

VELUX INTEGRA® electric roof windows



Utilising the latest radio frequency technology, VELUX INTEGRA roof windows, ventilation flap, blinds and accessories are fully programmable and can be operated from a single remote control from anywhere in the house. Ideal for out of reach situations or when an easier, more comfortable lifestyle is requested.

Application

Based on the GGL/GGU centre-pivot roof windows, the INTEGRA range is pre-fitted with all electrical components. A rain sensor is included that will override any programme to close the window/s at the onset of rain – while leaving the vent flap open.

Features

The windows are installed in the same manner as any VELUX roof window and only requires plugging in to the mains to be ready, for radio frequency remote control use.

The windows are prepared for the subsequent installation of electrical blinds, awnings, roller shutters and frame lights.

The remote will immediately recognise any such installation and make it ready for use/programming.

Operation

The remote is programmable for operating the window, ventilation flap, blinds, awnings or shutters. A number of windows can be run from one remote unit for simultaneous or individual functions.



The all-in-one electrical roof window system based on VELUX GGL and GGU centre-pivot windows.

10 year VELUX guarantee for the windows and parts, 3 year guarantee for the electrical items and blinds.

Guarantee

INTEGRA electric roof windows can be combined with:

Flashings for

- Single installation
- Twin installation
- Combi installation



Interior sunscreening

- Electrical Blackout blinds
- Electrical Roller blinds
- Electrical Pleated blinds
- Electrical Venetian blinds



Installation products

- Insulation collar
- Underfelt collar
- Vapour barrier



Exterior sunscreening

- Electrical Awning blinds
- Electrical Roller shutters (except twin installation)



Additional accessories

- Frame lights

Combinations

Interior variants:

Pine with triple coat finish or timber core with two coats of white polyurethane lacquer finish or white paint finish

Variants

Cladding variants:

Grey aluminium, titanium zinc, copper or other cladding types and colours

Pane variants:

(--73) Toughened outer pane with clear and clean coating and laminated inner pane for additional safety

For more pane variants see section 8.

For Technical data of GGL and GGU see pages 3.01.01 and 3.01.03. io-homecontrol® compatible

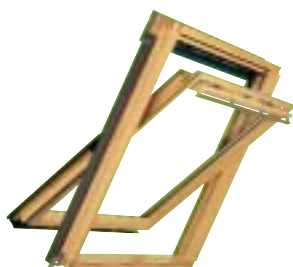


io-homecontrol® provides advanced and secure radio technology that is easy to install. io-homecontrol® labelled products communicate with each other, improving comfort, security and energy savings. www.io-homecontrol.com

Centre-pivot pine finish roof window – GGL



Centre-pivot roof windows with pine finish



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.

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.

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.

10 year VELUX guarantee.

Application

Features

Operation

Guarantee

GGL can be combined with:

- Flashings for**
- Single installation
 - Twin installation
 - Combi installation



- Controls**
- Rod
 - Electrical



- Installation products**
- Insulation collar
 - Underfelt collar
 - Vapour barrier



Interior sunscreening

- Blackout blinds
- Roller blinds
- Pleated blinds
- Venetian blinds



Exterior suncreening

- Awning blind
- Roller shutter



Additional accessories

- Insect screen



Combinations

Interior variants:

Pine with double lacquer finish or white paint finish

Cladding variants:

Grey aluminium, titanium zinc, copper or other cladding types and colours

Pane variants:

- (--59) Toughened outer pane
- (--34) Obscure glazing, toughened outer pane
- (--73) Toughened outer pane with clear and clean coating and laminated inner pane for additional safety
- (--60) Improved U-value and greater noise reduction. Toughened outer pane with clear and clean coating and laminated inner pane for additional safety
- (--65) Triple glazing, lowest U-value and noise reduction. Laminated inner pane with clear and clean coating on toughened outer pane

For more pane variants see section 8.

