



TECHNICAL REMARKS

Design – General

Design of the PREMIUM SERIES PVC-U windows and doors must be carried out to meet the requirements of NZS 4211 and NZS 4223: Part 3.

The joinery is only to be installed in buildings where there is a suitable means of attaching to the wall construction and a weather-tight joint can be practicably designed, made, and sustained between the joinery unit and the wall cladding.

Where combinations of fixed lights and opening sashes are required, the height of the window will depend on the maximum allowable mullion height for the wind exposure and the mullion spacing selected. The joinery can be of any width, provided the width of any light is within the maximum allowable transom length and the maximum allowable sash width. In all cases, the glass installed must meet the structural requirements for the wind exposure selected.

Static Requirements – NZS4211:2008

The window construction including the connecting components must be able to absorb all forces acting on them and release them into the building structure.

NZS4211:2008, Paragraph 6 SERVICEABILITY DEFLECTION – 6.2 Unless a smaller value of allowable deflection is separately specified for windows that are subject to specific design, in buildings requiring specific design, the maximum deflection due to bending of any structural member, including the outer window frame, measured relative to the end of the member at the serviceability limit state shall not exceed $1/200^{\text{th}}$ of the span.

All Homerit Premium Series PVC-U windows are suitable for use in Building Wind Zones of NZS3604 and NZS4211, up to and including “High”. Homerit Premium Series casement PVC-U windows are suitable for use in Building Wind Zones of NZS3604 and NZS4211, up to and including “Extra High”.

Structure – NZBC B1

Homerit Premium Series PVC-U windows and doors meet the requirements arising for loads from self-weight, wind and impact.

Opening sashes meet the torsion strength requirements of NZS4211, Paragraph 11.

Sashes fitted with Homerit Premium Series Windows hardware meet the opening force requirements of NZS4211, Paragraph 7 and can be opened without difficulty.

Durability – NZBC B2

Performance B2.3.1(b), 15 years for the windows and doors and B2.3.1(c), 5 years for the hardware. Homerit windows and doors meet these requirements.

Homerit Premium Series white PVC-U joinery profiles and associated EPDM gaskets and seals are expected to remain serviceable under New Zealand conditions of use for a period of at least 15 years. Over time, some loss of gloss, and some colour fade may affect the surface of the PVC-U profile.

Coloured PVDF acrylic foils laminated onto the PVC-U profiles can also be expected to remain serviceable for at least 15 years. Over time, some loss of gloss, and some colour fade may affect the surface of the foil. Colour stability testing has been assessed by BRANZ for the following colours: Mahogany, Golden Oak, Rustic Oak, Natural Oak, Dark Oak, White, Choco Brown, Charcoal Grey, Dark Brown, and Dark Green. Other colours in the available range have not been assessed by BRANZ and are outside the scope of BRANZ Certificate.

Double glazing is subject to the performance requirements of NZS4223 and additionally AS/NZS4666. Glazing is expected to have a serviceable life of at least 15 years.

Hardware used in Homerit Premium Series PVC-U windows and doors has been corrosion-resistance tested in accordance with grade 4 (very high) of EN1670:1988 and can be used in environments in heavily polluted areas which for example, are characterized by a combination of industrial and coastal influences.

External Moisture – NZBC E2

Homerit Premium Series PVC-U windows and doors are an alternative solution to the Windows and Doors specified in NZBC Acceptable Solution E2/AS1. Homerit Premium Series PVC-U windows and doors, when correctly installed, prevent the penetration of moisture that could cause undue dampness or damage to building elements.

Buildings outside the scope of NZBC Acceptable Solution E2/AS1 must be the subject of specific weather-tightness design for the joinery installation details. The designer must develop these joinery installation details to meet their own requirements and the performance requirements of the NZBC.

All window and door joinery must be installed using flexible flashing tapes and air-seals in accordance with NZBC Acceptable Solution E2/AS1, Paragraphs 9.1.5 and 9.1.6, or when used outside the scope of NZBC, specific weather-tightness design details must also follow these principles.

Air and Water Leakage – NZS4211:2008

Homerit Premium Series PVC-U windows and doors comply with the air and water leakage requirements of NZS 4211, Paragraphs 8 and 9 when tested in accordance with that standard. Air leakage ratings for the joinery can reach Level 2, which means they are suitable for use in air-conditioned buildings and in other demanding situations.

Ventilation – NZBC G4

If the joinery is installed in sufficient quantity or size with opening sashes to provide a net open-able area of not less than 5% of the room floor area, and if they are located in exterior walls that enclose occupied spaces, they can be used to meet the ventilation performance requirements of the NZBC.

Ventilation performance requirement may also be met by air-conditioning or other ways.

Natural Light – NZBC G7

The joinery can be used to meet the performance requirements of the NZBC for natural light providing a sufficient number of joinery units are installed with an acceptable glazing area's transmittance value, and they are located correctly within exterior walls, along with acceptable interior surface reflectance's.

NZBC Acceptable Solution G7/AS1 provides guidance for meeting the area, glazing transmittance value, location, and surface reflective requirements.

Energy Efficiency – NZBC H1

Where Homerit PREMIUM SERIES PVC-U windows and doors are supplied with double glazing units, the joinery units will assist in meeting the performance requirements of NZBC H1.3.1 and H1.3.2.

Hazardous Building Materials – NZBC F2

PREMIUM SERIES PVC-U has demonstrated that it can be considered stable and non-hazardous. Other materials used in the fabrication of Homerit PREMIUM SERIES PVC-U windows and doors, EPDM gaskets of seals and hardware also demonstrates a long and non-hazardous history of use.

Human Impact Safety Requirements – NZBC F2

Where it is specified by the designer, glazing is supplied to comply with NZBC Acceptable Solution F2/AS1, Paragraph 1.0.

Safety from Falling – NZBC F4

Where it is specified by the designer, Homerit PREMIUM SERIES PVC-U windows and doors are supplied to comply with NZBC Acceptable Solution F4/AS1, Paragraph 4.0.

Means of Escape – NZBC C

Homerit PREMIUM SERIES PVC-U windows and doors can be used to meet the requirements of NZBC Acceptable Solution C/AS1, Part 3 for windows used for escape,

providing they comply with and are installed in accordance with NZBC Acceptable Solution C/AS1 Part 3, Paragraph 3.18.

The windows are not suitable for use as fire rated windows.

Joinery Security

The design of Homerit PREMIUM SERIES PVC-U windows and doors units is such that when closed, sashes cannot be readily opened from the outside by, for example, the insertion of a thin blade.

Gaskets

External gaskets between window frame and sash and between glazing and the glazing bead have to match the system and be of APTK- (EPDM) quality. They have to be aligned on the same plane and drawn through in the mitres or be joined homogeneously with glue.

Profile system offered

VEKA Softline Category "S" – www.veka.com

Fitting system offered

ROTO and/or SIEGENIA – www.roto.de and www.siegenia-aubi.com

Glazing system offered

Double glazed to IGU standard EN1279 Part 1 and Part 2
Or unglazed

The Supplier / Bidder:

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