CodeMark

Certificate no: CMNZ10009
Version: 02
Original issue date: 15 May 2020
Version date: 29 May 2025

Product Certificate

Velux Roof Windows

1. Certificate Holder Details

VELUX®

Velux New Zealand Ltd
62b Princes Street
Onehunga
Auckland, 1061
Tel: 0800 650 445
Email: info@velux.co.nz
Web: www.velux.co.nz

2. Product Certification Body

BRANZ Limited
1222 Moonshine Road
RD1, Porirua 5381
Private Bag 50 908
Porirua 5240
New Zealand

Tel: 04 237 1170
Email: assuranceservices@branz.co.nz
Web: www.branz.nz

Complaints: The complaints process for this certificate can be found here:

https://www.branz.co.nz/codemark-info/complaints-and-appeals/

3. Description of Building Method or Product

Velux Roof Windows are double-glazed or triple-glazed feature wooden frames with an aluminium exterior. Velux Roof Windows are for use on roofs with a roof pitch between 15° and 60° to provide natural light into interior spaces within buildings. Velux Roof Windows can also be used to provide ventilation.

Velux Roof Windows can be identified by their brand markings on both the units themselves and the packaging.

4. Intended use of Building Method or Product

Velux Roof Windows are an opening, centre-pivoting roof window used to bring natural light and air into attic or loft rooms where ventilation is required. Velux Roof Windows are polyurethane moulded over a timber core and finished in white. Aluminium external cappings are finished in a smooth grey colour.

5. New Zealand Building Code Provisions

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4 for the relevant physical conditions of B1.3.3 (g), (h) and (j) [i.e. loads arising from snow, wind and impact].

Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years.

Clause E2 EXTERNAL MOISTURE: Performance E2.3.1 and E2.3.2.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. and F2.3.3 (a).

Clause G4 VENTILATION: Performance G4.3.1 and G4.3.3 (contributes).

Clause G7 NATURAL LIGHT: Performance G7.3.1 and G7.3.2. (contributes).

Clause H1 ENERGY EFFICIENCY: Performance H1.3.1 and H1.3.2E (contributes).

6. Conditions and Limitations of Use

Velux Roof Windows are for use on buildings within the following scope:

- the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1 with regard to building height and maximum floor plan area; and,
- with roof structures designed and constructed to meet the requirements of the NZBC; and,
- with masonry tile, pressed metal tile and profiled metal roof cladding systems complying with NZBC Acceptable Solution E2/AS1; and,
- with a roof pitch between 15° and 60°; and,
- situated in NZS 3604 Wind Zones up to, and including, Extra High.

HANDLING AND STORAGE

Handling and storage of all components of Velux Roof Windows is under the control of the roof window installer. Components must be kept dry and under cover at all times. Care must be taken to avoid surface damage to the window components and flashings during the installation process.

INSTALLATION SKILL LEVEL REQUIREMENT

The installation of Velux Roof Windows must be completed by installers trained by Velux New Zealand Ltd, or by competent, experienced tradespeople with an understanding of roof window installation and weathertightness details.

Velux Roof Windows must be installed in accordance with the Reference Document supplied by Velux New Zealand Ltd, and this Product Certificate.

REFERENCE DOCUMENT

This Product Certificate must be read in conjunction with:

- Technical Manual for Velux Roof Windows, dated May 2025.

7. Health and Safety Information

Velux Roof Windows with ’76’ and ‘66’ type glazing meets the safety glass requirements of NZS 4223.4 and may be installed at heights 5 m or more above floor level. Refer to Velux New Zealand Ltd for advice or confirmation of type if necessary.

Manufacturer’s instructions and typical practices for working with, handling and maintaining glazing should be observed.

There are no particular health and safety issues relating to the installation or use of Velux Roof Windows. Installers must however observe safe working practices for working on roofs and at heights.

8. Basis for Certification

TESTING

The following tests have been carried out on Velux Roof Windows:

- Resistance to impact loads, snow loads and resistance to wind pressure (non-cyclonic regions). These assessments have been reviewed by BRANZ and were found to be satisfactory.
- Dynamic weather resistance testing by a National Association of Testing Authorities (NATA) registered laboratory in Australia.

EXPERT JUDGEMENT

- Opinions on durability and the thermal performance of Velux Roof Windows have been given by BRANZ technical experts.
- Weathertightness detailing of the Velux Roof Windows has been assessed by BRANZ and found to be satisfactory. Instructions for installation of units and associated flashing components for different roof types have also been reviewed and found to be satisfactory.

QUALITY

- The Reference Document has been examined by BRANZ and found to be satisfactory.
- The quality of materials, components and accessories supplied to the market is the responsibility of Velux New Zealand Ltd.
- Quality of installation on-site of Velux Roof Windows components and accessories is the responsibility of the installer.
- Designers are responsible for building design and specification of natural lighting and ventilation systems.
- Building owners are responsible for any required maintenance of Velux Roof Windows in accordance with the advice of Velux New Zealand Ltd.

9. Supporting Documentation for Certification

- Acceptable Solutions and Verification Methods for New Zealand Building Code Clause B1 Structure, 1st Edition, Amendment 21, 2 November 2023.
- Acceptable Solutions and Verification Methods for New Zealand Building Code Clause B2 Durability, 2nd Edition, Amendment 12, 28 November 2019.

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- Acceptable Solutions and Verification Methods for New Zealand Building Code Clause F2 Hazardous Building Materials, 1st Edition, Amendment 3, 1 January 2017.
- Acceptable Solutions and Verification Methods for New Zealand Building Code Clause G4 Ventilation, 4th Edition, 27 June 2019.
- AS 4285:1995 Skylights.
- AS/NZS 1170.0:2002 Structural design actions - Permanent, imposed and other actions.
- BRANZ Appraisal No. 969 Velux Roof Windows.
- BRANZ Consulting Report DC16020-001, H1 compliance for Velux - Phase 1, issue date 21 April 2022.
- BRANZ Consulting Report DC16020-002 H1 compliance for Velux - Phase 2, issue date 31 March 2022.
- BRANZ Consulting Report DC16020-003 H1 compliance for Velux – Phase 3, issue date 25 May 2022.
- BRANZ Durability Opinion DA0359/1, Durability opinion on Velux Skylights, Roof Windows and Sun Tunnels, issue date 14 June 2017.
- BRANZ Report No. DA0359/2, E2 and H1 opinion - Velux weathertightness and thermal performance, issue date 19 June 2017.
- BRANZ Memorandum, Additional of three larger skylight sizes, issue date 14 May 2025.
- BRANZ Report No. TV18116-01-01, Structures technical opinion for Velux revalidations, issue date 27 November 2024.
- BRANZ R-value Calculations, VELUX Version 5.xlsx, last modified 17 April 2025.
- BRANZ Structural Memorandum for Velux Skylights, issue date 11 May 2017.
- BRANZ Structural Memorandum for Velux 968, 969, 970, issue date 10 March 2023.
- BRANZ Test Report No. DA0359 Dynamic weather resistance test of a Velux Skylight, issue date 29 May 2017.
- BS EN 1279-5:2005 Glass in building: Insulating glass units - Evaluation of conformity.
- Calderone and Associates Pty Ltd, Skylight glass design report for Velux Australia Pty Ltd, dated 15 May 2023.
- C1-C6 Protection from Fire Acceptable Solution C/AS1 Protection from fire for buildings with sleeping (residential) and outbuildings (risk group SH), 2nd Edition, 2 November 2023.
- C/AS2 Acceptable Solution for Buildings other than risk group SH For New Zealand Building Code Clauses C1-C6 Protection from Fire, 1st Edition, Amendment 3, 2 November 2023.
- G7 Natural Light Acceptable Solution G7/AS1 Natural light for simple buildings up to three storeys excluding those with borrowed daylight, 2nd Edition, 29 November 2021.
- H1 Energy Efficiency Acceptable Solution H1/AS1 Energy efficiency for all housing, and buildings up to 300 m², 5th Edition, Amendment 1, 4 August 2022.
- H1 Energy Efficiency Acceptable Solution H1/AS2 Energy efficiency for buildings greater than 300 m², 1st Edition, Amendment 1, 41 August 2022.

- H1 Energy Efficiency Verification Method H1/VM1 Energy efficiency for all housing, and buildings up to 300 m², 5th Edition, Amendment 1, 4 August 2022.
- H1 Energy Efficiency Verification Method H1/VM2 Energy efficiency for buildings greater than 300m², 1st Edition, Amendment 1, 4 August 2022.
- NZS 3604:2011 Timber-framed buildings.
- NZS 4223.4:2016 Code of practice for glazing in buildings - Dead, wind and snow loading.
- Ministry of Business, Innovation and Employment Record of amendments - Acceptable Solutions, Verification Methods and handbooks.
- The Building Regulations.
- Verification Methods E2/VM1 and Acceptable Solution E2/AS1, E2/AS2 and E2/AS3 for New Zealand Building Code Clause E2 External Moisture, 3rd Edition, Amendment 10, 5 November 2020.

10. Supporting Information About Description

PRODUCT SPECIFICATION

Velux Roof Windows (GGU series) are a range of opening roof windows manufactured from preservative treated softwood frames and sashes. The interior faces are encapsulated in a white 3 mm thick polyurethane (Everfinish - GGU Series). External cappings are 'grey friars' coloured PVDF lacquered aluminium.

The Velux Roof Window models covered by this Product Certificate are provided in Table 1.

Table 1: Velux Roof Windows Models

Overall frame dimension (mm)	550 x 780	550 x 980	780 x 980	780 x 1,180	780 x 1,400	1,140 x 1,180	1,400 x 1,400
Size Code	CK02	CK04	MK04	MK06	MK08	SK06	SK08

GLAZING

Velux Roof Windows are factory glazed using sealed double-glazed or triple-glazed insulated glass units (IGUs). The IGUs for all units are provided in one type signified by the number '76' contained within the product code on the packaging and on the IGU itself and on the spacer bar between the glazing panes. Refer to Velux New Zealand Ltd for advice or confirmation of glazing if necessary.

Type 76 units comprise a 4 mm thick toughened outer pane with a low emissivity (Low-E) coating, a 14 mm argon-filled cavity and a 6 mm thick inner pane of laminated toughened safety glass.

Type 66 units comprise a 4 mm thick toughened outer pane, a 3 mm heat-strengthened middle pane, a 6mm laminated inner pane and two 13mm argon-filled cavities.

Glazing units carry CE marking to show compliance with BS EN 1279-5.

FLASHINGS

EDW, EDL and EKW Flashings are a range of Kynar 500 painted aluminium flashings designed for use with Velux Roof Windows.

11. Supporting Information About Intended Use

GENERAL

Velux Roof Windows are for use on roofs of new and existing buildings with a roof pitch of between 15° and 60°. Installation of Velux Roof Windows on roofs of other pitches is outside the scope of this Product Certificate and must be specifically designed in all instances.

Velux Roof Windows are suitable for most existing timber-framed roofs. For such installations, it is important that the roof structure is checked by a suitably qualified person for structural adequacy and suitability of the existing roof cladding.

When installed on new roofs, whenever possible, the installation should be carried out concurrently with the roof cladding installation.

BUILDING CODE

B1 STRUCTURE

Velux Roof Windows are suitable for use in NZS 3604 Wind Zones up to, and including, Extra High.

Velux Roof Windows are suitable for use in areas where buildings are designed for a 1 kPa snow loading.

Velux Roof Windows have been assessed for point loads from AS/NZS 1170 for situations where supports should be placed over the surface when access is necessary.

B2 DURABILITY

Velux Roof Windows are expected to have a serviceable life of at least 15 years, provided they are maintained in accordance with the Technical Literature.

On exposure to the weather, the coil coated aluminium may gradually lose the original surface finish. A faster reduction in both surface finish and overall serviceable life can be anticipated in severe industrial, geothermal and marine exposures.

C3 PREVENTION OF FIRE OCCURRING

Separation or protection must be provided to Velux Roof Windows from heat sources such as fireplaces, heating appliances and chimneys. Part 7 of NZBC Acceptable Solution C/AS1 and NZBC Acceptable Solution C/AS2 provide methods for separation and protection of combustible materials from heat sources.

E2 EXTERNAL MOISTURE

Velux Roof Windows, when installed in accordance with this Product Certificate and the Reference Document, will prevent the penetration of moisture that could cause undue dampness or damage to building elements.

E3 INTERNAL MOISTURE

Experience with double-glazed and triple-glazed roof windows has shown that in normal domestic or similar applications, the windows do not pose a significant risk of condensation when correctly installed.

F2 HAZARDOUS BUILDING MATERIALS

Velux Roof Windows with '76' and '66' type glazing meets the safety glass requirements of NZS 4223.4 and may be installed at heights 5 m or more above floor level, refer to Glazing in Section 10 of this Product Certificate. Refer to Velux New Zealand Ltd for advice or confirmation of glazing type if necessary.

G4 VENTILATION

Velux Roof Windows which contain an openable aperture will contribute to the compliance of a building with NZBC Clause G4. Consideration must be given to the 'net openable area' required for a particular space by the designer. NZBC Acceptable Solution G4/AS1 provides guidance on required ventilation.

G7 NATURAL LIGHT

Velux Roof Windows all contain transparent apertures which can contribute to the compliance of a building with NZBC Clause G7. Consideration of the amount of illuminance provided by the roof window for a particular space will depend on a wide range of factors unique to each installation. The use of Velux Roof Windows to supplement natural light from other sources is an alternative solution to NZBC Clause G7.

H1 ENERGY EFFICIENCY

Velux Schedule Method

The Velux Schedule Method may be used as an alternative solution to the Schedule Method contained in the NZBC Acceptable Solution H1/AS1 for housing, and other buildings up to 300 m² in floor area. The Velux Schedule Method requires that:

- the sum of the vertical glazing area and the Velux product area (Velux Skylights, Velux Roof Windows and Velux Sun Tunnels) is 30% or less of the total wall area; and,
- the combined glazing area on the east, south and west facing walls is 30% or less of the combined total area of these walls; and,
- the Velux product area is no more than 1.5 m² or 1.5% of the total roof area (whichever is greater); and,
- the opaque door area is no more than 6 m² or 6% of the total wall area (whichever is greater); and,
- the roof, wall, floor, window and door glazing R-values are in accordance with Section 2.1.2 of NZBC Acceptable Solution H1/AS1.

Calculation and Modelling Methods

Alternatively, designers can use the calculation methods contained in NZBC Acceptable Solutions H1/AS1 or H1/AS2, or the modelling methods contained in NZBC Verification Methods H1/VM1 or H1/VM2. Contact Velux New Zealand Ltd for the relevant product R-values.

SYSTEM INSTALLATION

Installation must be completed in accordance with instructions given in the Velux Roof Windows Reference Document and this Product Certificate.

MAINTENANCE REQUIREMENTS

Maintenance of Velux Roof Windows shall be carried out in accordance with the relevant manufacturer's instructions and at prescribed intervals.

The external surface of the glazing on Velux Roof Windows can be cleaned from inside the building by pivoting the window through 180° and locking the window temporarily in this position.

The glazing and external surfaces of the Velux Roof Windows can be cleaned using a mild, nonabrasive glass cleaner along with a soft brush or other non-abrasive applicator to maintain the surface appearance.

Keep all leaves clear from around roof windows. Ensure all exposed fasteners are secure. Inspect roofing and flashing for excessive wear or scratches on the roofing finish. Scratches in the cladding finish may be fixed with touch-up paint available through Velux New Zealand Ltd. Damaged claddings or flashings should be replaced as soon as they are detected.

The internal workings of the manual and the Integra electric operators are considered maintenance free over the lifetime of the roof window. Mechanisms are pre-lubricated and need no additional lubrication. The chains and hinges should be checked and lubricated as required.

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12. Supporting Information About Conditions and Limitations of Use

All conditions and limitations provided as stated in this Product Certificate.

Signatures

Claire Falck
CEO, BRANZ Limited.

All CodeMark certificates that are current much be registered with MBIE. MBIE maintains a register of valid product certificates. Please find the register here.

If the certificate is not listed on this register or it appears as (SUSPENDED), it is not a valid CodeMark certificate and does not have to be accepted by a building consent authority as establishing compliance with the New Zealand Building Code.