Variants

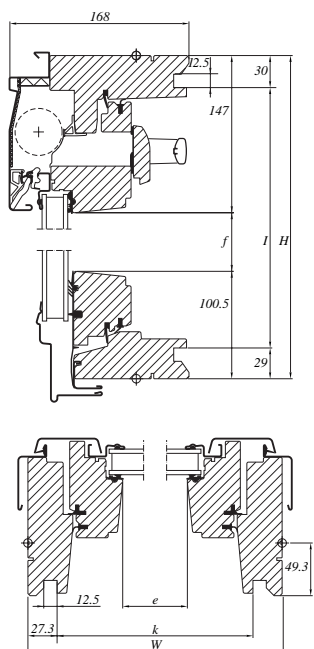
Technical data – GGL

Measurements (mm)

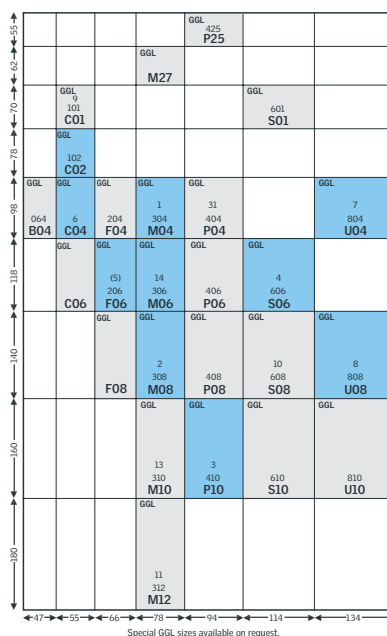
Size	Exterior frame	Visible glass	Lining rebate
	W x H	e x f	k x l
B04	472 x 978	295 x 730	417 x 919
C01	550 x 698	373 x 450	495 x 639
C02	550 x 778	373 x 530	495 x 719
C04	550 x 978	373 x 730	495 x 919
C06	550 x 1178	373 x 930	495 x 1119
F04	660 x 978	483 x 730	605 x 919
F06	660 x 1178	483 x 930	605 x 1119
F08	660 x 1398	483 x 1150	605 x 1339
M27	780 x 624	603 x 376	725 x 565
M04	780 x 978	603 x 730	725 x 919
M06	780 x 1178	603 x 930	725 x 1119
M08	780 x 1398	603 x 1150	725 x 1339
M10	780 x 1600	603 x 1352	725 x 1741

Size	Exterior frame	Visible glass	Lining rebate
	W x H	e x f	k x l
M12	780 x 1800	603 x 1552	725 x 1741
P25	942 x 550	765 x 302	887 x 491
P04	942 x 978	765 x 730	887 x 919
P06	942 x 1178	765 x 930	887 x 1119
P08	942 x 1398	765 x 1150	887 x 1339
P10	942 x 1600	765 x 1352	887 x 1541
S01	1140 x 698	963 x 450	1085 x 639
S06	1140 x 1178	963 x 930	1085 x 1119
S08	1140 x 1398	963 x 1150	1085 x 1339
S10	1140 x 1600	963 x 1352	1085 x 1541
U04	1340 x 978	1163 x 730	1285 x 919
U08	1340 x 1398	1163 x 1150	1285 x 1339
U10	1340 x 1600	1163 x 1352	1285 x 1541

Cross-section/measurements (mm)



Sizes (cm)



VELUX GB/Ireland product programme

Technical data

	Size	B04	C01	C02	C04	C06	F04	F06	F08	M04	M06	M08	M10	M12	M27
Ventilation flap – free area [10 ³ mm ²]		2.3	2.8	2.8	2.8	2.8	3.5	3.5	3.5	4.3	4.3	4.3	4.3	4.3	4.3
Ventilation flap – equivalent area [10 ³ mm ²]*		2.2	2.6	2.6	2.6	2.6	3.1	3.1	3.1	3.7	3.7	3.7	3.7	3.7	3.7
Ventilation – open window manual [m ²]		0.27	0.21	0.24	0.33	0.42	0.42	0.53	0.65	0.51	0.64	0.79	0.92	1.02	0.26
Ventilation – open window INTEGRA [m ²]				0.16	0.17	0.17		0.20	0.21	0.23	0.24	0.25			
Effective daylight area [m ²]		0.22	0.17	0.20	0.27	0.35	0.35	0.45	0.56	0.44	0.56	0.69	0.82	0.94	0.23

