

### DESIGN CONSIDERATIONS

- **Contour aluminium Window & Door systems**
  - cover contemporary residential, architectural, and commercial joinery applications
  - suitable for retrofitting existing windows and doors
  - windows available in sliding, stacking, casement, awning and bifold options. Also available in custom options including curved or angled
  - doors available in hinged, sliding, stacking and bifold options
  - entrance door options to complement the look and style of any residence, that exceed required New Zealand standards, are durable and provide security
  - available in a wide range of finishes including metallic colours, solid colours, patterns and matte
  - glass options include tinted, patterned/opaque, for privacy and reduced glare, and acoustic
  - a range of hardware options and finishes to complement the colour and style of the joinery
  - design detail to be used to meet NZ Building Code, H1 requirements and tested in accordance with NZS4211:2008 and AS2047

## • Contour uPVC Window & Door systems

- primarily used for contemporary residential joinery
- 38% more thermally efficient than thermally broken aluminium joinery and exceeds the requirements of NZ Building Code H1
- reduce noise transmission resulting in a quieter interior environment.
- windows available in tilt & turn, sliding, stacking, casement, awning and bifold options. Also available raked/angled
- doors available in hinged, sliding, stacking and bifold options. Sliding and stacking door frames are generally deeper than aluminium—ensure all products detailed fit within the project wall thickness
- some limitations on door and window sizes. Minimum window size 600mm x 600mm. Maximum door heights 2640mm and width 1500mm—Refer [Product-Technical-Statement.pdf \(starke.co.nz\)](#)
- not recommended for custom configurations including roof glazing, curves or complex geometric shaped units
- standard colours White and Matt Black
- special colours to order only—may require significantly extended lead times. Contact Contour for available colours
- glass options include tinted, patterned/opaque, for privacy and reduced glare, and acoustic
- a range of hardware options and finishes to complement the colour and style of the joinery
- design detail to be used to meet NZ Building Code, H1 requirements and tested in accordance with NZS4211:2008 and AS2047  
Refer [Architects Portal - STÄRKE Windows & Doors \(starke.co.nz\)](#)

Contact the Contour Window & Door Systems Sales Team for further information or at [www.contour.nz/contact-us](http://www.contour.nz/contact-us)

## BUILDING CODE COMPLIANCE

### Contour aluminium window & door range:

The product will, if used in accordance with Contour Window & Doors installation and maintenance requirements, assist with meeting the following provisions of the building code:

- **Clause B1 Structure:** B1.3.1, B1.3.2, B1.3.3 (a, b, f, h, j), B1.3.4
- **Clause B2 Durability:** B2.3.1 (b), B2.3.2
- **Clause C4 Movement to a place of safety:** C4.3 and C4.5
- **Clause D1 Access Routes:** D1.3.1(b)
- **Clause E2 External Moisture:** E2.3.2, E2.3.7
- **Clause E3 Internal moisture:** E3.3.1
- **Clause F2 Hazardous building materials:** F2.3.1, F2.3.2, F2.3.3
- **Clause F4 Safety from falling:** F4.3.1, F4.3.4
- **Clause F9 Means of restricting access to residential pools:** F9.3.4
- **Clause G4 Ventilation:** G4.3.1, G4.3.3
- **Clause G7 Natural light:** G7.3.1, G7.3.2
- **Clause H1 Energy Efficiency:** H1.3.1, H1.3.2E, H1.3.3

Building Code Compliance, performance claims and applicable Standards are available in BPIR documents by Nebulite product through the following link:

[AltusBPIR](#)

### Contour uPVC window & door range:

The product will, if used in accordance with Contour Window & Doors installation and maintenance requirements, assist with meeting the following provisions of the building code:

- **Clause B1 Structure:** B1.3.1, B1.3.2, B1.3.3 (a, b, h, j), B1.3.4
- **Clause B2 Durability:** B2.3.1 (b). Hardware only B2.3.1 (c)
- **Clause E2 External Moisture:** E2.3.2, E2.3.7
- **Clause E3 Internal moisture:** E3.3.1
- **Clause F2 Hazardous building materials:** F2.3.1, F2.3.3
- **Clause F4 Safety from falling:** F4.3.1
- **Clause G4 Ventilation:** G4.3.1
- **Clause G7 Natural light:** G7.3.1, G7.3.2
- **Clause H1 Energy Efficiency:** H1.3.1, H1.3.2E

Building Code Compliance, performance claims and applicable Standards are available through the following link:

[Product-Technical-Statement.pdf \(starke.co.nz\)](#)

## CONTOUR WINDOW & DOOR SYSTEMS HARDWARE & ACCESSORIES

### Nebulite

Place of manufacture—New Zealand

### Starke

Place of manufacture—New Zealand

### Assa Abloy

Place of manufacture— New Zealand & Overseas—[Assa Abloy BPIR](#)

## Glass Suppliers

### Metro Performance Glass

Place of manufacture—New Zealand—[Metro Glass BPIR](#)

### Viridian Glass

Place of manufacture—New Zealand — [Viridian Knowledge Hub](#)

## INSTALLATION

Installation of Contour Window & Door Systems is undertaken by approved installers only.

## MAINTENANCE

### Contour Aluminium Window & Door systems

Maintain your aluminium windows and doors by washing them regularly. Coastal, geothermal and industrial locations - every 3 months. Rural and residential - twice a year. Use a mild detergent, warm water and a quality soft-bristled brush or cloth. Simply wash the entire frame with soapy water, rinse with clean water and dry to avoid streaking.

Never use solvent cleaners as they can damage the powder coating. Common solvents like petrol, acetates, thinners and Methyl Ethyl Ketone (MEK) are very damaging as are common household cleaners. Highly acidic, alkali and many common household solvent or alcohol based cleaners are also not recommended.

After first testing a non-visible area, remove paint or sealant splashes with a cloth soaked in methylated spirits. Spirit must be washed off immediately with soapy water after use. During construction, concrete and mortar splashes can damage the joinery so it should be protected and/or care taken during construction to avoid this.

It is important to note that sunscreens containing Zinc or Titanium oxides, will damage the powder coat surface of the joinery over time. It is recommended that the joinery which has come into contact with sunscreens, either during construction or in general, is cleaned immediately with soapy water and then rinsed clean.

The tracks and guides (either top and/or bottom) of sliding and bifolding units should be inspected and cleaned every 3-6 months to remove any debris and dirt. All seals, hinges, stays, rollers and other hardware should be checked annually for proper fit and operation, and to ensure all screws and fixings remain tight.

Interior surfaces should be regularly dusted or wiped with a sponge or soft cloth and warm water. Do not use harsh cleaners or detergents. Handles, catches, and similar hardware should be cleaned regularly with a sponge or soft cloth and warm water, mild detergent may be used for powdercoated or anodised components or use a proprietary cleaning product designed for the hardware finish material.

Glass surfaces may be cleaned with a sponge or soft cloth and warm water with mild detergent, or with proprietary glass cleaning products. Abrasive materials should not be used to clean or wipe glass, as this will cause damage to the glass surface.

### Contour uPVC Window & Door systems

Maintain uPVC windows and doors by washing them regularly using a mild detergent in water with a quality soft-bristled brush or cloth. Soiling due to dust and rain can be removed easily by this means. Do not use abrasives or chemicals as nitro diluents, benzene or similar agents for cleaning. In case of soiling that cannot be removed as described above, please contact the Contour Window & Door Team.

Despite all the care taken during installation, soiling like residues of mortar, wallpaper paste, adhesives etc. may occur. Residues of mortar and colour splatters can be removed with a semi-rigid putty knife by carefully scraping off the soiling. After that, wipe with a damp cloth. Take care not to scratch the surfaces with the small but sharp pebbles that are present in the mortar. Residual adhesives on the glass surface can be removed carefully with an inclined razor blade.

