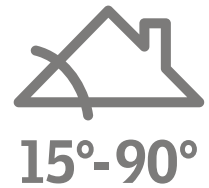


GGL/GGU Centre-Pivot Roof Window



The centre-pivot window is a classic and versatile design manufactured in high quality natural pine with the option of a clear lacquered pine internal finish (GGL) or a white polyurethane internal finish (GGU). It is suitable for installation into 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.

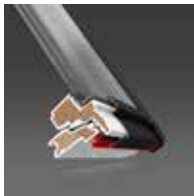
VELUX recommend that all roof windows including solar or electrically operated roof windows are installed with a laminated pane for instances above 2.20m.



GGL



GGU



Features/Benefits

- Ventilation bar with dust and insect filter – *Allows fresh air to enter the room while the window is securely closed*
- Friction springs – *Allows easy operation of window*
- Sash rotates 180° from inside – *Allows easy and convenient cleaning*
- Barrel bolt – *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*

Operation

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

Glazing options

- (--34) glazing Double glazed, laminated opaque inner pane, toughened outer pane.
- (--50) glazing Double glazed, toughened outer pane.
- (--60) glazing Double glazed, laminated inner pane, toughened outer pane with Easy-to-clean coating, enhanced noise reduction.
- (--62) glazing Triple glazed, laminated inner pane, toughened outer pane with Easy-to-clean & Anti-dew coating. Provides enhanced U-value and Noise Reduction.
- (--66) glazing Triple glazed, laminated inner, toughened outer pane with Easy-to-clean & Anti-dew coating.
- (--70) glazing Double glazed, laminated inner pane, toughened outer pane.
- (--70Q) glazing Double glazed, laminated inner pane, toughened outer pane. Provides a burglary resistance of Class P4A.

Cladding

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

Maintenance

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.

Guarantee

- 10 year VELUX guarantee on windows and flashing kits.
- 3 year guarantee on blinds, shutters, awnings and electrics.

Interior finish option

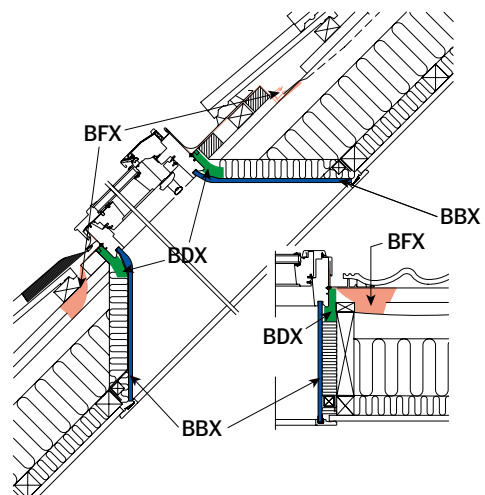
GGL

- White paint finish.

GGU

- No other finish available.

Best practice installation



Installation Products recommended by VELUX

Flashings for

- Single installation (ED_)
- Twin installation (EB_)
- Combi installation (EK_)

Installation Products

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

Control Options

- Rod (ZCT 200)
- Rod Extension (ZCT 100)
- Solar conversion kit (KSX 100K) can be fitted to upgrade manual windows that were manufactured after April 1986.

Blinds, Awnings/Shutters

Interior Sunscreening

- Blackout Blind – Manual (DKL)
- Roller Blind – Manual (RFL)
- Flying Pleated Blind – Manual (FHL)
- Venetian Blind – Manual (PAL)
- Duo Blackout Blind – Manual (DFD)

Awnings/Shutters

- Awning Blind – Manual (MAL)
- Roller Shutters – Manual (SHL)

Additional Accessories

- Insect screen – Manual (ZIL)

