

# 4554VS VELUX OPENING AND FIXED SKYLIGHTS

## 1. GENERAL

This section relates to the manufacture, supply, and installation of VELUX opening and fixed skylights and roof windows:

It includes;

- operating systems
- accessories
- proprietary flashings

### 1.1 RELATED WORK

Refer to ~ for ~

#### Documents

### 1.2 DOCUMENTS

Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

- [NZBC E2/AS1](#) External moisture
- [AS/NZS 2208](#) Safety glazing materials in buildings
- [NZS 3604](#) Timber-framed buildings
- [NZS 4223.3](#) Code of practice for glazing in buildings - Human impact safety requirements
- [NZS 4223.4](#) Code of practice for glazing in buildings - Wind, dead, snow and live actions

### 1.3 MANUFACTURER/SUPPLIER DOCUMENTS

Manufacturer's and supplier's documents relating to this part of the work:

Sales Brochure September 2017

Installation instructions for GGU Roof Window and Flashing

Installation instructions for VS/VSE/VSS Skylight

Installation instructions for FS Skylight

Installation instructions for VCM curb mounted Skylight

Installation instructions for VCS curb mounted Skylight

Installation instructions for FCM curb mounted Skylight

Installation instructions for EDW flashing

Installation instructions for EDL flashing

Manufacturer/supplier contact details

Company: VELUX New Zealand Limited

Web: [www.velux.co.nz](http://www.velux.co.nz)

Email: [info@velux.co.nz](mailto:info@velux.co.nz)

Telephone: 0800 650 445

#### Warranties

### 1.4 WARRANTY - MANUFACTURER/SUPPLIER

Provide a material manufacturer/supplier warranty:

10 years: For VELUX Skylights

- Provide this warranty on the manufacturer/supplier standard form.
- Commence the warranty from the date of practical completion of the contract works.

Refer to the general section 1237 WARRANTIES for additional requirements.

### 1.5 WARRANTY - INSTALLER/APPLICATOR

Provide an installer/applicator warranty:

2 years: For installation of VELUX Skylights

- Provide this warranty on the installer/applicator standard form.
- Commence the warranty from the date of installation.

Refer to the general section 1237 WARRANTIES for additional requirements.

### **Requirements**

- 1.6 **QUALIFICATIONS**  
Installers to be experienced, competent trades people familiar with the materials and techniques specified.
- 1.7 **NO SUBSTITUTIONS**  
Substitutions are not permitted to any of the specified VELUX systems, components and associated products listed in this section.

### **Performance**

- 1.8 **PERFORMANCE, WIND, DEAD, SNOW, AND LIVE ACTIONS**  
The design wind pressures and snow loads to [NZS 3604](#). Live loads and glazing design, for glass or equivalent plastics, to [NZS 4223.4](#).

## **2. PRODUCTS**

- 2.1 **SKYLIGHTS – PITCHED ROOF**  
VELUX Skylights, either top hinged with electric, solar or manual opening, or fixed skylight, for roof pitches between 15° to 90°. Manufactured from high quality treated timber, prefinished frame and sash in white, semi-gloss paint. External cappings in umber grey manufactured from polyester coated aluminium. Refer to SELECTIONS for type, finish and accessories.
- 2.2 **ROOF WINDOWS - EVERFINISH - WHITE**  
VELUX opening Roof Windows, pivot hinged at centre with vent flap for roof pitches between 15° to 90°. Manufactured from high quality treated timber, encapsulated in a white, virtually maintenance free, 3mm thick polyurethane. External cappings in umber grey manufactured from polyester coated aluminium. Refer to SELECTIONS for type, finish and accessories.
- 2.3 **SKYLIGHTS – LOW PITCH / FLAT ROOF**  
VELUX Low Pitch Skylights, either top hinged with solar, manual opening or fixed, for roof pitches between 0° to 60° manufactured from internal PVC frame in white. External frame and cappings in 'grey friars' manufactured of Kynar 500 coated aluminium. Refer to SELECTIONS for type, finish and accessories.

### **Components**

- 2.4 **FIXINGS**  
VELUX proprietary fixings and brackets compatible with the skylight/roof window.
- 2.5 **GLAZING - ELECTRIC or SOLAR OPENING SKYLIGHTS**  
VELUX proprietary laminated double glazing with Argon gas fill and low E<sup>3</sup> coating.
- 2.6 **GLAZING - MANUAL OPENING SKYLIGHTS**  
VELUX proprietary laminated double glazing with Argon gas fill and low E<sup>3</sup> coating.
- 2.7 **GLAZING - FIXED SKYLIGHTS**  
VELUX proprietary laminated double glazing with Argon gas fill and low E<sup>3</sup> coating.
- 2.8 **GLAZING - ROOF WINDOWS**  
VELUX proprietary laminated double glazing with Argon gas fill and low E<sup>2</sup> coating.
- 2.9 **HARDWARE**  
Fasteners, stays, locks, vents and other hardware as supplied with the unit.
- 2.10 **FLASHINGS**  
VELUX proprietary flashing solutions to VELUX instructions. Refer to SELECTIONS for type.

## **Accessories**

- 2.11 **MANUAL OPENING DEVICES**  
Proprietary rod for manual opening.
- 2.12 **MOTORISED OPENING DEVICES**  
Motorised control unit including remote, electric motor or solar motor, keypad and transformer.  
Rain sensor for automatic control of opening.
- 2.13 **INTERNAL BLINDS/SCREENS**  
Blind/s to suit the type of Skylight. Refer to SELECTIONS for type.
- 2.14 **INSTALLATION ACCESSORIES**  
VELUX installation accessories as supplied with the unit. Refer to SELECTIONS for type.

## **Finishes**

- 2.15 **FINISH**  
VELUX proprietary finishes.

## **3. EXECUTION**

### **Conditions**

- 3.1 **DELIVERY, STORAGE AND HANDLING**  
Avoid distortion of elements during transit, handling and storage. Deliver in original containers, dry, undamaged with seals and labels intact. Prevent pre-finished surfaces from rubbing together. Prevent contact with mud, plaster and cement. Do not deliver to site any elements which cannot be immediately unloaded into suitable conditions of storage.
- 3.2 **PRE-INSTALLATION REQUIREMENTS**  
Confirm framed openings on site for dimensions, to suit the VELUX proprietary Skylight / Roof Window. Unit dimensions are overall finished frame dimensions. For framing purposes refer to supplied installation instructions.
- 3.3 **EXECUTION GENERALLY**  
Check that the preparation of the opening is to [NZBC E2/AS1](#), 8.4.17, Roof penetrations.
- 3.4 **HARDWARE GENERALLY**  
Factory fit all required and scheduled hardware.
- 3.5 **RETAIN PROTECTIVE COVERINGS**  
Retain protective coverings and coatings in place during fixing wherever possible. Provide additional protection to prevent marking of surfaces visible in the completed work. Remove protection on completion.

### **Installation**

- 3.6 **GENERALLY**  
Check that the trimmed openings are formed and constructed to suit the required units. Do not proceed until roof and structural openings are properly formed.
- 3.7 **INSTALL UNITS**  
Install and fix the units strictly in accordance with manufacturer's requirements and installation instructions. Repack any thermal insulation around rough openings where disturbed by the installation to maintain continuity of thermal barriers. Install proprietary flashings (EDW, EDL) as detailed by VELUX to make the installation completely weatherproof.

- 3.8 ACCESSORIES AND OPERATING SYSTEMS  
Install selected VELUX accessories and hardware and complete all operating systems.

#### **Completion**

- 3.9 CLEAN FRAMES AND GLAZING  
On completion clean down both sides of unit frames, using the methods required by the manufacturer. Remove any manufacturer's stickers and clean glass. Ensure all installed units are adequately protected from damage and adverse weather during construction.

- 3.10 CONFIRM  
Confirm the proper operation of hardware and operating systems on completion of the installation and again at completion of the contract works.

#### **4. SELECTIONS**

For further details on selections go to [www.velux.co.nz](http://www.velux.co.nz)  
Substitutions are not permitted to the following, unless stated otherwise.

##### **Skylights**

- 4.1 INTEGRA OPENING SKYLIGHT, SOLAR  
Location: ~  
Brand: VELUX  
Model: VSS INTEGRA Opening (solar)  
Type/size: ~, ~  
Glazing: Pre installed. VELUX proprietary laminated double glazing with Argon gas fill and low E<sup>3</sup> coating.  
Colour: White, semi gloss finish  
Roof type/pitch: ~, ~  
Control mechanism: Radio frequency key pad
- 4.2 INTEGRA OPENING SKYLIGHT, ELECTRIC  
Location: ~  
Brand: VELUX  
Model: VSE INTEGRA Opening (electric)  
Type/size: ~, ~  
Glazing: Pre installed. VELUX proprietary laminated double glazing with Argon gas fill and low E<sup>3</sup> coating.  
Colour: White, semi gloss finish  
Roof type/pitch: ~, ~  
Control mechanism: Radio frequency key pad
- 4.3 MANUAL OPENING SKYLIGHT  
Location: ~  
Brand: VELUX  
Model: VS Manual Opening  
Type/size: ~, ~  
Glazing: Pre installed. VELUX proprietary toughened double glazing with Argon gas fill and low E<sup>3</sup> coating.  
Colour: White, semi gloss finish  
Roof type/pitch: ~, ~  
Control mechanism: ~
- 4.4 FIXED SKYLIGHT  
Location: ~  
Brand: VELUX  
Model: FS Fixed  
Type/size: ~, ~  
Glazing: Pre installed. VELUX proprietary toughened double glazing with Argon gas fill and low E<sup>3</sup> coating.  
Colour: White, semi gloss finish  
Roof type/pitch: ~, ~

## Roof windows

- 4.5 ROOF WINDOW - EVERFINISH - WHITE  
Location: ~  
Brand: VELUX  
Model: GGU Everfinish  
Type/size: ~, ~  
Glazing: Pre installed. VELUX proprietary laminated double glazing with Argon gas fill and low E<sup>2</sup> coating.  
Colour: White Everfinish encapsulated in a white, virtually maintenance free, 3mm thick polyurethane.  
Roof type/pitch: ~, ~  
Control for vent flap: ~

## Low pitch skylights

- 4.6 INTEGRA LOW PITCH OPENING SKYLIGHT, SOLAR  
Location: ~  
Brand: VELUX  
Model: VCS INTEGRA Low Pitch Opening (Solar)  
Type/size: ~, ~  
Glazing: Pre installed. VELUX proprietary laminated double glazing with Argon gas fill and low E<sup>3</sup> coating.  
Colour: White PVC interior  
Roof type/pitch: ~, ~  
Control mechanism: Radio frequency remote control
- 4.7 LOW PITCH OPENING SKYLIGHT , MANUAL  
Location: ~  
Brand: VELUX  
Model: VCM Low Pitch Opening (Manual)  
Type/size: ~, ~  
Glazing: Pre installed. VELUX proprietary toughened double glazing with Argon gas fill and low E<sup>3</sup> coating.  
Colour: White PVC interior  
Roof type/pitch: ~, ~  
Control mechanism: ~
- 4.8 LOW PITCH FIXED SKYLIGHT  
Location: ~  
Brand: VELUX  
Model: FCM Low Pitched Fixed  
Type/size: ~, ~  
Glazing: Pre installed. VELUX proprietary toughened double glazing with Argon gas fill and low E<sup>3</sup> coating.  
Colour: ~  
Roof type/pitch: ~, ~

## Components

- 4.9 HARDWARE/OPENING DEVICES  
Control rods/handles: VELUX control rod/handles for manual opening  
Motorised control: motor, keypad, transformer rain sensor supplied with electric and solar opening skylights (models VSE, VSS & VCS)
- 4.10 FLASHING SYSTEM  
Brand: VELUX  
Roofing type: ~

Roof pitch: ~  
Flashing type: ~, to match unit/roof type  
Colour: Greyfriars

**Accessories**

4.11 INTERNAL BLINDS/SCREENS  
Brand: VELUX  
Type: ~ to match unit  
Colour/pattern: ~ white