In order to ensure proper functioning of the hardware the following maintenance works should be done at least once a year:

- Check all hardware elements with security-related function frequently for wear.
- Lubricate all movable parts with a drop of oil and the locking points of the hardware elements with acid-free grease or industrial Vaseline.
- Use only cleansing agents and care products that do not affect the hardware's corrosion protection

## SECTION 26 OF THE BUILDING ACT

Contour Window & Door systems are not subject to any warnings or bans under Section 26 of the Building Act.

## ENVIRONMENT

Contour, through Stratco, has Toitu Enviromark Gold Certification plus, as approved partners with New Zealand Steel, Stratco and Contour are licensed to use the Eco Choice Aotearoa Label for products formed in Colorsteel®, Zinalume® and Galvsteel® as made by New Zealand Steel Ltd. Refer [Eco Choice Aotearoa](#)

Stratco sites recycle their steel and aluminium scrap/offcuts. Steel and aluminium are infinitely recyclable so at the end of its useful life they can be recycled and remelted for use in other steel/aluminium products.

uPVC is recyclable so at the end of its useful life the product can be recycled and is recycled for re-use in New Zealand.

## Appendix

As reference, this appendix contains the full descriptions of all building performance clauses listed in this document.

### B1 Structure

#### B1.3.1

*Buildings, building elements* and *sitework* shall have a low probability of rupturing, becoming unstable, losing equilibrium, or collapsing during *construction* or *alteration* and throughout their lives.

#### B1.3.2

*Buildings, building elements* and *sitework* shall have a low probability of causing loss of amenity through undue deformation, vibratory response, degradation, or other physical characteristics throughout their lives, or during *construction* or *alteration* when the *building* is in use.

#### B1.3.3

Account shall be taken of all physical conditions likely to affect the stability of *buildings, building elements* and *sitework*, including:

- (a) self-weight
- (b) imposed gravity loads arising from use
- (f) earthquake
- (h) wind
- (j) Impact

#### B1.3.4

Due allowances shall be made for:

- a. the consequences of failure,
- b. the intended use of the *building*,
- c. effects of uncertainties resulting from *construction* activities, or the sequence in which *construction* activities occur,
- d. variation in the properties of materials and the characteristics of the site, and
- e. accuracy limitations inherent in the methods used to predict the stability of *buildings*

### B2 Durability

#### B2.3.1

*Building elements* must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the *specified intended life* of the *building*, if stated, or:

(b) 15 years, if:

- i. those building elements (including floors, walls, and fixings) provide structural stability to the building, or
- ii. those building elements are difficult to access or replace, or
- iii. failure of those building elements to comply with the building code would go undetected during both normal use and maintenance of the building

(c) 5 years if:

- i. the *building elements* (including services, linings, renewable protective coatings, and *fixtures*) are easy to access and replace, and
- ii. failure of those *building elements* to comply with the *building code* would be easily detected during normal use of

#### B2.3.2

Individual building elements which are components of a building system and are difficult to access or replace must either:

- (a) all have the same durability
- (b) be installed in a manner that permits the replacement of building elements of lesser durability without removing building elements that have greater durability and are not specifically designed for removal and replacement

## C4 Movement to a place of safety

### C4.3

The *evacuation time* must allow occupants of a *building* to move to a *place of safety* in the event of a *fire* so that occupants are not exposed to any of the following:

- (a) *fractional effective dose* of carbon monoxide greater than 0.3:
- (b) a *fractional effective dose* of thermal effects greater than 0.3:
- (c) conditions where, due to smoke obscuration, visibility is less than 10 m except in rooms of less than 100 m<sup>2</sup> where visibility may fall to 5 m.

### C4.5

Means of escape to a *place of safety* in *buildings* must be designed and constructed with regard to the likelihood and consequence of failure of any *fire safety systems*.

## D1 Access Routes

### D1.3.1

*Access routes* shall enable people to:

## E2 External moisture

### E2.3.2

Roofs and exterior walls must prevent the penetration of water that could cause undue dampness, damage to *building elements*, or both.

### E2.3.7

*Building elements* must be constructed in a way that makes due allowance for the following:

- (a) the consequences of failure:
- (b) the effects of uncertainties resulting from *construction* or from the sequence in which different aspects of *construction* occur:
- (c) variation in the properties of materials and in the characteristics of the site.