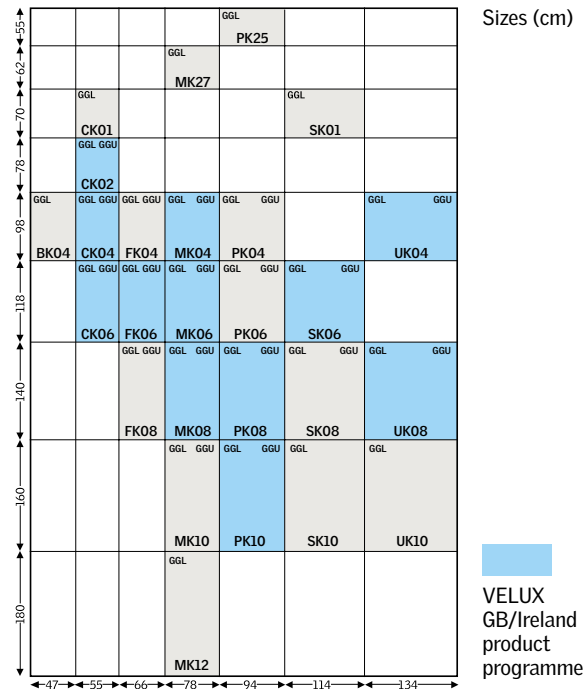
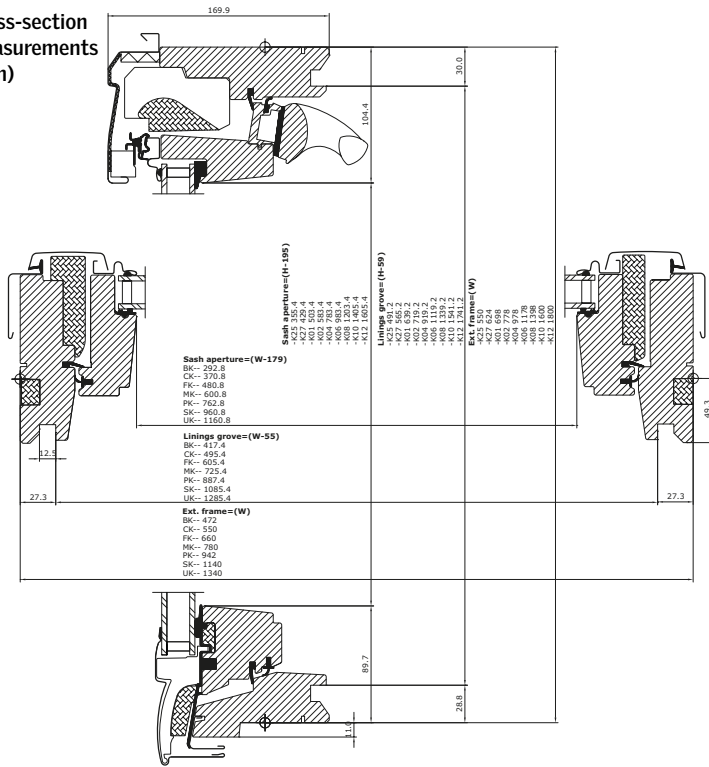
Technical data – GGL/GGU

Please note not all glazing variants are available in all sizes and types

Size	Window Options	Exterior Frame	Visible Glass	Lining Rebate
		WxH	exf	kxl
BK04	GGL	472 x 978	293 x 783	417 x 639
CK01	GGL	550 x 698	371 x 503	495 x 639
CK02	GGL, GGU	550 x 778	371 x 583	495 x 719
CK04	GGL, GGU	550 x 978	371 x 783	495 x 919
CK06	GGL, GGU	550 x 1178	371 x 983	495 x 1119
FK04	GGL, GGU	660 x 978	481 x 783	605 x 919
FK06	GGL, GGU	660 x 1178	481 x 983	605 x 1119
FK08	GGL, GGU	660 x 1398	481 x 1203	605 x 1339
MK27	GGL	780 x 624	601 x 429	725 x 565
MK04	GGL, GGU	780 x 978	601 x 783	725 x 919
MK06	GGL, GGU	780 x 1178	601 x 983	725 x 1119
MK08	GGL, GGU	780 x 1398	601 x 1203	725 x 1339
MK10	GGL, GGU	780 x 1600	601 x 1405	725 x 1541

