OMEGA® 400 Series Thermally Broken Joinery Building Product Information

Product name:

OMEGA® 400 Series Thermally Broken Joinery

Product line: (the product line from which the product is customised)

OMEGA® 400 Series Thermal Suite

Product description and intended use: (measurements, materials, usage)

- OMEGA® 400 Series Thermally Broken Joinery comprises a fully assembled thermally broken aluminium window and door joinery units.
- OMEGA® 400 Series Thermally Broken Joinery has been designed for, but is not limited to, use in timber-framed housing and residential apartments up to three storeys in height.
- OMEGA® 400 Series Thermally Broken Joinery is custom fabricated to the requirements of specific projects. Window and door units are glazed with insulated glass units (IGUs) that vary in performance and features to suit the individual thermal requirements of each project. OMEGA 400 Series Thermally Broken Joinery may include fixed or opening sashes and door panels. Opening sash options include: awning, casement and sliding types. Door systems include: hinged, bifold and sliding types.

Product identifier: (if applicable)

OMEGA® 400 Series Thermally Broken Joinery

Place of manufacture:

New Zealand

Legal and trading name of the manufacturer(s):

Fabricator company name

Legal and trading name of the importer: (if applicable)

N/A

Address for service:

Fabricator address

City, country, postcode

Website: (if applicable)

Fabricator website

Phone number: (if applicable)

Fabricator phone number

Email address:

Fabricator email address

NZBN: (if applicable)

Fabricator NZBN

Relevant Building Code clauses:

Relevant standards OMEGA® 400 Series Thermally Broken Joinery, and/or its component parts, are tested, fabricated and specified to comply with the following standards, as relevant to the project specifications:

- NZS 4211:2008 Specification for the performance of windows
- NZS 4223 Code of practice for glazing in buildings - Part 1:2008 Glass selection and glazing
- NZS 4223 Code of practice for glazing in buildings - Part 2:2016 Insulating glass units
- NZS 4223 Code of practice for glazing in buildings - Part 3:2016 Human impact safety requirements
- NZS 4223 Code of practice for glazing in buildings - Part 4:2008 Dead, wind and snow loading
- NZS 3602:2003 Timber and wood-based products for use in buildings
- AS 3715:2002 Metal finishing – Thermoset powder coatings for architectural applications of aluminium and aluminium alloys
- AS 1231:2000 Aluminium and aluminium alloys - Anodic oxidation coatings

Statement on how the building product is expected to contribute to compliance:

- B1.3.1, B1.3.2, B1.3.3 and B1.3.4: Omega 400 Series Thermally Broken Joinery has been tested in accordance with NZS 4211:2008, and is fabricated to the structural requirements of the Wind Zone specified in the project requirements. OMEGA® 400 Series Thermally Broken Joinery is glazed to comply with NZS 4223.3:2016 where specified in the project requirements because human impact may occur. Please refer to www.omegawindows.co.nz and refer to the test matrix in Technical Documents.

- B2.3.1(b) and B2.3.2: OMEGA® 400 Series Thermally Broken Joinery can be finished to provide a durability of at least 15 years in all Exposure Zones, except in microclimates where there is evidence of corrosion in adjacent structures caused by industrial or geothermal atmospheres. Durability is dependent on OMEGA® 400 Series Thermally Broken Joinery being installed and maintained in accordance with OMEGA® Windows and Doors Maintenance Guidelines. IGUs comply with the requirements of NZS 4223.2: 2016. Timber reveals comply with NZS 3602:2003. Please refer to the latest durability and warranty technical information for Duralloy+ and Duratec Powder Coatings from Dulux NZ. For anodised surface finishes, please refer to the OMEGA® anodising warranty document.

- C4.3 and C4.5: OMEGA® 400 Series Thermally Broken Joinery doors can be used within an escape route where relevant considerations are specified in the project requirements.

- D1.3.1(b): OMEGA® 400 Series Thermally Broken Joinery doors can be used within an access route where relevant considerations are specified in the project requirements.

- E2.3.2 and E.2.3.7: OMEGA® 400 Series Thermally Broken Joinery has been tested in accordance with NZS 4211:2008, and is fabricated to the water penetration requirements of the Wind Zone specified in the project requirements. OMEGA® 400 Series Thermally Broken Joinery is suitable for installation in accordance with Acceptable Solution E2/AS1, Third Edition, and can be supplied with sill support bars or support blocks to suit the cladding selection. Installation details provided by other parties such as architects and cladding system suppliers may also be suitable.

- E3.3.1: OMEGA® 400 Series Thermally Broken Joinery is glazed with IGUs to the project requirements, and does not require condensation collection channels to meet the requirements of E3/AS1 Second Edition, Paragraph 1.3 Condensation Control.