## E3 Internal moisture

### E3.3.1

An *adequate* combination of *thermal resistance*, ventilation, and space temperature must be provided to all *habitable spaces*, bathrooms, laundries, and other spaces where moisture may be generated or may accumulate.

## F2 Hazardous building materials: F2.3.1, F2.3.2, F2.3.3

### F2.3.1

The quantities of gas, liquid, radiation or solid particles emitted by materials used in the *construction* of *buildings*, shall not give rise to harmful concentrations at the surface of the material where the material is exposed, or in the atmosphere of any space.

### F2.3.2

Transparent panels capable of being mistaken for an unimpeded path of travel shall be marked to make them visible.

Note: Does not apply to housing

### F2.3.3

Glass or other brittle materials with which people are likely to come into contact shall:

- (a) if broken on impact, break in a way which is unlikely to cause injury, or
- (b) resist a reasonably foreseeable impact without breaking, or
- (c) be protected from impact.



## Appendix

### F4 Safety from falling

#### F4.3.1

Where people could fall 1 metre or more from an opening in the external envelope or floor of a *building*, or from a sudden change of level within or associated with a *building*, a barrier shall be provided.

#### F4.3.4

Barriers shall:

- (a) be continuous and extend for the full extent of the hazard,
- (b) be of appropriate height,
- (c) be constructed with *adequate* rigidity,
- (d) be of *adequate* strength to withstand the foreseeable impact of people and, where appropriate, the static pressure of people pressing against them,
- (e) be constructed to prevent people from falling through them, and
- (f) *Revoked*
- (g) restrict the passage of children under 6 years of age when provided to guard a change of level in areas likely to be frequented by them.
- (h) be constructed so that they are not readily able to be used as seats.

### F9 Means of restricting access to residential pools

#### F9.3.4

Where a *building* forms all or part of an *immediate pool area* barrier:

- (a) doors between the *building* and the *immediate pool area* must not be able to be readily opened by children, and must either -
  - (i) emit an audible warning when a door is open; or
  - (ii) close automatically after use;
- (b) windows opening from a *building* into the *immediate pool area* must be constructed or positioned to restrict the passage of children.

### Clause G4 Ventilation:

#### G4.3.1

Spaces within *buildings* shall have means of ventilation with *outdoor air* that will provide an *adequate* number of air changes to maintain air purity.

#### G4.3.3

*Buildings* shall have a means of collecting or otherwise removing the following products from the spaces in which they are generated:

- (a) cooking fumes and odours,
- (b) moisture from laundering, utensil washing, bathing and showering,
- (c) odours from sanitary and waste storage spaces,
- (d) gaseous by-products and excessive moisture from commercial or industrial processes,
- (e) poisonous fumes and gases,
- (f) flammable fumes and gases,
- (g) airborne particles,
- (h) bacteria, viruses or other pathogens, or
- (i) products of combustion.

### Clause G7 Natural light:

#### G7.3.1

Natural light shall provide an *illuminance* of no less than 30 lux at floor level for 75% of the *standard year*.

#### G7.3.2

Openings to give awareness of the outside shall be transparent and provided in suitable locations.

## Appendix

### Clause H1 Energy Efficiency:

#### H1.3.1

The *building* envelope enclosing spaces where the temperature or humidity (or both) are modified must be constructed to—

- (a) provide *adequate thermal resistance*; and
- (b) limit uncontrollable airflow.

#### H1.3.2E

*Buildings* must be constructed to ensure that their *building performance index* does not exceed 1.55. (Performance H1.3.2E applies only to *housing*)

#### H1.3.3

Account must be taken of physical conditions likely to affect energy performance of *buildings*, including—

- (a) the thermal mass of *building elements*; and
- (b) the building orientation and shape; and
- (c) the airtightness of the building envelope; and
- (d) the heat gains from services, processes and occupants; and
- (e) the local climate; and
- (f) heat gains from solar radiation.