Size	Window Options	Exterior Frame	Visible Glass	Lining Rebate
		WxH	exf	kxl
MK12	GGL	780 x 1800	601 x 1605	725 x 1741
PK25	GGL	942 x 550	763 x 355	887 x 491
PK04	GGL, GGU	942 x 978	763 x 783	887 x 919
PK06	GGL, GGU	942 x 1178	763 x 983	887 x 1119
PK08	GGL, GGU	942 x 1398	763 x 1203	887 x 1339
PK10	GGL, GGU	942 x 1600	763 x 1405	887 x 1541
SK01	GGL	1140 x 698	961 x 503	1085 x 639
SK06	GGL, GGU	1140 x 1178	961 x 983	1085 x 1119
SK08	GGL, GGU	1140 x 1398	961 x 1203	1085 x 1339
SK10	GGL	1140 x 1600	961 x 1405	1085 x 1541
UK04	GGL, GGU	1340 x 978	1161 x 783	1285 x 919
UK08	GGL, GGU	1340 x 1398	1161 x 1203	1285 x 1339
UK10	GGL	1340 x 1600	1161 x 1405	1285 x 1541

Cross-section measurements (mm)



Technical data (GGL/GGU)	Size	BK04	CK01	CK02	CK04	CK06	FK04	FK06	FK08	MK27	MK04	MK06	MK08	MK10
Ventilation flap – free area [10 ³ mm ²]*		2.2	2.8	2.8	2.8	2.8	3.7	3.7	3.7	4.5	4.5	4.5	4.5	4.5
Ventilation flap – equivalent area [10 ³ mm ²]*		1.9	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 ²]*		0.28	0.23	0.26	0.34	0.43	0.43	0.54	0.66	0.30	0.53	0.66	0.81	0.94
Effective daylight area [m ²]		0.23	0.19	0.22	0.29	0.37	0.37	0.47	0.58	0.26	0.47	0.59	0.72	0.85

*Measured to EN 13141-1

Technical data (GGL/GGU)	Size	MK12	PK04	PK06	PK08	PK10	PK25	SK01	SK06	SK08	SK10	UK04	UK08	UK10
Ventilation flap – free area [10 ³ mm ²]*		4.5	6.1	6.1	6.1	6.1	6.1	7.2	7.2	7.2	7.2	10.6	10.6	10.6
Ventilation flap – equivalent area [10 ³ mm ²]*		3.7	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]*		1.07	0.66	0.83	1.01	1.17	0.31	0.54	1.03	1.25	1.46	0.98	1.54	1.80
Effective daylight area [m ²]		0.97	0.60	0.75	0.91	1.07	0.27	0.48	0.95	1.14	1.35	0.91	1.41	1.63

*Measured to EN 13141-1

Pane variant	--34	--50	--60	GGL --62	GGU --62	--66	--70	--70Q	EN/ISO Standard
Thermal transmittance, U _w [W/m ² K]	1.2	1.3	1.2	0.83	0.81	1.0	1.3	1.3	EN ISO 12567-2
Thermal transmittance, U _g [W/m ² K]	1.0	1.1	1.0	0.5	0.5	0.7	1.1	1.1	EN 673
Sound insulation, R _w [dB]	35	32	37	42	42	37	35	35	EN ISO 10140-2
Air permeability	Class 4	Class 4	Class 4	Class 4	Class 4	Class 4	Class 4	Class 4	EN 1026
Light transmittance, τ _v	0.53	0.80	0.61	0.65	0.65	0.69	0.79	0.79	EN 410
Total solar energy transmittance, g	0.50	0.66	0.30	0.50	0.50	0.50	0.64	0.60	EN 410