- F2.3.1, F2.3.2 and F2.3.3: OMEGA® 400 Series Thermally Broken Joinery is safe when handled in accordance with installation instructions. OMEGA® 400 Series Thermally Broken Joinery is fabricated to comply with NZS 4223.3:2016 where specified in the project requirements.

- F4.3.1 and F4.3.4: OMEGA® 400 Series Thermally Broken Joinery is fabricated with opening restrictors to comply with F4/AS1 Third Edition, Paragraph 2.0 Opening Windows, where relevant considerations are specified in the project requirements.

- F9.3.4: OMEGA® 400 Series Thermally Broken Joinery may be fabricated with restrictors, door closers and swimming pool barrier latches fitted to opening windows or doors within a wall that forms part of a residential pool barrier. Residential pool barrier designs may comply with F9/AS1 First Edition, or with an alternative design provided by other parties. OMEGA® 400 Series Thermally Broken Joinery does not include warning signs and door alarms: if these are required by the design then they may be supplied and installed on site by others.

- G4.3.1 and G4.3.3: OMEGA® 400 Series Thermally Broken Joinery can be fabricated with opening sashes of type and dimensions specified in the project requirements to help provide building ventilation. Ventilation design may comply with G4/AS1 Fourth Edition, Paragraph 1.2 Natural ventilation, or an alternative ventilation system design which utilizes opening window sashes and is provided by other parties such as mechanical services engineers could be suitable.

- G7.3.1 and G7.3.2: OMEGA® 400 Series Thermally Broken Joinery can be fabricated with the area and Visible Light Transmittance (VLT) of glazing specified by the project requirements to help provide natural light and awareness of the outside. Glazing design may comply with G7/AS1 Second Edition or G7/AS2 First Edition, or an alternative glazing design provided by other parties such as lighting engineers could be suitable.

- H1.3.1(a), and H1.3.2E: OMEGA® 400 Series Thermally Broken Joinery can be fabricated with IGUs made from a range of possible glass, spacer and infill gas types, to suit the window insulation (R-value) requirements of the project. Depending on the window or door type, dimensions and IGU type, R-values between R0.28 and R0.56 can be provided, determined in accordance with either H1/AS1 Fifth Edition, Table E1.1.1, or with H1/VM1 Fifth Edition, Paragraph E1.

Limitations on the use of the building product:

OMEGA® 400 Series Thermally Broken Joinery cannot provide a fire resistance rating.

OMEGA® 400 Series Thermally Broken Joinery is not suitable for use in high-use situations such as commercial, institutional or industrial buildings.

OMEGA® 400 Series Thermally Broken Joinery is not suitable for use where recommended maintenance cannot be achieved, including use in buildings taller than three storeys or 10 m in height or buildings where access could be limited due to location or the surrounding environment.

OMEGA® 800 Series Thermally Broken Joinery is offered in a limited colour range of Duralloy Plus and Duratec powdercoat surface finish options. Please see Omega colour chart brochure for options.

OMEGA® 800 Series Thermally Broken Joinery is **NOT** offered in gloss finish, Protexture or Elements surface finishes.

Design requirements that would support the use of the building product:

OMEGA® 400 Series Thermally Broken Joinery is designed for, but is not limited to, use in projects within the following scope:

- Housing and residential apartment buildings, and their associated ancillary and outbuildings.
- Building height up to three storeys or 10 m.
- Timber, steel and masonry type construction.
- All Wind Zones up to and including Extra High. Unit configuration and type may limit wind zone suitability.
- All Exposure Zones, except in microclimates where there is evidence of corrosion in adjacent structures caused by industrial or geothermal atmospheres.
- Overall door or window size up to 6.000 m wide x 2.400 m high. Limitations on the configuration, maximum dimensions, and weights of individual panels also apply, and are dependent on the panel type, local wind zones and structural actions imposed by the building or other environmental factors.
- Maximum IGU thickness is 40mm for the fixed window and 29mm for all other assemblies.
- Design and installation that follows common Acceptable Solutions such as E2/AS1, F4/AS1, G4/AS1, G7/AS1 and H1/AS1.
- Anodised or powdercoat finish to aluminium, selected from the Omega Windows and Doors colour range.
- Timber reveals pre-primed for site painting, unless otherwise agreed with Omega Windows and Doors.
- OMEGA® 400 Series Thermally Broken Joinery may be used in projects outside this scope if other parties such as architects or cladding system suppliers establish appropriate design and installation requirements.
- OMEGA® 400 Series Thermally Broken Joinery has an air permeability class of 3 (determined in accordance with SNZ TS 4211) and achieves an air infiltration rating for air-conditioned buildings (determined in accordance with NZS 4211). Controlling air permeability and infiltration helps prevent heat losses from buildings.
- OMEGA® 400 Series Thermally Broken Joinery is custom fabricated to the requirements of each project. Prior to fabrication, the following project selections must be confirmed by the specifier:
  - Unit size.
  - Opening panel size(s) and type(s), and configuration of fixed and opening panels, including any specific requirements for doors that are on access routes or escape routes.
  - Project Wind Zone.
  - Project Exposure Zone.
  - IGU performance selections, including R-value, acoustic performance, solar heat gain (SHGC), VLT, and safety glazing requirements.
  - Safety fittings and hardware: restrictors, door closers and swimming pool barrier latches to be fitted where an opening window or door requires features for safety from falling or is within a wall that forms part of a residential pool barrier.
  - Finish requirements and colour for aluminium components.
  - Any special requirements.

