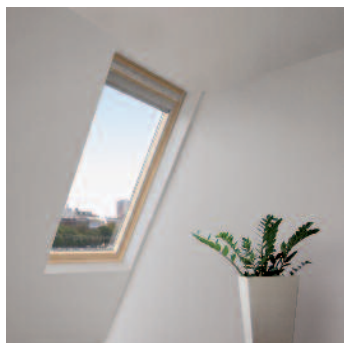


# Centre-pivot pine finish roof window – GGL



Centre-pivot roof windows with pine finish.



The Pine Centre-pivot window (GGL) is a classic and versatile design manufactured in high quality natural pine, finished with triple coat finish. It is suitable for installation in roof pitches between 15° and 90°. For easy operation it is recommended to place the top frame of the window 1.85-2.20m above the floor.

VELUX recommend solar or electrically operated windows with laminated inner pane for windows installed above 2.20m.

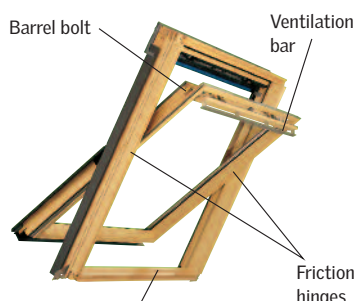
## Application

### Features –

- Ventilation bar with dust and insect filter
- Friction springs
- Sash rotates 180° from inside
- Barrel bolt

### Benefits –

- Allows fresh air to enter the room while the window is still securely closed
- Allows easy operation of window
- Allows easy and convenient cleaning
- Allows the window to be locked in two positions
  - At 180° for secure cleaning of the exterior pane internally
  - At 5° to allow extra ventilation



High quality natural pine, with triple coat finish

The window is operated manually using the full width control bar on the ventilation flap along the top of the sash.

To watch an illustration of how the window operates [click here](#).

## Operation

The pane should be cleaned with a soft, clean, lint-free cloth or non-abrasive sponge. The rest of the window can be cleaned with ordinary household cleaners. The filter can be removed and either washed or replaced.

For further advice on maintenance please [click here](#).

## Maintenance

- 10 year VELUX guarantee on windows and flashings
- 3 year guarantee on blinds, shutters and awnings

[Click here](#) for further information regarding the VELUX guarantee.

## Guarantee

### Interior variants:

- White paint finish (GGL).

### Cladding variants:

- NCS standard colour: S 7500-N nearest RAL standard colour: 7043.
- Also available: titanium zinc, copper or other cladding types and colours.

## Variants

### VELUX offer several glazing options

- (--59) 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. Toughened outer pane with clearview coating to minimise the formation of condensation on the external pane, 3mm middle pane and laminated inner pane for additional safety.
- (--41Q) Laminated inner pane, toughened outer pane. Provides a Burglary Resistance of Class P5A.

For further information regarding VELUX glazing options [click here](#).

### Installation products recommended by VELUX:

#### Flashings for

- Single installation (ED\_)
- Twin installation (EB\_)
- Combi installation (EK\_)

[Click here](#) for more information on flashings.

#### Installation products

- Insulation Collar (BDX)
- Underfelt Collar (BFX) includes transverse drainage gutter
- Vapour Barrier (BBX)

[Click here](#) for more information on installation products.

#### Control options:

- Rod (ZCT 200)
- Remote control – Electrical conversion kit (KMX 100) or Solar conversion kit (KSX 100) can be fitted to upgrade manual windows



### Blinds, awnings and shutters:

#### Interior sunscreening\*

- Blackout blind – Manual (DKL) or Solar (DSL)
- Roller blind – Manual (RFL) or Solar (RSL)
- Flying Pleated blind – Manual (FHL)
- Venetian blind – Manual (PAL)
- Duo Blackout blind – Manual (DFD)

\*Manual and Solar blinds can be used on manual windows, electric blinds are for use on electric windows only

#### Exterior suncreening†

- Awning blind – Manual (MAL)
- Roller shutter – Manual (SCL)

#### Additional accessories

- Insect screen – Manual (ZIL)

[Click here](#) for more information on blinds.



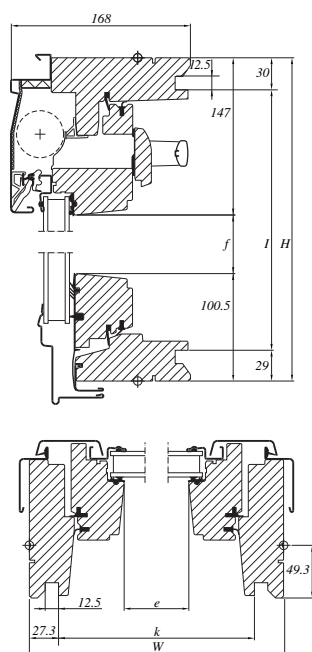
# Technical data – GGL

## Measurements (mm)

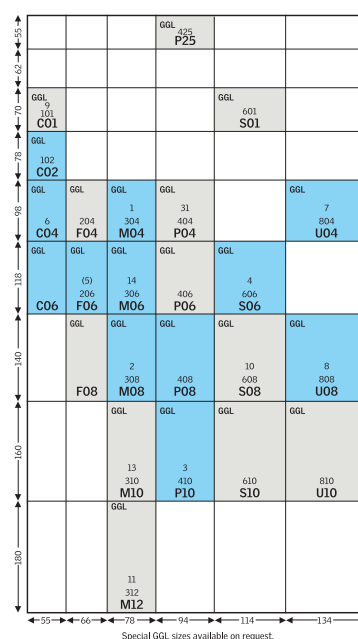
Size	Exterior frame	Visible glass	Lining rebate
	W x H	e x f	k x l
C01	550 x 698	373 x 450	495 x 639
C02	550 x 778	373 x 530	495 x 719
C04	550 x 978	373 x 730	495 x 919
C06	550 x 1178	373 x 930	495 x 1119
F04	660 x 978	483 x 730	605 x 919
F06	660 x 1178	483 x 930	605 x 1119
F08	660 x 1398	483 x 1150	605 x 1339
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
M12	780 x 1800	603 x 1552	725 x 1741

Size	Exterior frame	Visible glass	Lining rebate
	W x H	e x f	k x l
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 standard product programme

Sizes available on request

## Technical data

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

	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> ]		0.28	0.28	0.29	0.30			0.34	0.35	0.35	0.39	0.41	0.41
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	--59	--60	--65	--73	--41Q	EN/ISO Standard
Thermal transmittance, U <sub>w</sub> [W/m <sup>2</sup> K]	1.4	1.3	1.0	1.4	1.6	EN ISO 12567-2
Sound insulation, R <sub>w</sub> [dB]	32	37	35	35	35	EN ISO 717-1
Air permeability	Class 3	Class 3	Class 3	Class 3	Class 3	EN 1026
Light transmittance, τ <sub>v</sub>	0.79	0.62	0.67	0.77	0.75	EN 410
Total solar energy transmittance, g	0.60	0.29	0.46	0.56	0.54	EN 410