	Size	P04	P06	P08	P10	P25	S01	S06	S08	S10	U04	U08	U10
Ventilation flap – free area [10 ³ mm ²]		5.4	5.4	5.4	5.4	5.4	6.8	6.8	6.8	6.8	8.1	8.1	8.1
Ventilation flap – equivalent area [10 ³ mm ²]*		4.6	4.6	4.6	4.6	4.6	5.6	5.6	5.6	5.6	6.6	6.6	6.6
Ventilation – open window manual [m ²]		0.63	0.80	0.98	1.15	0.28	0.49	0.99	1.22	1.42	0.94	1.45	1.70
Ventilation – open window INTEGRA [m ²]					0.30			0.34		0.39			
Effective daylight area [m ²]		0.56	0.71	0.88	1.03	0.23	0.43	0.90	1.11	1.30	0.85	1.34	1.57

*Measured to EN 13141-1

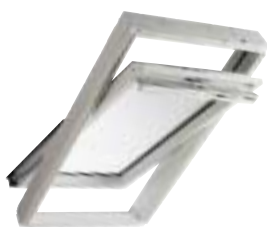
Pane variant	--34	--59	--60	--65	--73	EN/ISO Standard
Thermal transmittance, U _w [W/m ² K]	1.4	1.4	1.3	1.1	1.4	EN ISO 12567-2
Sound insulation, R _w [dB]	3.2	3.2	3.7	3.5	3.5	EN ISO 140-3/EN ISO 717-1
Air permeability	Class 3	Class 3	Class 3	Class 3	Class 3	EN 12207
Light transmittance, τ _v	0.75	0.77	0.62	0.67	0.77	EN 410
Total solar energy transmittance, g	0.54	0.60	0.29	0.45	0.54	EN 410

Section 3.01.01

Centre-pivot white polyurethane finish roof window – GGU



Centre-pivot window with timber core and two coats of white polyurethane lacquer finish.



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.

Application

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.

Features

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

Operation

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.

10 year VELUX guarantee.

Guarantee

GGU can be combined with:

- Flashings for**
- Single installation
 - Twin installation
 - Combi installation



Interior sunscreening

- Blackout blinds
- Roller blinds
- Pleated blinds
- Venetian blinds



Controls

- Rod
- Electrical



Exterior sunscreening

- Awning blind
- Roller shutter



Installation products

- Insulation collar
- Underfelt collar
- Vapour barrier



Additional accessories

- Insect screen



Combinations

Interior variants:

Pine with double lacquer finish or white paint finish

Variants

Cladding variants:

Grey aluminium, titanium zinc, copper or other cladding types and colours

Pane variants:

- (--59) Toughened outer pane
- (--34) Obscure glazing, toughened outer pane
- (--73) Toughened outer pane with clear and clean coating and laminated inner pane for additional safety
- (--60) Improved U-value and greater noise reduction. Toughened outer pane with clear and clean coating and laminated inner pane for additional safety
- (--65) Triple glazing, lowest U-value and noise reduction. Laminated inner pane with clear and clean coating on toughened outer pane

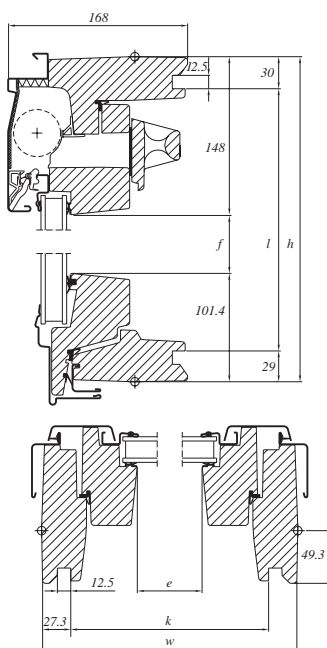
For more pane variants see section 8.

Technical data – GGU

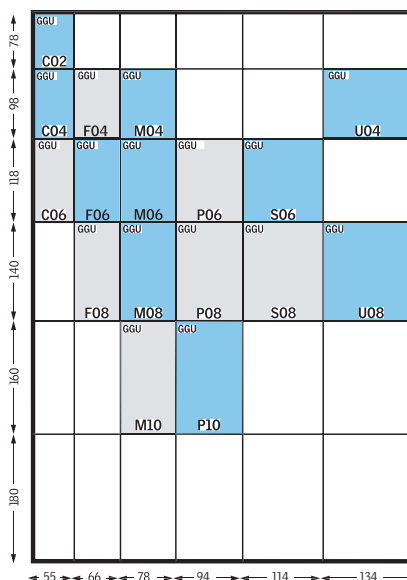
Measurements (mm)

Size	Exterior frame W x H	Visible glass e x f	Lining rebate k x l
C02	550 x 778	371 x 529	495 x 719
C04	550 x 978	371 x 729	495 x 919
C06	550 x 1178	371 x 929	495 x 1119
F06	660 x 1178	481 x 929	605 x 1119
F08	660 x 1398	481 x 1149	605 x 1339
M04	780 x 978	601 x 729	725 x 919
M06	780 x 1178	601 x 929	725 x 1119
M08	780 x 1398	601 x 1149	725 x 1339
M10	780 x 1600	601 x 1351	725 x 1541
P06	942 x 1178	763 x 929	887 x 1119
P08	942 x 1398	763 x 1149	887 x 1339
P10	942 x 1600	763 x 1351	887 x 1541
S06	1140 x 1178	961 x 929	1085 x 1119
S08	1140 x 1398	961 x 1149	1085 x 1339
U04	1340 x 978	1161 x 729	1285 x 919
U08	1340 x 1398	1161 x 1149	1285 x 1339

Cross-section/measurements (mm)



Sizes (cm)



VELUX GB/Ireland product programme

Technical data

Size	C02	C04	C06	F06	F08	M04	M06	M08	M10	P06	P08	P10	S06	S08	U04	U08
Ventilation flap – free area [10 ³ mm ²]	2.8	2.8	2.8	3.5	3.5	4.3	4.3	4.3	4.3	5.4	5.4	5.4	6.8	6.8	8.1	8.1
Ventilation flap – equivalent area [10 ³ mm ²]*	2.6	2.6	2.6	3.1	3.1	3.7	3.7	3.7	3.7	4.6	4.6	4.6	5.6	5.6	6.6	6.6
Ventilation – open window manual [m ²]	0.24	0.33	0.42	0.53	0.65	0.51	0.64	0.79	0.92	0.80	0.98	1.15	0.99	1.22	0.94	1.45
Ventilation – open window INTEGRA [m ²]	0.16	0.17	0.17	0.20	0.21	0.23	0.24	0.25				0.30	0.34		0.39	
Effective daylight area [m ²]	0.20	0.27	0.34	0.45	0.55	0.44	0.56	0.69	0.81	0.71	0.88	1.03	0.89	1.10	0.85	1.33

*Measured to EN 13141-1

Pane variant	--34	--59	--60	--65	--73	EN/ISO Standard
Thermal transmittance, U _w [W/m ² K]	1.4	1.4	1.3	1.1	1.4	EN ISO 12567-2
Sound insulation, R _w [dB]	32	32	37	3.5	35	EN ISO 140-3/EN ISO 717-1
Air permeability	Class 3	Class 3	Class 3	Class 3	Class 3	EN 12207
Light transmittance, τ _v	0.75	0.77	0.62	0.67	0.77	EN 410
Total solar energy transmittance, g	0.54	0.60	0.29	0.45	0.54	EN 410

Section 3.01.03