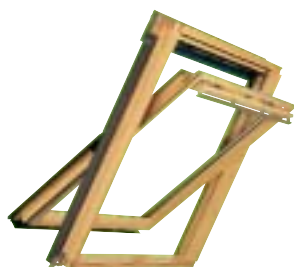


# Centre-pivot pine finish roof window – GGL



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 sunscreening

- 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**

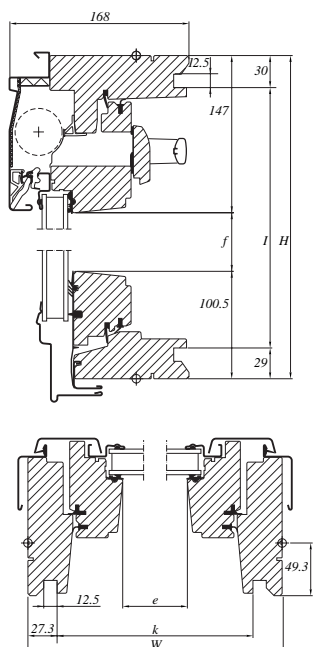
# Technical data – GGL

## Measurements (mm)

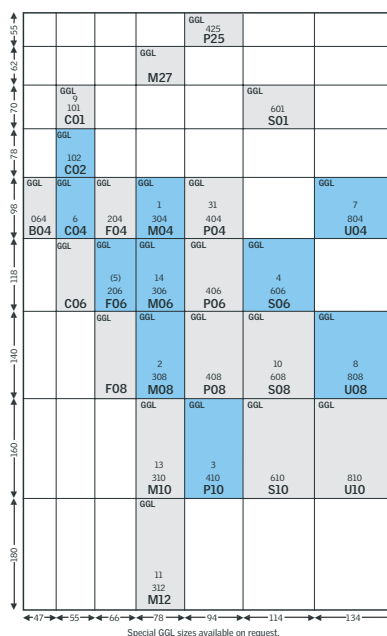
Size	Exterior frame	Visible glass	Lining rebate
	W x H	e x f	k x l
B04	472 x 978	295 x 730	417 x 919
C01	550 x 698	373 x 450	495 x 639
C02	550 x 778	373 x 530	495 x 719
C04	550 x 978	373 x 730	495 x 919
C06	550 x 1178	373 x 930	495 x 1119
F04	660 x 978	483 x 730	605 x 919
F06	660 x 1178	483 x 930	605 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 <sup>3</sup> mm <sup>2</sup> ]		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 <sup>3</sup> mm <sup>2</sup> ]*		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 <sup>2</sup> ]		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 <sup>2</sup> ]				0.16	0.17	0.17		0.20	0.21	0.23	0.24	0.25			
Effective daylight area [m <sup>2</sup> ]		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 <sup>3</sup> mm <sup>2</sup> ]		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 <sup>3</sup> mm <sup>2</sup> ]*		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 <sup>2</sup> ]		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 <sup>2</sup> ]					0.30			0.34		0.39			
Effective daylight area [m <sup>2</sup> ]		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 <sub>w</sub> [W/m <sup>2</sup> K]	1.4	1.4	1.3	1.1	1.4	EN ISO 12567-2
Sound insulation, R <sub>w</sub> [dB]	3.2	32	37	35	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 <sub>v</sub>	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