Installation requirements:

- Ensure that the joinery is protected from dust, debris, and moisture if stored prior to installation.
- Inspect joinery thoroughly before beginning installation to ensure it is free from any defects and damage, including damage caused during transit and delivery.
- Check the dimensions and fit of each unit against the rough opening.
- Install the door in accordance with the consented or design drawings and with and / or specific details from the NZBC (Such as E2-AS1) or the WGANZ guide to window installation.
- Ensure door and window units are installed plumb, level, and in plane, within the tolerances set out in the MBIE Guide to materials, tolerances, and workmanship in residential construction.
- Check and adjust all seals and operating hardware to ensure good fit and proper operation and function without jamming or gaps.
- Ensure drain holes are clear of dirt, debris and sealant following installation.

Maintenance requirements:

DURING THE BUILDING PROCESS

The builder must follow and adhere to the following cleaning instructions during the construction process:

1. It is recommended that windows and doors be covered with tarpaulins, plastic or with approved “paint on finish” as soon as window installation has taken place.
2. Removal of all mortar, paint, adhesives or any substance must take place from the joinery and glass before that substance dries, set or discolour the joinery, gaskets or glazing panel. This includes the cleaning of gaskets, hinges, stays, drainage holes, sills and tracks.
3. Joinery and glass should never be cleaned with a scraper or hard object as it will damage the visual surface areas.
4. Joinery should never be cleaned with solvent based cleaners as it may damage the glass coating or surface coat finish of the windows and doors. Products such as methylated spirits, white spirits, Fuellite, ammonia based cleaners, or petroleum based products should never be used in cleaning.
5. The following are known contributing causes of glass damage when protective screens are not being used:
   - Sandblasting near glass
   - Floor grinding near glass
   - Welding near glass
   - Cement splashes
   - Paint and other chemicals such as polymer sealants, PVC glue etc.

AFTER OCCUPATION BY THE HOMEOWNER:

1. Regular maintenance is required to retain the film and colour integrity of the aluminium windows and doors. This includes washing the windows and doors with a clean cloth using a warm water and mild detergent mix and then thoroughly rinsing with clean water. This will assist in the removal of salt spray, environmental pollution and other organic material.
2. Windows and doors should never be cleaned with solvent based cleaners as it may damage the glass coating or powder coat finish of the windows and doors. Products such as methylated spirits, ammonia based cleaners, or petroleum based products should never be used in cleaning.
3. Cleaning frequency is determined by the distance from the ocean and as a rule of thumb the following applies:
   - 150m from the water: Cleaning every month.
   - 500m from the water: Cleaning every 3 months.
   - 500m from the water: Cleaning every 6 months.

4. Some clear gaskets may discolour as time passes. This is considered normal and will not affect the durability or functionality of the goods.

5. Windows should never be scrubbed with brushes or abrasive hard sponges.

6. Windows should never be cleaned using products such as abrasive pot cleaner, stainless steel cleaner, Jiff, oven cleaner, etc, as it will damage the glass and surface powder coat finish.

7. The following maintenance procedures should be followed:
   - Inspect the glass for cracks, chips or other damage.
   - Rinse the windows with running water. Water from a hose is preferred but care should be taken that no pressure is applied on the stream of water flowing from the hose.
   - Never use a water blaster to clean windows as the water pressure in combination with the dirt may damage the glass permanently and penetrate past flashings.
   - Make a mild, warm water/detergent mixture. Wash off windows with a soft clean cloth. Ensure the window and door frames are also washed.
   - Rinse the windows and doors after washing.
   - Use a clean squeegee to remove remaining water.

Is the building product/building product line subject to warning or ban under section 26?:

No

Date: