

VELUX roof windows



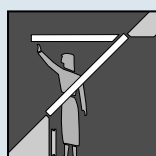
VELUX roof windows



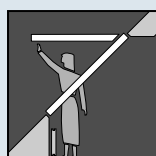
GGL Centre-pivot roof window 3.01.00



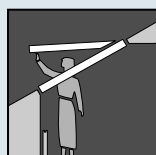
GGU Centre-pivot roof window 3.01.02



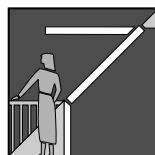
GPL Top-hung emergency escape/access roof window 3.02.00



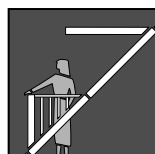
GPU Top-hung roof window 3.02.02



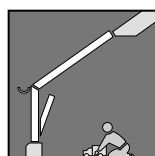
GHL Top-hung roof window 3.02.04



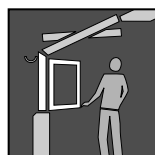
GEL + VEA/B/C Roof Terrace System 3.03.00



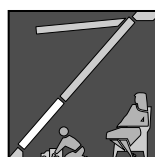
GDL CABRIO™ Roof Balcony System 3.04.00



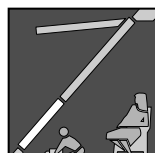
GGL+VFE Combined roof and vertical window elements 3.05.00



VFA/B Vertical window elements 3.05.02



GIL Additional elements 3.06.00



GIU Additional elements 3.06.02



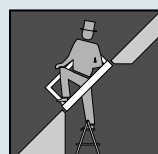
GI – Additional elements 3.06.04



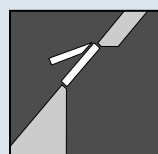
Conservation Roof Window System 3.07.00



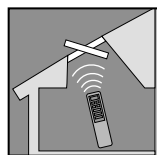
GVA Conservation rooflight 3.08.00



GVT Conservation emergency escape/access rooflight 3.08.02



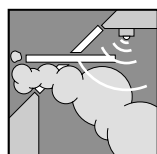
VLT Rooflight 3.08.04



Electric Skylight System 3.09.00



Flat Roof Window System 3.09.02

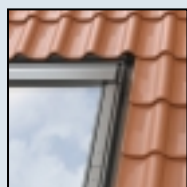


Smoke Ventilation System 3.09.04

Product overview 3.10.00

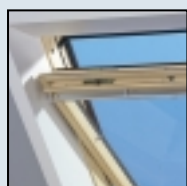
VELUX roof windows

VELUX roof windows are designed to create a unique environment within the attic.



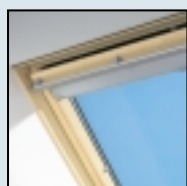
Exterior cladding

As standard the window is supplied with maintenance-free exterior cladding of grey aluminium. The grey colour has colour code NCS S-7500-N, making it easy to fit in with different colours and types of roofing materials. The colour has also been selected to obtain harmony, even under very different light conditions, between the grey cladding and the window glass. One of the reasons why NCS (Natural Color System) has been selected is that the colours in this system do not contain environmentally damaging pigments.



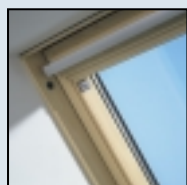
Frame and sash

VELUX roof windows are made of Nordic pine treated with a water based preservative. The frame and sash are supplied with a finished clear lacquer treatment, TOPfinish™. GIU/GGU/GPU EVERfinish® roof windows are made from moulded polyurethane with timber core and white polyurethane varnish finish.



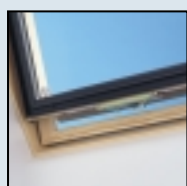
Ventilation flap

The control bar with ventilation flap is positioned at the head of the sash. The ventilation flap makes it possible to get fresh air in the room without opening the window. An air filter keeps out dust, insects, etc. when the ventilation flap is open.



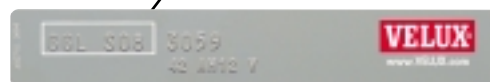
Blind brackets

VELUX roof windows are supplied with brackets, ensuring an easy and simple installation of VELUX interior decoration and sunscreening products.



Barrel bolt

VELUX roof windows can be fully rotated and securely locked with the barrel bolt for easy cleaning of the exterior pane. In addition, the centre-pivot roof windows can be secured in open position.



Data plate

The data plate with product code is used as documentation for production and subsequent service. In addition, the data plate is used for ordering VELUX decoration and suncreening products.



Insulating glazing unit

All VELUX roof windows are supplied with insulation panes in many variants.

Quality control

Roof windows are particularly exposed to changing weather conditions, and VELUX roof windows are therefore designed to be able to resist such conditions. In addition, all functions have been tested so that the window can withstand the varying degrees of exposure.



GGL Centre-pivot roof window

Centre-pivot window

Application

GGL roof window can be installed in roof pitches between 15° and 90°.

For easy operation and free view it is recommended to place the top frame of the window 1.85 – 2.20m above the floor.

Features

The centre-pivot window features a control bar which, when operated, opens the ventilation flap. The friction hinges keep the window in an open position, and if additional ventilation is required it can be opened further and secured with a barrel bolt.

Operation

GGL window is operated by means of the control bar at the top of the window sash. The control bar is used for opening of the ventilation flap and the window.

The window can be opened approx. 5° and locked for ventilation.

The sash can also be fully rotated and locked for easy cleaning of the exterior of the pane.



GGL versions

	Standard	Variants
Frame and sash	Nordic pine with TOPfinish™	White paint, PAINTfinish™
Exterior cladding	Grey aluminium	Titanium zinc, pre-patinated zinc, copper or other cladding colours
Panes	Standard insulating (--00) PROTEC-STAR™ (--73)	See section 8

GGL can be combined with:



Flashings for

- Single installation
- Twin installation
- Combi installation



Exterior sunscreening

- Awning blind
- Roller shutter



Linings for

- Roof
- Vertical walls



Controls

- Rod
- Electrical



Interior suncreening

- Siesta blinds
- Roller blinds
- Pleated blinds
- Venetian blinds



Additional accessories

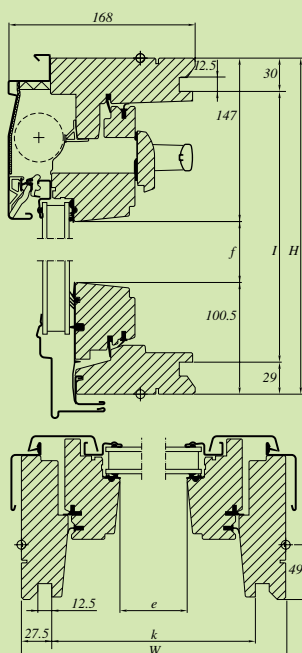
- Insect screen

Technical data GGL

Sizes

VELUX GB/IRL product programme

Cross-sections and measurements



Technical data

	Pane variant	Sizes											
		C01	C02	C04	F04	F06	M04	M06	M08	M10	M12	P04	P06
Ventilation flap [10 ³ mm ²]	--00 --73	2.7	2.7	2.7	3.4	3.4	4	4	4	4	4	5	5
Ventilation open window [m ²]	--00 --73	0.27	0.31	0.40	0.50	0.61	0.60	0.74	0.89	1.03	1.17	0.74	0.91
Effective daylight area [m ²]	--00 --73	0.17	0.20	0.27	0.35	0.45	0.44	0.56	0.69	0.82	0.94	0.56	0.71

	Pane variant	Sizes									
		P08	P10	P25	S01	S06	S08	S10	U04	U08	U10
Ventilation flap [10 ³ mm ²]	--00 --73	5	5	5	6.2	6.2	6.2	6.2	7.4	7.4	7.4
Ventilation open window [m ²]	--00 --73	1.10	1.27	0.37	0.61	1.12	1.35	1.57	1.08	1.60	1.86
Effective daylight area [m ²]	--00 --73	0.88	1.03	0.23	0.43	0.90	1.11	1.30	0.85	1.34	1.57

Thermal transmittance, U _w [W/m ² K]	--00 --73	1.6	pr EN ISO 12567-2
Sound insulation, R _w [dB]	--00 --73	29 35	EN ISO 140-3/EN ISO 717-1
Air permeability	--00 --73	Class 2 Class 3	EN 12207
Light transmittance, τ _v	--00 --73	0.76 0.75	EN 410
Total solar energy transmittance, g	--00 --73	0.59 0.54	EN 410

Measurements [mm]:

Width	Size	Exterior frame dimension	Visible glass	Lining rebate
		W	e	k
	C01, C02, C04	550	373	495
	F06	660	483	605
	M04, M06, M08, M10, M12	780	603	725
	P06, P08, P10, P25	942	765	887
	S01, S06, S08, S10	1140	963	1085
	U04, U08, U10	1340	1163	1285

Height	Size	Exterior frame dimension	Visible glass	Lining rebate
		H	f	l
	P25	550	302	491
	C01	698	450	639
	C02	778	530	719
	C04, F04, M04, P04, U04	978	730	919
	F06, M06, S06, P06	1178	930	1119
	M08, S08, P08, U08	1398	1150	1339
	P10, S10, M10, U10	1600	1352	1541
	M12	1800	1552	1741



GGU Centre-pivot roof window

Centre-pivot window with wooden core and EVERfinish® surface

Application

GGU roof window can be installed in roof pitches between 15° and 90° with the recommended installation height the same as the GGL. The elegant white polyurethane window is resistant to humidity and condensation making it particularly suited for use in a kitchen or bathroom.

Features

The centre-pivot window features a control bar which, when operated opens the ventilation flap. The friction hinges keep the window in an open position, and if additional ventilation is required it can be opened further and secured with a barrel bolt.

Operation

The control bar at the top of the window sash opens the ventilation flap and the window.

The window can be opened 5° and kept in locked position for ventilation. In addition, the sash can be fully rotated and kept in locked position for easy cleaning of the exterior pane.



GGU versions

	Standard	Variants
Frame and sash	EVERfinish® - white varnished polyurethane with wooden core	
Exterior cladding	Grey aluminium	Titanium zinc, pre-patinated zinc, copper or other cladding colours
Panes	Translucent obscure (--34) THERMO-STAR™ (--59) PROTEC-STAR™ (--73)	See section 8

GGU can be combined with:



Flashings for

- Single installation
- Twin installation
- Combi installation



Exterior suncreening

- Awning blind
- Roller shutter



Linings for

- Roof
- Vertical walls



Controls

- Rod
- Electrical



Interior sunscreening

- Siesta blinds
- Roller blinds
- Pleated blinds
- Venetian blinds

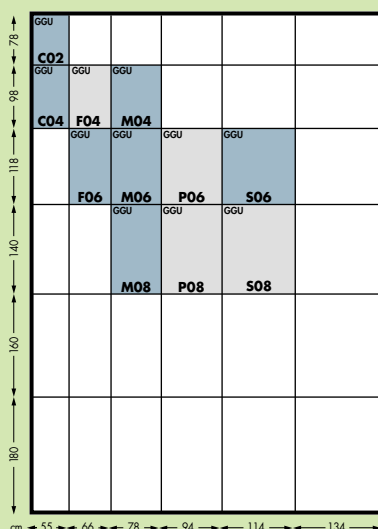


Additional accessories

- Insect screen

Technical data GGU

Sizes



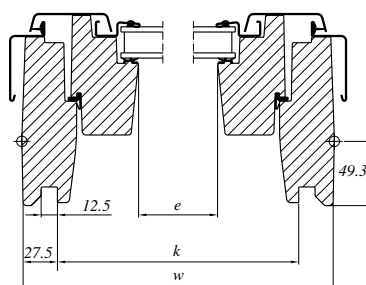
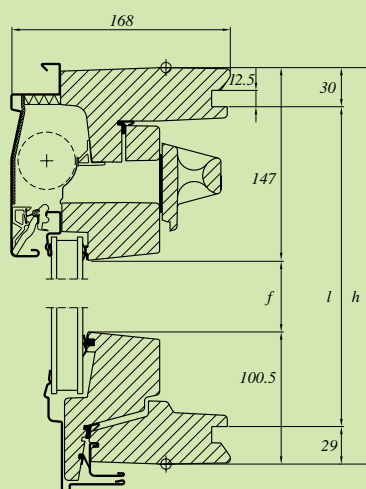
VELUX GB/IRL product programme

Technical data

	Pane variant	Sizes									
		C02	C04	F06	M04	M06	M08	P06	P08	S06	S08
Ventilation flap [10 ³ mm ²]	--34 --59 --73	2.7	2.7	3.4	4	4	4	5	5	6.2	6.2
Ventilation open window [m ²]	--34 --59 --73	0.31	0.40	0.61	0.60	0.74	0.89	0.91	1.10	1.12	1.35
Effective daylight area [m ²]	--34 --59 --73	0.20	0.27	0.45	0.44	0.56	0.69	0.71	0.88	0.90	1.11

Thermal transmittance, U_w [W/m ² K]	--34 --59 --73	1.6	pr EN ISO 12567-2
Sound insulation R_w [dB]	--34 --59 --73	32 32 35	EN ISO 140-3/EN ISO 717-1
Air permeability	--34 --59 --73	Class 3	EN 12207
Light transmittance, τ_v	--34 --59 --73	0.75 0.76 0.75	EN 410
Total solar energy transmittance, g	--34 --59 --73	0.54 0.59 0.54	EN 410

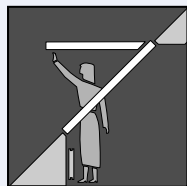
Cross-sections and measurements



Measurements [mm]:

Width	Size	Exterior frame dimension W	Visible glass e	Lining groove k
	C02, C04	550	373	495
F06	660	483	605	
M04, M06, M08	780	603	725	
P06, P08	942	765	887	
S06, S08	1140	963	1085	

Height	Size	H	f	l
	C02	778	530	719
C04, M04	978	730	919	
F06, P06, S06, M06	1178	930	1119	
M08, P08, S08	1398	1150	1339	



GPL Emergency escape/ access roof window

Top-hung roof window

Application

GPL roof window can be installed in roof pitches between 15° and 55° (with special springs up to 75°).

Certain sizes of GPL window meet the Building Regulations for emergency escape/access. For further details see 2.10.00.

Emergency escape/access roof windows should not be fitted with locks, restrictors, shutters or any other product that will restrict their use.

Features

Top-hung window with control bar, ventilation flap with air filter, opens in various positions up to 45°. Barrel bolt for keeping the window locked in cleaning position. The handle at the bottom sash can keep the window in ventilation position.

Operation

The window is opened by means of a handle placed at the bottom sash.

The control bar at the top of the window sash is used for opening the ventilation flap or for fully rotating the sash for cleaning of the exterior pane.



GPL versions

	Standard	Variants
Frame and sash	Nordic pine with TOPfinish™	White PAINTfinish™
Exterior cladding	Grey aluminium	Titanium zinc, pre-patinated zinc, copper or other cladding colours
Panes	THERMO-STAR™ (--59) PROTEC-STAR™ (--73)	See section 8

GPL can be combined with:



Flashings for

- Single installation
- Twin installation
- Combi installation



Exterior suncreening

- Awning blind
- Roller shutter



Linings for

- Roof
- Vertical walls



Controls

- Electrical



Interior suncreening

- Siesta blinds
- Roller blinds
- Pleated blinds
- Venetian blinds

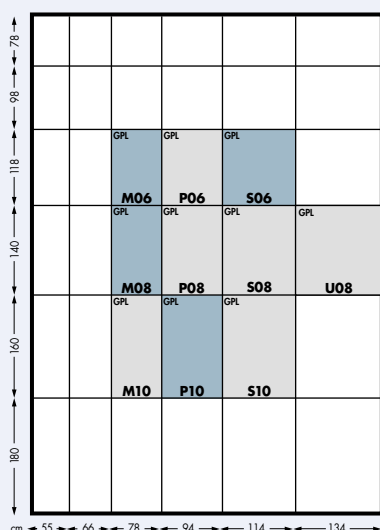


Additional accessories

- Insect screen

Technical data GPL

Sizes



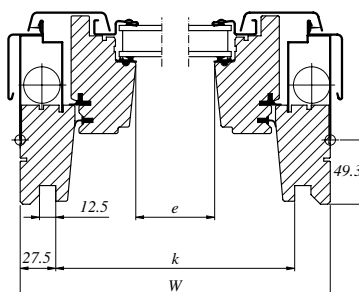
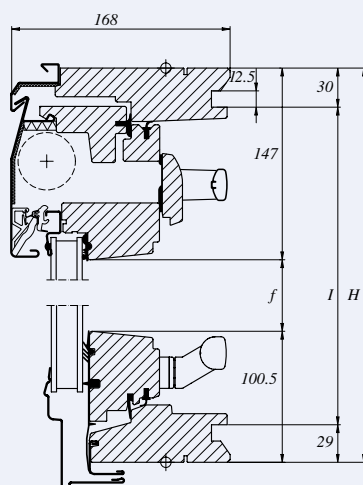
VELUX GB/IRL product programme

Technical data

	Pane variant	Sizes									
		M06	M08	M10	P06	P08	P10	S06	S08	S10	U08
Ventilation flap [10 ³ mm ²]	--59 --73	4	4	4	5	5	5	6.2	6.2	6.2	7.4
Ventilation open window [m ²]	--59 --73	0.76	0.91	1.05	0.94	1.13	1.30	1.15	1.39	1.60	1.65
Effective daylight area [m ²]	--59 --73	0.56	0.69	0.82	0.71	0.88	1.03	0.90	1.11	1.3	1.34

Thermal transmittance, U_w [W/m ² K]	--59 --73	1.6	pr EN ISO 12567-2
Sound insulation, R_w [dB]	--59 --73	32 35	EN ISO 140-3/EN ISO 717-1
Air permeability	--59 --73	Class 3	EN 12207
Light transmittance, τ_v	--59 --73	0.76 0.75	EN 410
Total solar energy transmittance, g	--59 --73	0.59 0.54	EN 410

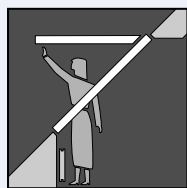
Cross-sections and measurements



Measurements [mm]:

Width	Size	Exterior frame dimension W	Visible glass e	Lining groove k
	M06, M08, M10	780	603	725
P06, P08, P10	942	765	887	
S06, S08, S10	1140	963	1085	
U08	1340	1163	1285	

Height	Size	H	f	l
	M06, P06, S06	1178	930	1119
	M08, P08, S08, U08	1398	1150	1339
	M10, P10, S10	1600	1352	1541



GPU Top-hung roof window

Top-hung roof window with wooden core and EVERfinish® surface.

Application

GPU roof window can be installed in roof pitches between 15° and 55° (with special springs up to 75°).

The maintenance free polyurethane surface makes the window resistant to humidity and condensation. It is therefore ideal for kitchens, bathrooms, shower rooms, etc.

Some sizes of GPU meet Building Regulation requirements for emergency escape/access. Please refer to 2.10.00 for further details.

Emergency escape/access roof windows should not be fitted with locks, restrictors, shutters or any other product that will restrict their use.

Features

Top-hung window with control bar.
Ventilation flap with air filter.
Opens in various positions up to 45°.
Barrel bolt keeps the window locked in cleaning position.

The handle at the bottom frame can keep the window locked in ventilation position.

The smooth surface is without joints and edges, making the roof window very easy to clean.

Operation

The window can be opened by means of a handle placed at the bottom sash.

The control bar at the top of the window sash is used for opening the ventilation flap or fully rotating the sash for cleaning of the exterior pane.



GPU versions

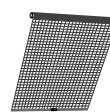
	Standard	Variants
Frame and sash	EVERfinish® - white varnished polyurethane with wooden core	
Exterior cladding	Grey aluminium	Titanium zinc, pre-patinated zinc, copper or other cladding colours
Panes	Translucent ornamental (--34) THERMO-STAR™ (--59) PROTEC-STAR™ (--73)	See section 8

GPU can be combined with:



Flashings for

- Single installation
- Twin installation
- Combi installation



Exterior suncreening

- Awning blind
- Roller shutter



Linings for

- Roof
- Vertical walls



Controls

- Electrical



Interior suncreening

- Siesta blinds
- Roller blinds
- Pleated blinds
- Venetian blinds

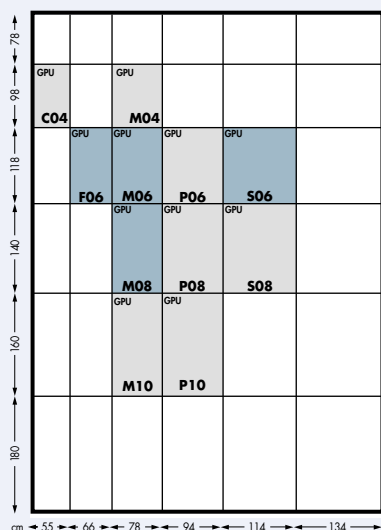


Additional accessories

- Insect screen

Technical data GPU

Sizes



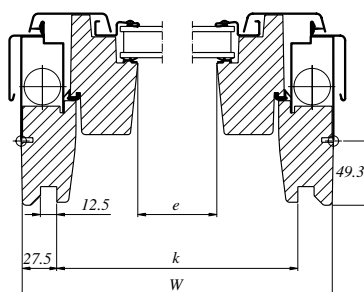
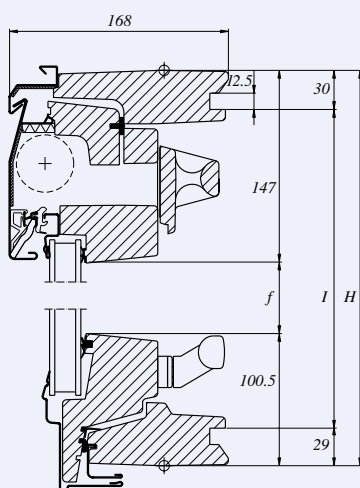
VELUX GB/IRL product programme

Technical data

	Pane variant	Sizes						
		F06	M06	M08	P06	P08	S06	S08
Ventilation flap [10' mm ²]	--34 --59 --73	3.4	4	4	5	5	6.2	6.2
Ventilation open window [m ²]	--34 --59 --73	0.63	0.76	0.91	0.94	1.13	1.15	1.39
Effective daylight area [m ²]	--34 --59 --73	0.45	0.56	0.69	0.71	0.88	0.90	1.11

Thermal transmittance, U_w [W/m ² K]	--34 --59 --73	1.6	pr EN ISO 12567-2
Sound insulation R_w [dB]	--34 --59 --73	32 32 35	EN ISO 140-3/EN ISO 717-1
Air permeability	--34 --59 --73	Class 3	EN 12207
Light transmittance, τ_v	--34 --59 --73	0.75 0.76 0.75	EN 410
Total solar energy transmittance, g	--34 --59 --73	0.54 0.59 0.54	EN 410

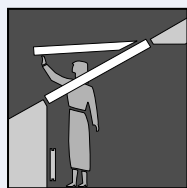
Cross-sections and measurements



Measurements [mm]:

Width	Size	Exterior frame dimension W	Visible glass e	Lining groove k
	F06	660	483	605
M06, M08	780	603	725	
P06, P08	942	765	887	
S06, S08	1140	963	1085	

Height	Size	H	f	l
	F06, M06, P06, S06	1178	930	1119
M08, P08, S08	1398	1150	1339	



GHL Top-hung roof window

Top-hung roof window

Application

GHL roof window can be installed in roof pitches between 15° and 55° (with special springs up to 75°).

The bottom edge of the window must be placed approx. 0.90 – 1.20m above the floor.

Features

Top-hung window with control bar, ventilation flap with air filter, three different opening positions, 5°, 15° and 30°, barrel bolt for keeping the window locked in cleaning position, handle at the bottom sash can keep the window locked in ventilation position.

Operation

The window is opened by means of a handle placed at the bottom sash.

The control bar at the top of the window sash is used for opening the ventilation flap or for fully rotating the sash for cleaning of the exterior pane.



GHL versions

	Standard	Variants
Frame and sash	Nordic pine with TOPfinish™	White paint, PAINTfinish™
Exterior cladding	Grey aluminium	Titanium zinc, pre-patinated zinc, copper or other cladding colours
Panes	THERMO-STAR™ (--59) PROTEC-STAR™ (--73)	See section 8

GHL can be combined with:



Flashings for

- Single installation
- Twin installation
- Combi installation



Exterior sunscreening

- Awning blind
- Roller shutter



Linings for

- Roof
- Vertical walls



Controls

- Electrical



Interior suncreening

- Siesta blinds
- Roller blinds
- Pleated blinds
- Venetian blinds

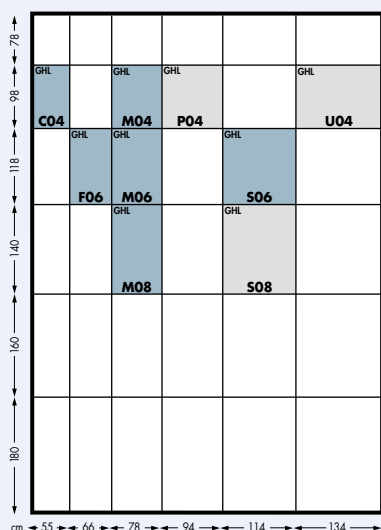


Additional accessories

- Insect screen

Technical data GHL

Sizes



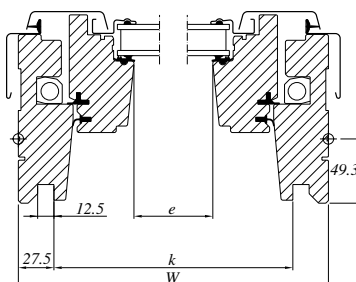
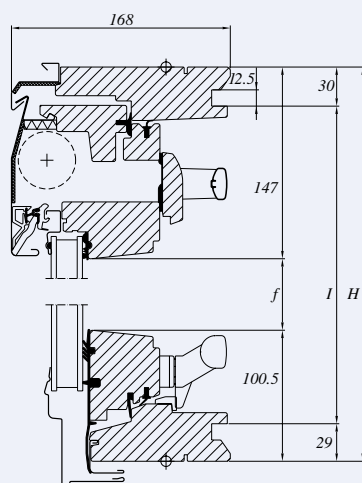
VELUX GB/IRL product programme

Technical data

	Pane variant	Sizes								
		C04	F06	M04	M06	M08	P04	S06	S08	U04
Ventilation flap [10 ³ mm ²]	--59 --73	2.7	3.4	4	4	4	5	6.2	6.2	7.4
Ventilation open window [m ²]	--59 --73	0.42	0.63	0.62	0.76	0.91	0.77	1.15	1.39	1.12
Effective daylight area [m ²]	--59 --73	0.27	0.45	0.44	0.56	0.69	0.56	0.90	1.11	0.85

Thermal transmittance, U_w [W/m ² K]	--59 --73	1.6	pr EN ISO 12567-2
Sound insulation, R_w [dB]	--59 --73	32 35	EN ISO 140-3/EN ISO 717-1
Air permeability	--59 --73	Class 3	EN 12207
Light transmittance, τ_v	--59 --73	0.76 0.75	EN 410
Total solar energy transmittance, g	--59 --73	0.59 0.54	EN 410

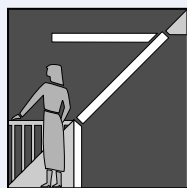
Cross-sections and measurements



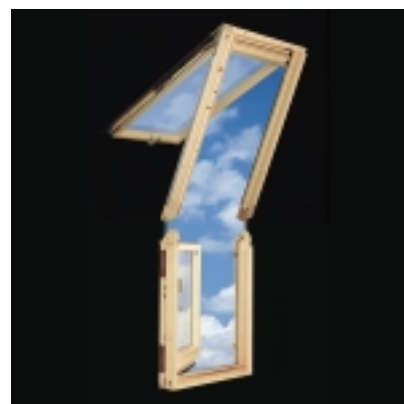
Measurements [mm]:

Width	Size	Exterior frame dimension	Visible glass	Lining groove
		W	e	k
	C04	550	373	495
	F06	660	483	605
	M04, M06, M08	780	603	725
	S06, S08	1140	963	1085
	U04	1340	1163	1285

Height	Size	H	f	l	
		C04, M04, U04	978	730	919
		F06, M06, S06	1178	930	1119
M08, S08	1398	1150	1339		



GEL + VEA/B/C Roof Terrace System



Roof Terrace System

Application

The VELUX Roof Terrace System can be installed in roof pitches between 35° and 53°. The system offers the possibility of creating a roof terrace with access from the building. The number of units installed is according to individual wishes. VELUX do not supply the exterior terrace weathering or railing elements.

Features

The system consists of:

GEL: The top-hung top element opens 45°, barrel bolt for locking the sash in cleaning position, ventilation flap with air filter, control bar.

VEA: Side-hung bottom element opens 90° and is hinged on the left hand side seen from the outside.

VEB: Side-hung bottom element opens 90° and is hinged on the right hand side seen from the outside.

VEC: Fixed bottom element.

The appropriate flashing and the EBY adjustable support trimmer are also supplied as part of the system.

Operation

GEL can be opened by means of a handle at the bottom sash. The window opens up to 45°.

The control bar on GEL is used for operating the ventilation flap or for fully rotating the sash for cleaning the exterior pane.

The bottom element is opened by means of a handle at the side sash. When both the top and the bottom element are open, there is free access to the roof terrace.

GEL+VEA/B/C versions

	Standard	Variants
Frame and sash	Nordic pine with TOPfinish™	White paint, PAINTfinish™
Exterior cladding	Grey aluminium	Titanium zinc, pre-patinated zinc, copper or other cladding colours
Panes	PROTEC-STAR™ (--73)	See section 8

Roof Terrace System can be combined with:



Flashings for

- Combi installation



Interior suncreening

- Siesta blinds
- Roller blinds
- Pleated blinds
- Venetian blinds



Linings for

- Specially made on request
- please contact VELUX

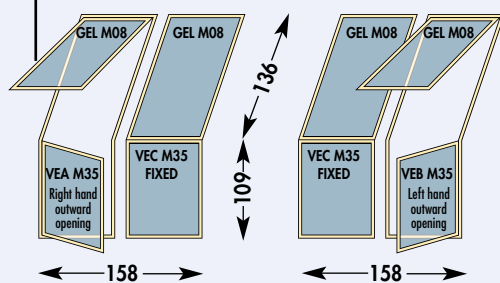


Exterior suncreening

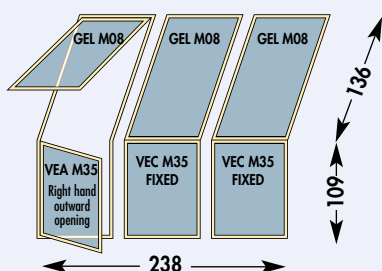
- Awning blind
- for top element GEL only

Technical data GEL + VEA/B/C Roof Terrace System

Sizes



Available in sets including flashings and EBV trimmer/s



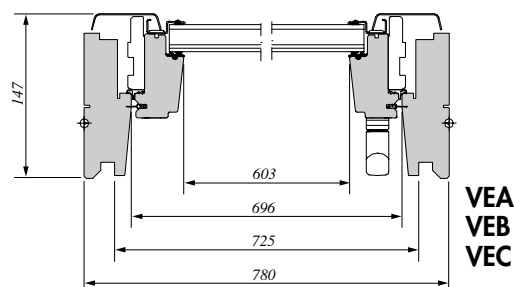
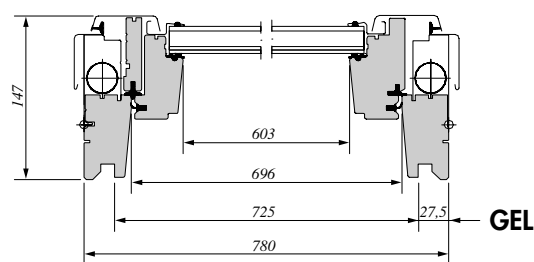
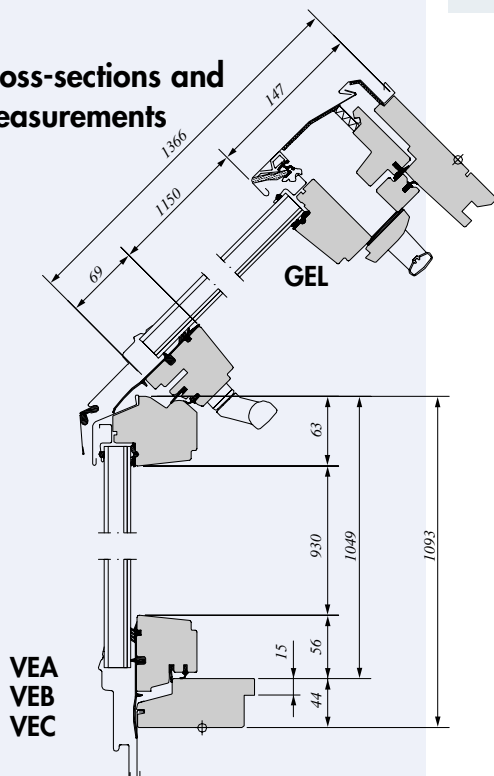
VELUX GB/IRL product packages

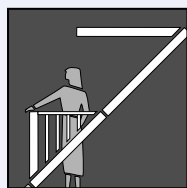
Technical data

	Pane variant	Sizes	
		M08	M35
Ventilation flap [10° mm²]	--73	4	–
Ventilation open window [m²]	--73	0.89	0.64
Effective daylight area [m²]	GEL	0.69	
	VEA, B, C		0.44

Thermal transmittance, U_w [W/m²K]	--73	1.6	pr EN ISO 12567-2
Sound insulation, R_w [dB]	--73	33	EN ISO 140-3/EN ISO 717-1
Air permeability	--73	Class 3	EN 12207
Light transmittance, τ_v	--73	0.75	EN 410
Total solar energy transmittance, g	--73	0.54	EN 410

Cross-sections and measurements





GDL CABRIO™ Roof Window Balcony System



Combined roof window and balcony

Application

The GDL CABRIO Roof Balcony window can be used on its own in roof pitches 35° and 53°. It can also be used, to great effect, in conjunction with a combination comprising GPL top-hung and GIL fixed lower window elements. Further combinations are also available.

Features

The GDL upper sash and GPL can open up to 45° and have control bars, ventilation flaps with air filters and barrel bolts to secure the sash when reversed for cleaning. The GDL bottom sash has integral railings which automatically slide into place.

Operation

Comprising of GDL, GPL and GIL roof windows, the system retains all the functions of a VELUX roof window. The GDL CABRIO balcony opens and closes easily on powerful, spring assisted hinges.

GDL CABRIO upper element and GPL are opened by means of a handle on the bottom of the sash. The control bar at the top of the sash is used to open the ventilation flap or to fully rotate the window into the cleaning position. When pushed gently forward into the vertical position the lower section of the GDL forms an instant balcony with side railings. GIL is a fixed window element which fits directly below the GPL.

GDL versions

	Standard	Variants
Frame and sash	Nordic pine with TOPfinish™	White paint, PAINTfinish™
Exterior cladding	Grey aluminium	Titanium zinc, pre-patinated zinc, copper or other cladding colours
Panes	PROTEC-STAR™ (--73)	See section 8

The CABRIO Roof Window Balcony System can be combined with:



Flashings for

- Single installation
- Combi installation



Interior suncreening

- Siesta blinds
- Roller blinds
- Pleated blinds
- Venetian blinds



Linings for

- Roof



Exterior suncreening

- Awning blind – only for top element.

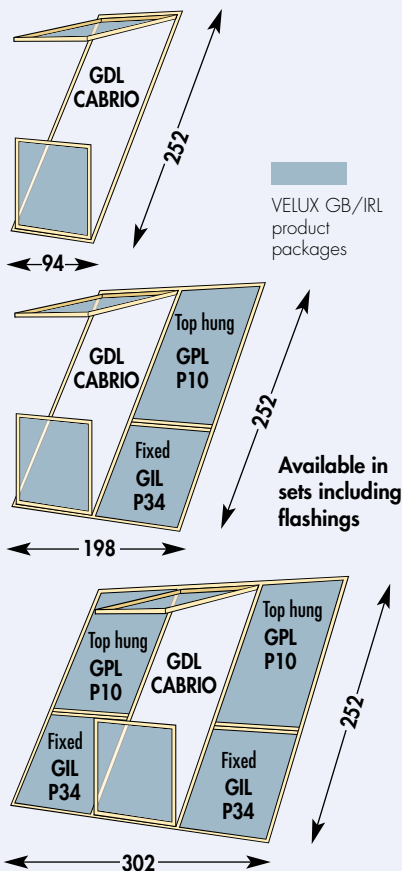


Additional accessories

- Insect screen

Technical data CABRIO™ Roof Window Balcony System

Sizes



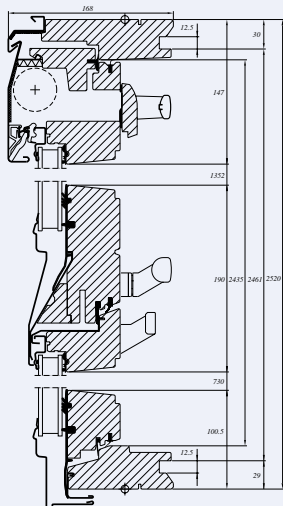
Technical data

	Pane variant	Sizes		
		P19	P10	P34
Ventilation flap [10 ³ mm ²]	--73	5.0	5	-
Ventilation open window [m ²]	--73	2.09	1.30	-
Effective daylight area [m ²]	--73	1.59	1.03	0.56

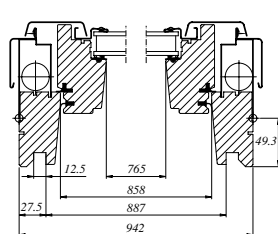
Thermal transmittance, U_w [W/m ² K]	--73	1.6	pr EN ISO 12567-2
Sound insulation, R_w [dB]	--73	35	EN ISO 140-3/EN ISO 717-1
Air permeability	--73	Class 3	EN 12207
Light transmittance, τ_v	--73	0.75	EN 410
Total solar energy transmittance, g	--73	0.54	EN 410

Cross-sections and measurements

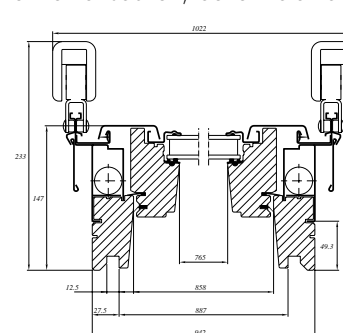
Vertical section

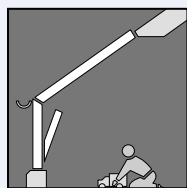


Horizontal section, top element



Horizontal section, bottom element





GGL+VFE Combined roof and vertical window element



Vertical window element for combination with a roof window

Application

A combination of the GGL centre-pivot window and VFE vertical window is the ideal solution for rooms with a high inner wall. The view is improved considerably when the roof windows are extended down into the facade.

The top of the VFE frame is profiled so that it fits into the bottom frame of the roof window. Can be installed in a roof pitch between 15° and 55°.

The VFE element can also be combined with GHL and GPL top-hung roof windows.

Features

VFE vertical window element is bottom-hung and opens inwards. Handle for opening the window to ventilation position.

Operation

VFE is operated by means of a handle at the top of the sash. Ventilation is obtained through a limited opening for safety. A release button makes it possible to open the window completely for easy cleaning of the exterior pane.

VFE versions

	Standard	Variants
Frame and sash	<i>Nordic pine with TOPfinish™</i>	<i>White paint, PAINTfinish™</i>
Exterior cladding	<i>Grey aluminium</i>	<i>Titanium zinc, pre-patinated zinc, copper or other cladding colours</i>
Panes	<i>PROTEC-STAR™ (--73)</i>	<i>See section 8</i>

VFE can be combined with:



Roof windows

- GGL
- GHL
- GPL



Interior suncreening

- Siesta blinds
- Roller blinds
- Pleated blinds
- Venetian blinds



Flashings for

- Single installation
- Twin installation



Exterior suncreening

- Awning blind



Linings for

- Roof and vertical elements

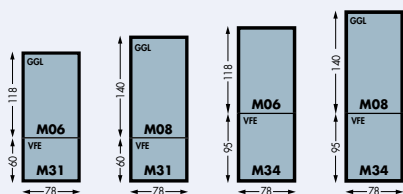


Additional accessories

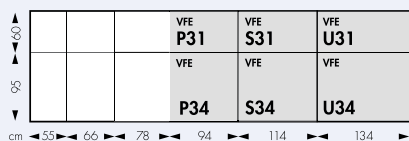
- Insect screen

Technical data VFE

Sizes



VELUX GB/IRL product programme



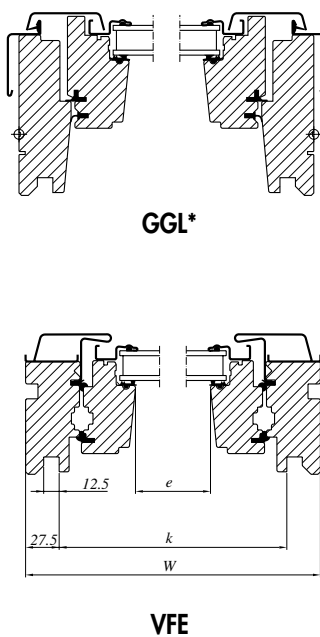
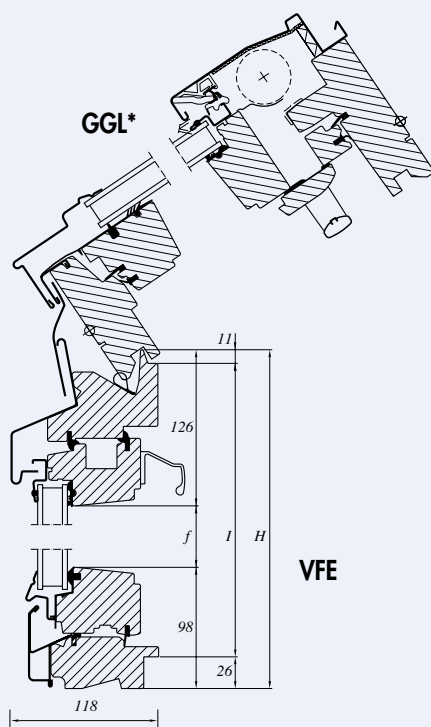
Available to order

Technical data

	Pane variant	Sizes							
		M31	M34	P31	P34	S31	S34	U31	U34
Ventilation open window [m ²]	--73	0.33	0.58	0.41	0.72	0.51	0.88	0.61	1.05

Thermal transmittance, U_w [W/m ² K]	--73	1.6	pr EN ISO 12567-2
Sound insulation, R_w [dB]	--73	35	EN ISO 140-3/EN ISO 717-1
Air permeability	--73	Class 3	EN 12207
Light transmittance, τ_v	--73	0.75	EN 410
Total solar energy transmittance, g	--73	0.54	EN 410

Cross-sections and measurements

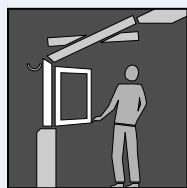


Measurements [mm]:

Width	Size	Exterior frame dimension	Visible glass	Lining groove
		W	e	k
Width	M31, M34	780	603	725
	P31, P34	942	765	887
	S31, S34	1140	963	1085
	U31, U34	1340	1163	1285

Height	Size	H	f	l
		M31, P31, S31, U31	600	376
	M34, P34, S34, U34	954	730	917

*See page 3.01.01 for full details of GGL



VFA/B Vertical window element

The vertical tilt and turn window that fits directly below a roof window

Application

VFA and VFB can be combined with VELUX roof windows GGL, GHL and GPL. It is the ideal solution for rooms with a high inner wall where an extended view is required.

The top of the frame is profiled so that it fits into the bottom frame of the roof window. Can be installed in a roof pitch between 15° and 55°.

The vertical window elements are delivered in standard widths.

Features

VFA vertical window element is left-hung. VFB is right-hung. Both vertical windows open inwards. Handle for opening the window in tilting position.

Operation

VFA and VFB are operated by means of the handle at the side sash and the window is opened to ventilation position.

A release button makes it possible to open the window up to 90°, and thereby used as emergency escape.



VFA/B versions

	Standard	Variants
Frame and sash	Nordic pine with TOPfinish™	White paint, PAINTfinish™
Exterior cladding	Grey aluminium	Titanium zinc, pre-patinated zinc, copper or other cladding colours
Panes	PROTEC-STAR™ (--73)	See section 8

VFA/B can be combined with:



Roof windows

- GGL
- GHL
- GPL



Linings for

- Roof and vertical elements



Flashings for

- Single installation
- Twin installation



Interior suncreening

- Siesta blinds
- Roller blinds
- Pleated blinds
- Venetian blinds

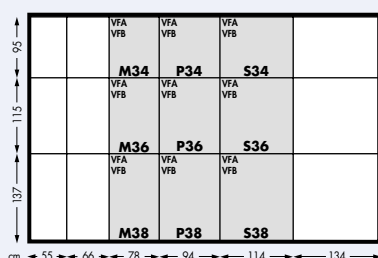


Additional accessories

- Insect screen

Technical data VFA/B

Sizes

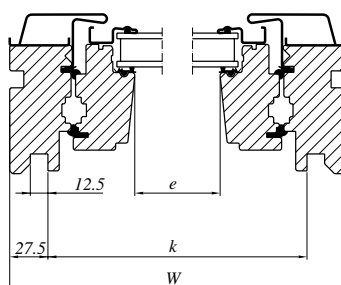
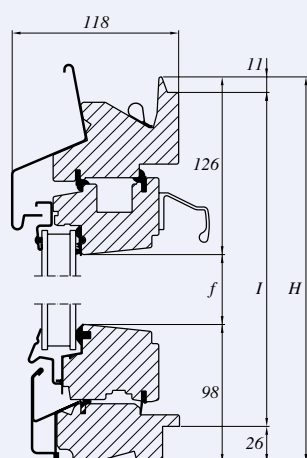


Technical data

	Sizes								
	M34	M36	M38	P34	P36	P38	S34	S36	S38
Effective daylight area [m ²]	0.44	0.56	0.69	0.56	0.71	0.88	0.70	0.90	1.11
Ventilation open window [m ²]	0.56	0.70	0.87	0.70	0.89	1.07	0.86	1.09	1.32

Thermal transmittance, U-value [W/m ² K]	1.6	pr EN ISO 12567-2
Sound insulation, R _w [dB]	35	EN ISO 140-3/EN ISO 717-1
Air permeability	Class 3	EN 12207
Light transmittance, τ _v	0.75	EN 410
Total solar energy transmittance, g	0.54	EN 410

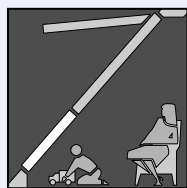
Cross-sections and measurements



Measurements [mm]:

Width	Size	Exterior frame dimension W	Visible glass e	Lining groove k
	M34, M36, M38	780	603	725
P34, P36, P38	942	765	887	
S34, S36, S38	1140	963	1085	

Height	Size	H	f	l
	M34, P34, S34	954	730	917
M36, P36, S36	1154	930	1117	
M38, P38, S38	1374	1150	1337	



GIL Additional elements

Additional element for installation below a VELUX roof window

Application

GIL roof window can be installed in roof pitches between 15° and 90°. The window is installed directly against the frame of the roof window positioned above. The design of the window gives new architectural possibilities and increases the field of vision downwards.

Features

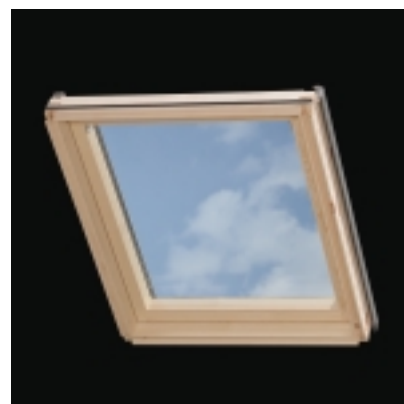
GIL roof window has a fixed sash. Ventilation takes place through the roof window positioned above. Frame and sash are delivered with the same inner and outer profiles as the roof windows with which the window is combined.

Operation

Exterior maintenance and cleaning takes place through the roof window positioned above.

Installation

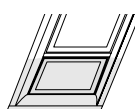
GIL can be installed together with the following types of roof windows: GGL, GHL, and GPL.



GIL versions

	Standard	Variants
Frame and sash	<i>Nordic pine with TOPfinish™</i>	<i>White paint PAINTfinish™</i>
Exterior cladding	<i>Grey aluminium</i>	<i>Titanium zinc, pre-patinated zinc, copper or other cladding colours</i>
Panes	<i>PROTEC-STAR™ (--73)</i>	<i>See section 8</i>

GIL can be combined with:



Flashings for

- Single installation
- Twin installation
- Combi installation



Additional accessories

- Insect screen

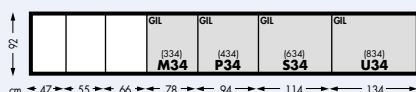


Interior sunscreening

- Siesta blind
- Roller blind
- Pleated blind
- Venetian blind

Technical data GIL

Sizes



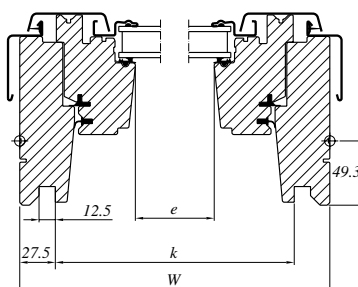
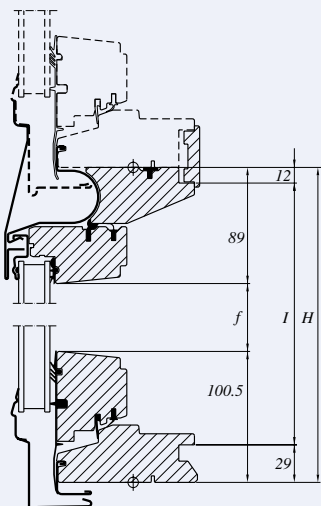
Available to order

Technical data

	Pane variant	Sizes			
		M34	P34	S34	U34
Effective daylight area [m ²]	--73	0.44	0.56	0.70	0.85

Thermal transmittance, U-value [W/m ² K]	--73	1.6	pr EN ISO 12567-2	
Sound insulation, R _w [dB]	--73	35	EN ISO 140-3/EN ISO 717-1	
Air permeability	--73	Class 3	EN 12207	
Light transmittance, τ _v	--73	0.75	EN 410	
Total solar energy transmittance, g	--73	0.54	EN 410	

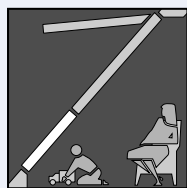
Cross-sections and measurements



Measurements [mm]:

	Exterior frame dimension	Visible glass	Lining groove
Width			
Size	W	e	k
M34	780	603	725
P34	942	765	887
S34	1140	963	1085
U34	1340	1163	1285

Height	Size	H	f	l
	M34, P34, S34, U34	920	730	879



GIU Additional elements

Additional element for installation below a VELUX EVERfinish® roof window

Application

GIU roof window can be installed in roof pitches between 15° and 90°. The window is installed directly against the frame of the roof window positioned above. The design of the window gives new architectural possibilities and increases the field of vision downwards.

Features

GIU roof window has a fixed sash. Ventilation takes place through the roof window positioned above. Frame and sash are delivered with the same inner and outer profiles as the roof windows with which the window is combined.

Operation

Exterior maintenance and cleaning takes place through the roof window placed above.

Installation

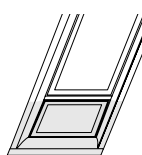
GIU can be installed together with the following types of roof windows: GGU, GPU.



GIU versions

	Standard	Variants
Frame and sash	<i>EVERfinish® - white varnished polyurethane with wooden core</i>	
Exterior cladding	<i>Grey aluminium</i>	<i>Titanium zinc, pre-patinated zinc, copper or other cladding colours</i>
Panes	<i>PROTEC-STAR™ (--73)</i>	<i>See section 8</i>

GIU can be combined with:



Flashings for

- Single installation
- Twin installation
- Combi installation



Additional accessories

- Insect screen

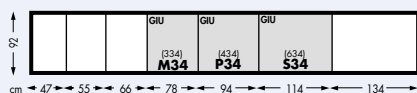


Interior sunscreening

- Siesta blind
- Roller blind
- Pleated blind
- Venetian blind

Technical data GIU

Sizes



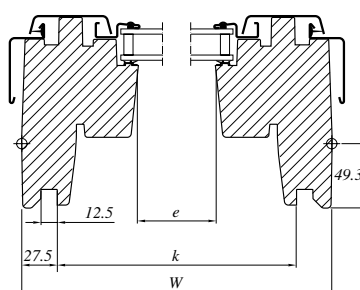
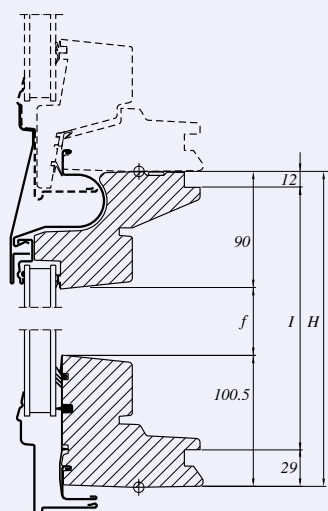
Available to order.

Technical data

	Pane variant	Sizes		
		M34	P34	S34
Effective daylight area [m ²]	--73	0.44	0.56	0.70

Thermal transmittance, U_w [W/m ² K]	--73	1.6	pr EN ISO 12567-2
Sound insulation, R_w [dB]	--73	35	EN ISO 140-3/EN ISO 717-1
Air permeability	--73	Class 3	EN 12207
Light transmittance, τ_v	--73	0.75	EN 410
Total solar energy transmittance, g	--73	0.54	EN 410

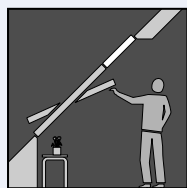
Cross-sections and measurements



Measurements [mm]:

Width		Exterior frame dimension	Visible glass	Lining groove
	Size	W	e	k
M34		780	601	725
P34		942	763	887
S34		1140	961	1085

Height		H	f	l
	M34, P34, S34		920	729



GI- Additional elements

Additional element for installation above a VELUX roof window

Application

GI- roof window can be installed in all roofing materials in roof pitches between 15° and 90°. The window is installed directly against the frame of the roof window positioned below. The design of the window gives new architectural possibilities and increases the field of vision upwards.

Features

GI- roof window has a fixed sash. Ventilation takes place through the roof window positioned below. Frame and sash are delivered with the same inner and outer profiles as the roof windows with which the window is combined.

Operation

Exterior maintenance and cleaning takes place through the roof window positioned below.

Installation

GI- can be installed together with the following types of roof windows: GGL, GHL, GPL, GDL and GEL.



GI- versions

	Standard	Variants
Frame and sash	<i>Nordic pine with TOPfinish™</i>	<i>White paint PAINTfinish™</i>
Exterior cladding	<i>Grey aluminium</i>	<i>Titanium zinc, pre-patinated zinc, copper or other cladding colours</i>
Panes	<i>PROTEC-STAR™ (--73)</i>	<i>See section 8</i>

GI- can be combined with:



Flashings for

- Single installation
- Combi installation

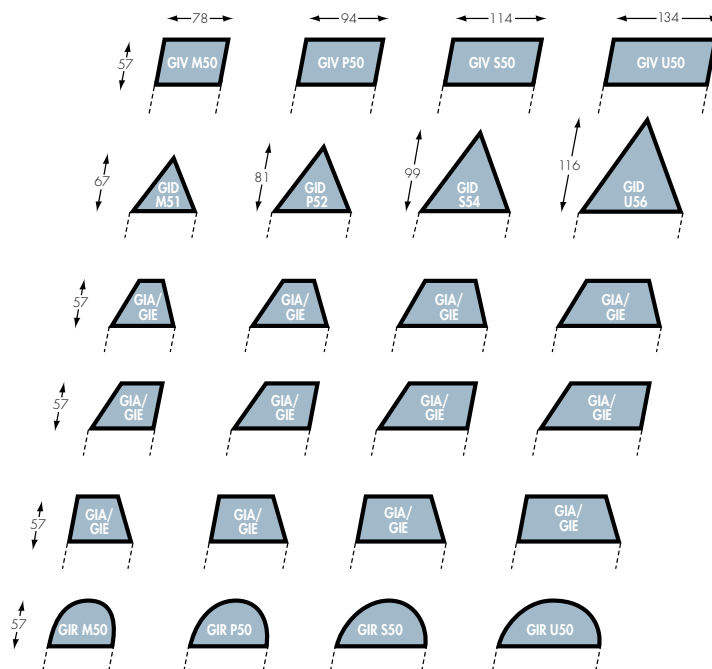


Interior sunscreening

- Roller blinds are specially made - please contact VELUX

Technical data GI-

Extending the roof window upwards with GI-elements can now shape your thinking in new ways. There are three standard shapes, GIV, GID and GIR with the GIA/GIE available as specials each available in four sizes, plus the opportunity to specify your own shape if required. For further information please contact VELUX.



For special size/shape windows see section 9.00.00.



Conservation Roof Window System

Centre-pivot window

Application

The VELUX Conservation Roof Window System offers all the superior technical features of a VELUX roof window but in a traditional conservation style. It allows you to make the area under the roof truly habitable – not previously possible with a rooflight. The system blends in perfectly in sensitive conservation areas with its:

- mullion (Central glazing bar)
- recessed installation
- external black metal work.

Features

Consisting of a GGL centre-pivot roof window with vertical glazing bar and associated flashing. Three different versions are available depending on the roofing material:

- for slate up to a maximum thickness of 8mm with roof pitches of 35°-90°.
- for profiled roofing material up to a maximum of 120mm in profile with roof pitches of 15° - 90°.
- for plain tiles up to 15mm thick with roof pitches of 25° - 90°.

An emergency escape/access system is also available which includes a GPL top-hung window with vertical glazing bar and associated flashing. Again choose from the variants listed above depending on roofing material and roof pitch for GPL.

Operation

See section 3.01.00 for GGL and section 3.02.02 for GPL.



GGL versions

Standard	Standard	Variants
Frame and sash	<i>Nordic pine with TOPfinish™</i>	<i>White paint, PAINTfinish™</i>
Exterior cladding	<i>Black aluminium</i>	<i>Titanium zinc, pre-patinated zinc, copper or other cladding colours</i>
Panes	<i>PROTEC-STAR™ (--73)</i>	<i>See section 8</i>

Conservation Roof Window System can be combined with:



Flashings for

- Single installation
- Twin installation – tile only
- Combi installation slate/tile only



Exterior sunscreening

- Awning blind (MHL only)
- Roller shutter



Linings for

- Roof
- Vertical walls



Controls

- Rod
- Electrical



Interior suncreening

- Siesta blinds
- Roller blinds
- Pleated blinds
- Venetian blinds

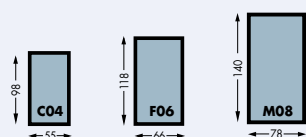


Additional accessories

- Insect screen

Technical data Conservation Roof Window System

Sizes



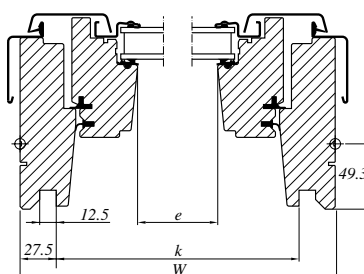
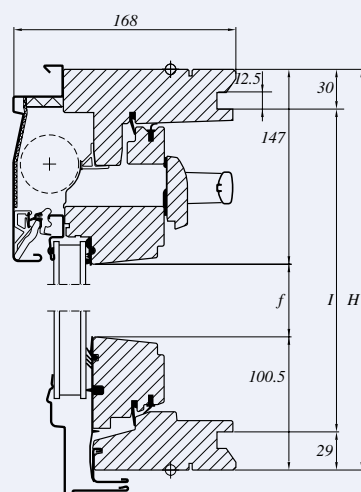
VELUX GB/IRL product programme.
Other sizes/types available to order.

Technical data

	Pane variant	Size GGL			Size GPL
		CO4	F06	M08	M08
Ventilation flap [10' mm ²]	--73	2.7	3.4	4	4
Ventilation open window [m ²]	--73	0.40	0.61	0.89	0.91
Effective daylight area [m ²]	--73	0.27	0.45	0.69	0.69

Thermal transmittance, U_w [W/m ² K]	--73	1.6	pr EN ISO 12567-2	
Sound insulation, R_w [dB]	--73	35	EN ISO 140-3/EN ISO 717-1	
Air permeability	--73	Class 3	EN 12207	
Light transmittance, τ_v	--73	0.75	EN 410	
Total solar energy transmittance, g	--73	0.54	EN 410	

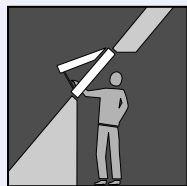
Cross-sections and measurements



Measurements [mm]:

Width		Exterior frame dimension	Visible glass	Lining rebate
	Size	W	e	k
	C04	550	373	495
	F06	660	483	605
	M08	780	603	725

Height		H	f	l
	Size	H	f	l
	C04	978	730	919
	F06	1178	930	1119
	M08	1398	1150	1339



GVA Rooflight

The top-hung rooflight for listed buildings and building in conservation areas.

Application

GVA rooflight can be installed in all roof pitches between 20° and 60° in flat or profiled roofing material up to 60mm in profile.

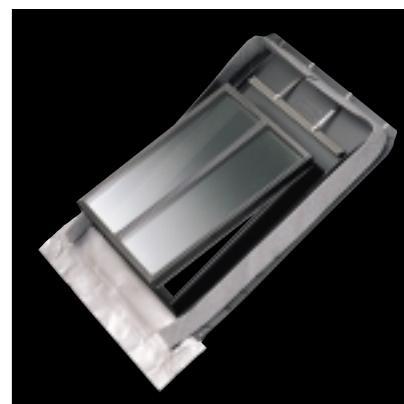
The traditional style of GVA rooflight with horizontal top edge and vertical glazing bar makes it ideal for historic buildings or for replacing old cast-iron rooflights.

Features

The flashing is an integral part of the rooflight, which facilitates installation. GVA has an interior and exterior vertical glazing bar and in addition, a lead apron for traditional installation.

Operation

GVA is top-hung and opens outwards with a peg stay at the bottom sash. The window can be opened and secured in two positions.



GVA

Frame	<i>Black polyurethane</i>
Sash	<i>Black anodised aluminium</i>
Pane	<i>Strength/low energy (--59)</i>

GVA flashing



- *Integral part of the frame*
- *For flat or profiled roofing material up to 60mm in profile*
- *Single installation only*
- *Lead apron*

Technical data GVA

Sizes



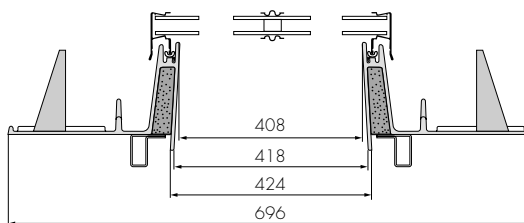
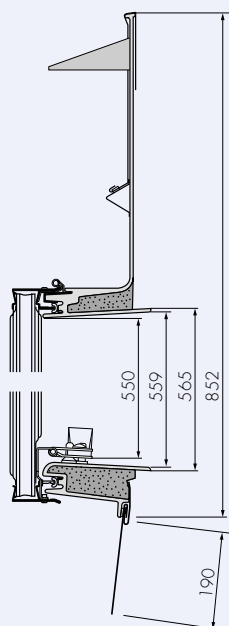
VELUX GB/IRL product programme

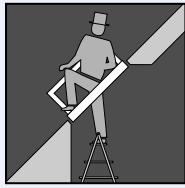
Technical data

	Pane variant	
Effective daylight area [m ²]	--59	0.22
Ventilation open window [m ²]	--59	0.13

Thermal transmittance, U_w [W/m ² K]	--59	3.1	pr EN ISO 12567-2
Sound insulation, R_w [dB]	--59	27	EN ISO 140-3/EN ISO 717-1
Air permeability	--59	Class 2	EN 12207
Light transmittance, τ_v	--59	0.76	EN 410
Total solar energy transmittance, g	--59	0.59	EN 410

Cross-sections and measurements





GVT Emergency escape/ access rooflight

Side-hung emergency escape/access rooflight

Application

The side-hung GVT rooflight can be installed in all roof pitches between 20° and 65° in flat or profiled roofing materials up to 60mm in profile.

The sash can be opened to 90° and secured when used for emergency escape/access.

Features

The flashing is an integral part of the window, which facilitates installation.

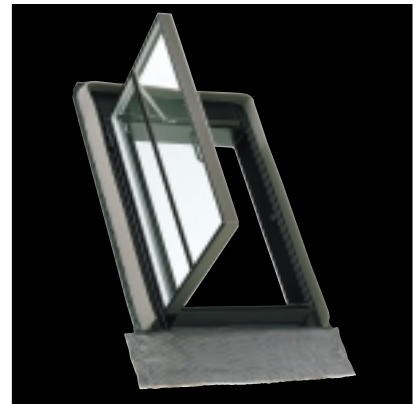
The sash of GVT is left-hung and opens outwards but can be turned to be right-hung and opens outwards – seen from the inside.

The bottom part of the frame/step has been embedded for secure footing.

Operation

The window is opened by turning the handle, and the sash opens outwards. The sash can be positioned and secured in three positions.

If the sash is opened 90°, a safety arm will automatically secure the sash. Press the release button gently when you want to close the rooflight.



GVT

Frame	<i>Black polyurethane</i>
Sash	<i>Black anodised aluminium</i>
Pane	<i>strength/low energy (--59)</i>

GVT flashing:



- *Integral part of the frame*
- *For flat or high profile roofing material up to 60mm in profile*
- *Single installation only*
- *Plain lead apron*

Technical data GVT

Sizes



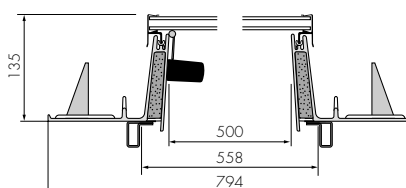
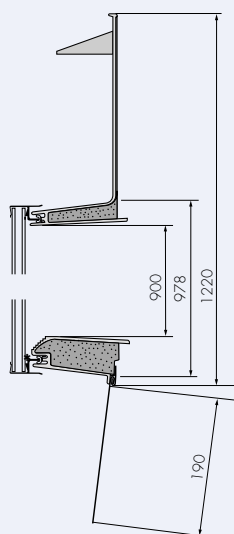
VELUX GB/IRL product programme

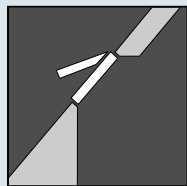
Technical data

	Pane variant	
<i>Effective daylight area [m²]</i>	--59	0.45
<i>Ventilation open window (m²)</i>	--59	0.45

<i>Thermal transmittance, U-value [W/m²K]</i>	--59	3.1	<i>pr EN ISO 12567-2</i>
<i>Sound insulation, R_w [dB]</i>	--59	27	<i>EN ISO 140-3/EN ISO 717-1</i>
<i>Air permeability</i>	--59	Class 2	<i>EN 12207</i>
<i>Light transmittance, τ_v</i>	--59	0.76	<i>EN 410</i>
<i>Total solar energy transmittance, g</i>	--59	0.59	<i>EN 410</i>

Cross-sections and measurements





VLT Rooflight

Top-hung rooflight for uninhabited attics

Application

VLT rooflight is for uninhabited attics where light and/or ventilation is required. The window can be used for both new buildings and for renovation.

VLT rooflight can be installed in all roof pitches between 15° and 60° in flat or profiled roofing material up to 60mm in profile. The window is not suitable for habitable rooms.

In the case of a loft conversion VELUX roof windows are recommended.

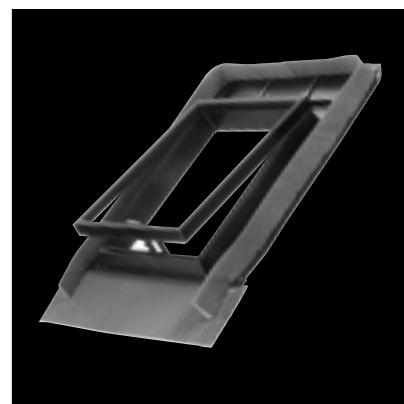
Features

The flashing is an integral part of the window frame, which facilitates installation. The frame is made of black polyurethane and the sash of black anodised aluminium.

Operation

VLT is a top-hung rooflight that opens outwards.

The window is opened by means of the handle placed in the bottom sash. The sash can be located in three positions.



VLT – FOR UNINHABITED ATTICS

	Standard
Frame	<i>Black polyurethane</i>
Sash	<i>Black anodised aluminium, top-hung</i>
Pane	<i>Standard pane (--00)</i>

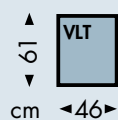
VLT flashings



- Integral part of the frame
- For flat or profiled roofing material up to 60mm in profile
- Pleated apron
- Single installation only

Technical data VLT

Sizes



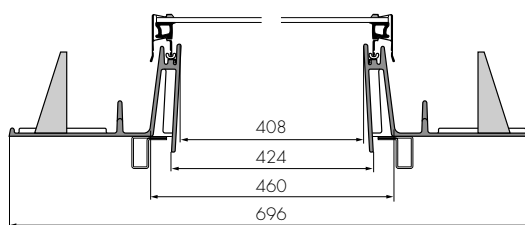
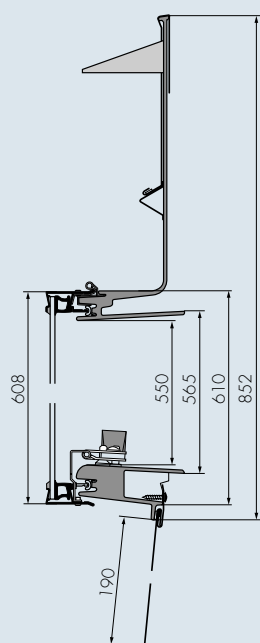
VELUX GB/IRL product programme

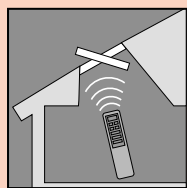
Technical data

	Pane variant	
Effective daylight area [m ²]	--00	0.22
Ventilation open window [m ²]	--00	0.13

Thermal transmittance, U_w [W/m ² K]	--00	6.0	pr EN ISO 12567-2
Sound insulation, R_w [dB]	--00	24	EN ISO 140-3/EN ISO 717-1
Air permeability	--00	Class 2	EN 12207
Light transmittance, τ_v	--00	0.89	EN 410
Total solar energy transmittance, g	--00	0.87	EN 410

Cross-sections and measurements





Electric Skylight System



Centre-pivot skylight with pre-installed motor and control system.

Application

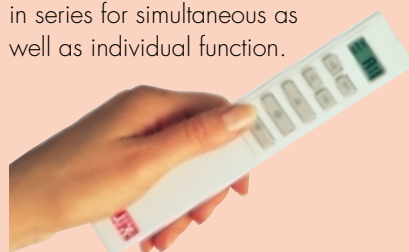
To bring daylight to inner rooms or additional daylight to areas not generally associated with roof windows because of high level installation and operation.

Features

Based on the GGL/GGU centre-pivot roof window the Electric Skylight System is provided with all main electrical components and motor pre-fitted. It is installed in the same manner as a standard roof window and only needs the infra-red receiver unit to be fitted and connection to a mains supply to be ready for operation. The system comprises of the GGL INTEGRA roof window, with appropriate flashing. The optional EBY trimmer can be used with the twin systems as a central support between the skylights (see section 4.04.00). It is also prepared for the subsequent installation of electrical blinds, shutters or awnings.

Operation

The hand-held infra-red transmitter controls the opening and closing of the skylight as well as the blinds, shutters or awnings. It is also possible to connect a number of windows in series for simultaneous as well as individual function.



Electric Skylight System versions

	Standard	Variants
Frame and sash	<i>Pine with TOPfinish™ or EVERfinish™ white varnished polyurethane with wooden core</i>	<i>White paint, PAINTfinish™</i>
Exterior cladding	<i>Grey aluminium</i>	<i>Titanium zinc, pre-patinated zinc, copper or other cladding colours</i>
Panes	<i>PROTEC-STAR™ (--73)</i>	<i>See section 8</i>

Electric Skylight System can be combined with:



Flashings for

- Single installation
- Twin installation
- Combi installation



Interior suncreening

- Electrical Siesta blinds
- Electrical Roller blinds
- Electrical Pleated blinds
- Electrical Venetian blinds



Exterior suncreening

- Electrical Awning blinds
- Electrical Roller shutters

Technical data Electric Skylight System

Sizes and Combinations

Single installation

C04	55 x 98
F06	66 x 118
M06	78 x 118
M08	78 x 140

GGL/
GGU

Twin installations

C04	112 x 98
F06	134 x 118
M06	158 x 118
M08	158 x 140

GGL/
GGU

GGL/
GGU

Twin installations

into trusses at 600mm centres

C04	115 x 98
------------	----------

GGL/
GGU

GGL/
GGU

Other sizes/combination of GGL/GGU are available

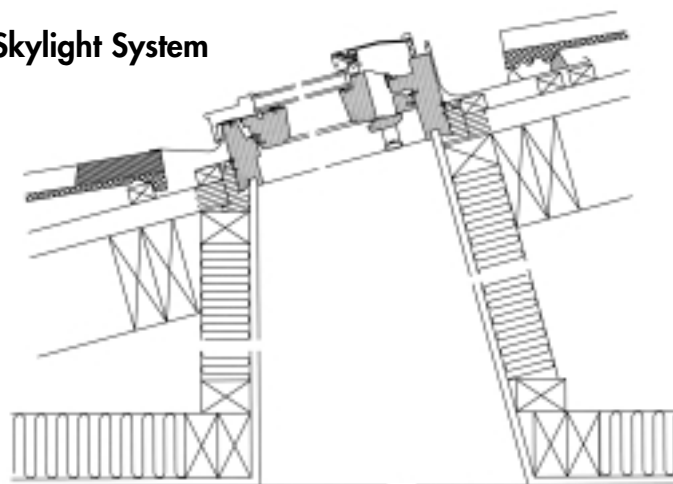
Technical data

	Pane variant	Sizes			
		C04	F06	M04	M08
Ventilation flap [10 ³ mm ²]	--73	2.7	3.4	4	4
Ventilation open window [m ²]	--73	0.18	0.23	0.27	0.29
Effective daylight area [m ²]	--73	0.27	0.45	0.44	0.69

Thermal transmittance, U_w [W/m ² K]	--73	1.6	pr EN ISO 12567-2
Sound insulation, R_w [dB]	--73	35	EN ISO 140-3/EN ISO 717-1
Air permeability	--73	Class 3	EN 12207
Light transmittance, τ_v	--73	0.75	EN 410
Total solar energy transmittance, g	--73	0.54	EN 410

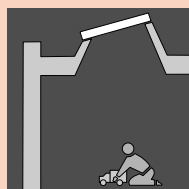
Measurements see sections 3.01.01 and 3.01.03

Typical cross-section of Electric Skylight System



EASE OF INSTALLATION

- Fit window and flashings like any VELUX window
- Attach rain sensor and infra red receiver
- Connect single power cable to a power point or fused outlet



Flat Roof Window System

Application

Allows for the installation of a GGL roof window on to a flat roof between the pitches of 0-1.5 degrees.

Features

The Flat Roof Window System comprises of a GGL roof window and ECX insulated kerb. The GGL centre-pivot window is supplied with the PROTEC-STAR™ pane whilst the ECX kerb is manufactured from plywood with polystyrene insulation.

Other types of VELUX roof windows can also be used.

Operation

Manual and electrical versions are available.

Flat Roof Window System can be combined with:

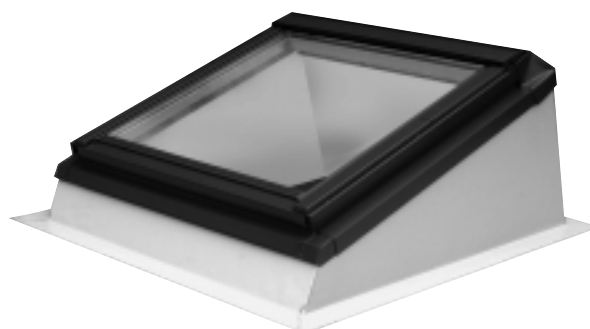
Interior sunscreening

- Siesta blinds†
- Roller blinds†
- Pleated blinds†
- Venetian blinds†

Exterior suncreening

- Awning blinds†
- Electrical roller shutter.

†Manual or electric possible.

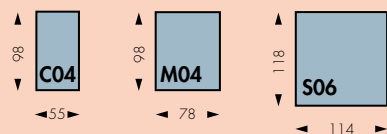


Flat Roof Window System

	Standard	Variants
Frame and sash	<i>Pine with TOPfinish™</i>	<i>White paint, PAINTfinish™</i>
Exterior cladding	<i>Grey aluminium</i>	<i>Titanium zinc, pre-patinated zinc, copper or other cladding colours</i>
Panes	<i>PROTEC-STAR™ (--73)</i>	<i>See section 8</i>

Technical data Flat Roof Window System

Sizes



VELUX GB/IRL product programme

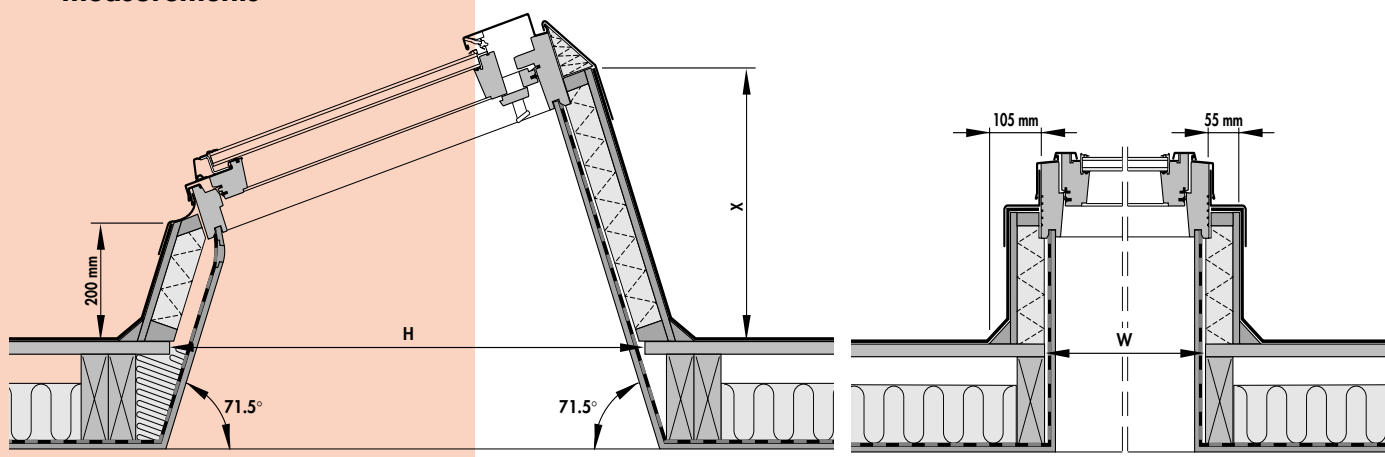
Technical data

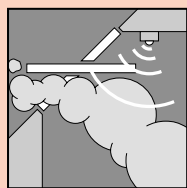
	Pane variant	Size		
		C04	M04	S06
Ventilation flap [10 ³ mm ²]	--73	2.7	4.0	6.2
Ventilation open window [m ²]	--73	0.4	0.6	1.12
Effective daylight area [m ²]	--73	0.27	0.44	0.90

Thermal transmittance, U_w [W/m ² K]	--73	1.6	pr EN ISO 12567-2
Sound insulation, R_w [dB]	--73	35	EN ISO 140-3/EN ISO 717-1
Air permeability	--73	Class 3	EN 12207
Light transmittance, τ_v	--73	0.75	EN 410
Total solar energy transmittance, g	--73	0.54	EN 410

Flat roof window system	W	H	X
C04	548	1172	542
M04	775	1172	542
S06	1138	1383	606

Cross-sections and measurements





Smoke Ventilation System

Integrated single or coupled centre-pivot roof window Smoke Ventilation System.

Application

For providing automatic smoke ventilation within stairwells or lobbies. VELUX Service can provide installation, commissioning and annual servicing of the system (see section 2.08.00).

Features

The system is provided as a complete package including GGL centre-pivot roof window(s), flashing(s), control unit, window motor(s), smoke sensor and break glass.

For 1 m² of smoke ventilation the single GGL S06 roof window is provided and for 1.5 m² two of the GGL M08 size.

Operation

The roof windows can be automatically opened via the smoke detector or break glass point. Alternatively it is possible to operate the system from the control panel only. A battery back-up unit within the control system ensures continuity of power. The window(s) can also be closed from the control unit or the break glass point.



Smoke Ventilation System versions

	Standard	Variants
Frame and sash	<i>Pine with TOPfinish™</i>	<i>White paint, PAINTfinish™</i>
Exterior cladding	<i>Grey aluminium</i>	<i>Titanium zinc, pre-patinated zinc, copper or other cladding colours</i>
Panes	<i>PROTEC-STAR™ (--73)</i>	<i>See section 8</i>

Smoke Ventilation System can be combined with:

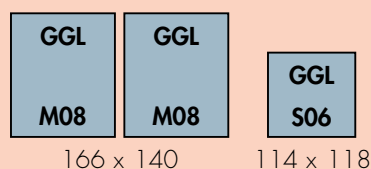


Flashings for

- *Single installation*
- *Twin installation*
- *Combi installation*

Technical data Smoke Ventilation System

Sizes and combinations



Other sizes/combination of GGL are available

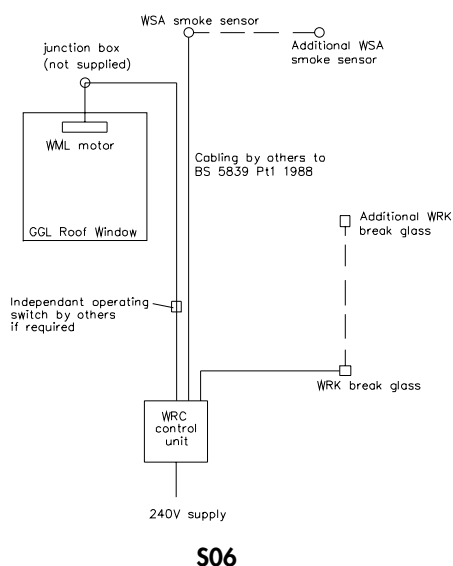
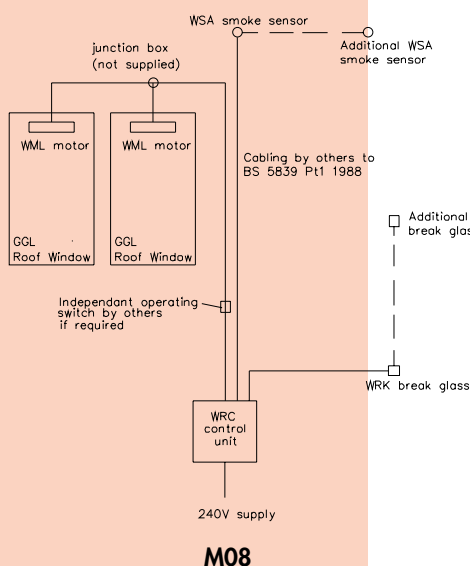
Technical data

	Pane variant	Sizes	
		M08	S06
Ventilation flap [10 ³ mm ²]	--73	4.0	6.2
Smoke Ventilation area [m ²]	--73	0.75	1.0
Effective daylight area [m ²]	--73	0.69	0.9

Thermal transmittance, U_w [W/m ² K]	--73	1.6	pr EN ISO 12567-2
Sound insulation, R_w [dB]	--73	35	EN ISO 140-3/EN ISO 717-1
Air permeability	--73	Class 3	EN 12207
Light transmittance, τ_v	--73	0.75	EN 410
Total solar energy transmittance, g	--73	0.54	EN 410

Measurements see section 3.01.01

Typical wiring diagrams



Product overview VELUX roof windows

GGL M04 3073

Type designation

GGL: Centre-pivot roof window.

GGU: Centre-pivot roof window, polyurethane.

GHL: Top-hung roof window.

GPL: Top-hung roof window.

GPU: Top-hung roof window, polyurethane.

GDL: Combined roof window and balcony.

GEL: Roof Terrace, upper element.

VEA: Roof Terrace, bottom element, left-hung, seen from the outside.

VEB: Roof Terrace, bottom element, right-hung, seen from the outside.

VEC: Roof Terrace, bottom element/ fixed.

GI-: Fixed addition elements.

VFE: Bottom-hung vertical window element.

VFA: Left-hung vertical window element, seen from the inside.

VFB: Right-hung vertical window element, seen from the inside.

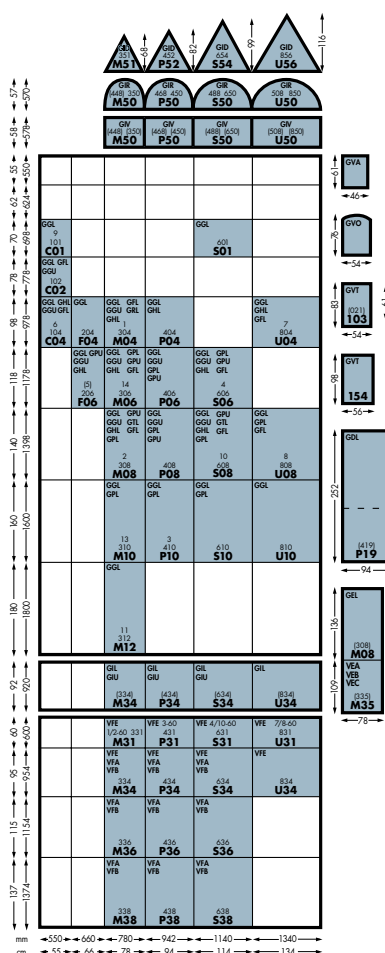
GVA: Top-hung conservation rooflight.

GVT: Side-hung emergency escape/access rooflight.

VLT: Top-hung rooflight.

GGL M04 3073

Size codes



GGL M04 3073

Variant code

GGL M04 3073

Code for interior surface

- 0---**: For GGU/GPU, white painted polyurethane, EVERfinish®.
- 2---**: Nordic pine, white painted, PAINTfinish™.
- 3---**: Nordic pine, clear lacquered, TOPfinish™.

GGL M04 3073

Code for exterior surface

- 0--:** Grey aluminium
- 1--:** Copper.
- 3--:** Titanium zinc.
- 4--:** Pre-patinated zinc.
- 8--:** Coloured aluminium.
- 9--:** Other customer requests.

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Pane code

- 00:** Standard insulating pane.
- 00:** Standard pane VLT.
- 34:** Translucent obscure pane.
- 59:** GVA/GVT.
- 59:** THERMO-STAR™ pane.
- 73:** PROTEC-STAR™ pane.
- 99:** Special glazing combination.

See section 8 for further details.

For availability, delivery times and special requests, please call VELUX technical support for further details, information, instructions and wiring diagrams.