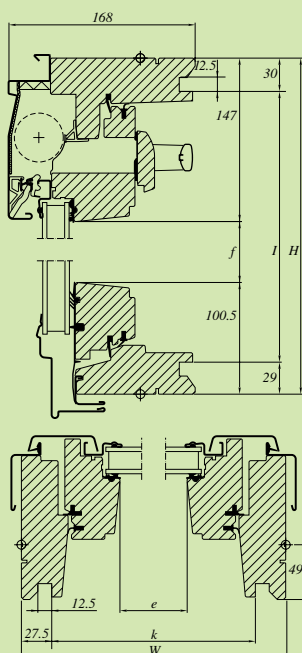


Technical data GGL

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

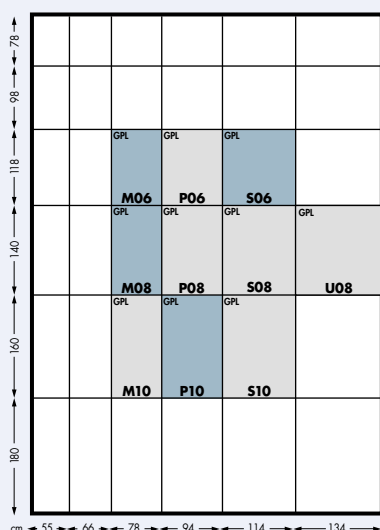
Measurements [mm]:

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

Technical data GPL

Sizes



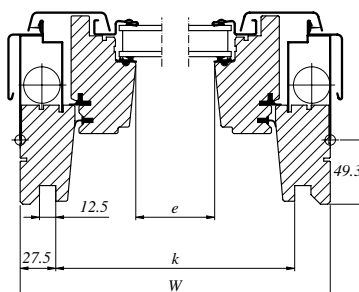
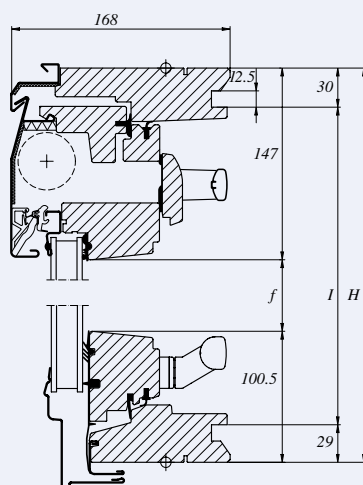
VELUX GB/IRL product programme

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



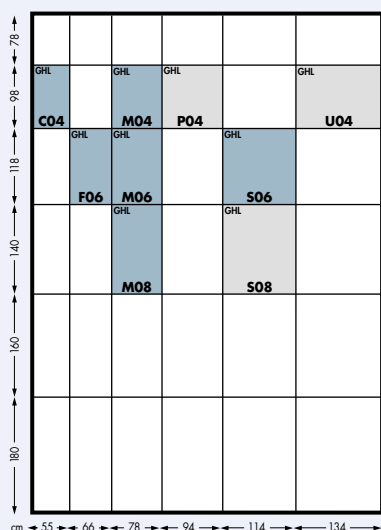
Measurements [mm]:

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

Technical data GHL

Sizes



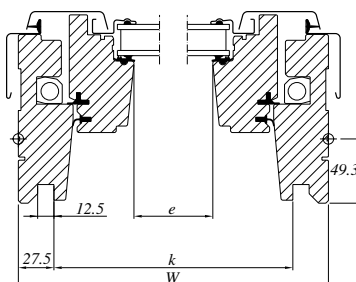
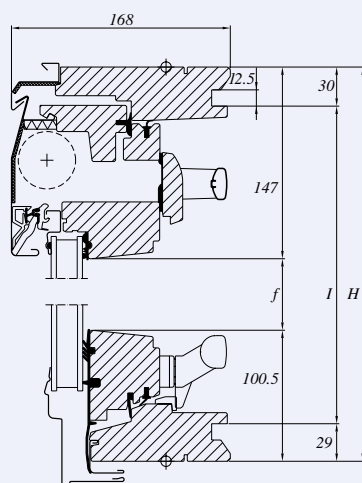
VELUX GB/IRL product programme

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



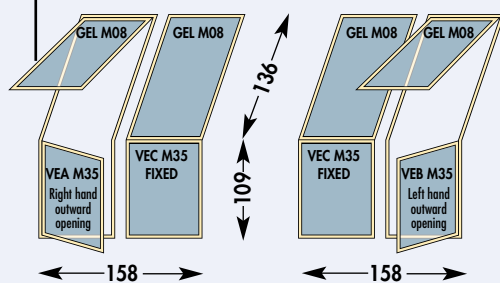
Measurements [mm]:

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

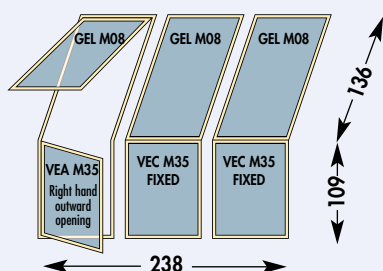
Height	Size	H	f	l	
		C04, M04, U04	978	730	919
		F06, M06, S06	1178	930	1119
M08, S08	1398	1150	1339		

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

Sizes



Available in sets including flashings and EBV trimmer/s



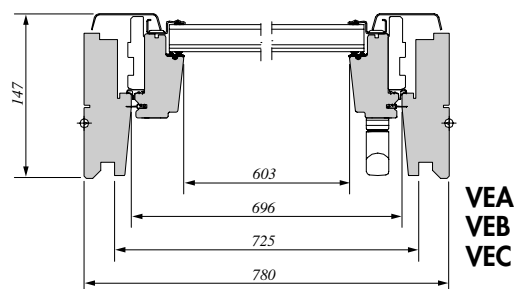
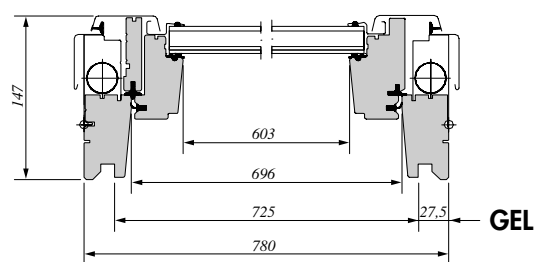
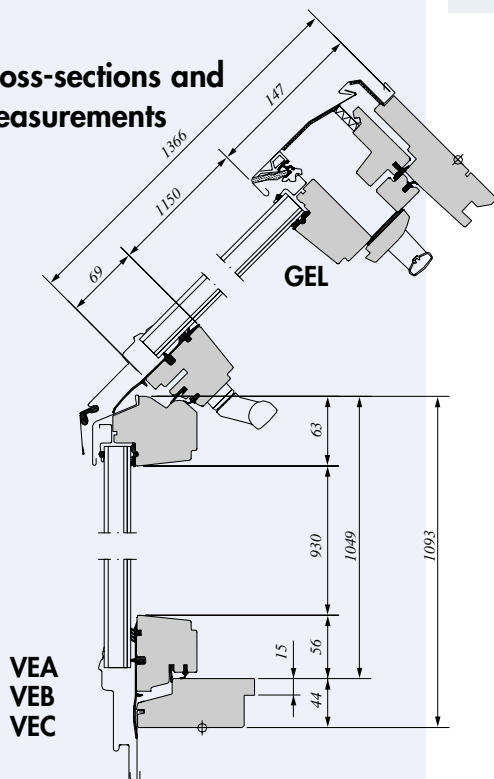
VELUX GB/IRL product packages

Technical data

	Pane variant	Sizes	
		M08	M35
Ventilation flap [10 ³ mm ²]	--73	4	–
Ventilation open window [m ²]	--73	0.89	0.64
Effective daylight area [m ²]	GEL	0.69	
	VEA, B, C		0.44

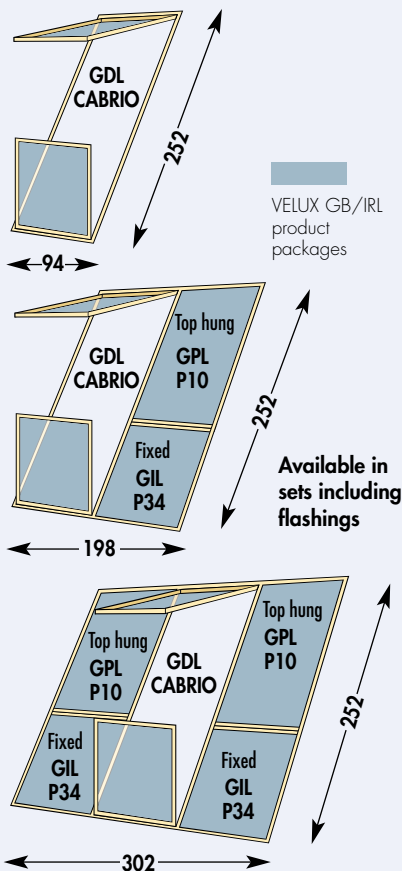
Thermal transmittance, U_w [W/m ² K]	--73	1.6	pr EN ISO 12567-2
Sound insulation, R_w [dB]	--73	33	EN ISO 140-3/EN ISO 717-1
Air permeability	--73	Class 3	EN 12207
Light transmittance, τ_v	--73	0.75	EN 410
Total solar energy transmittance, g	--73	0.54	EN 410

Cross-sections and measurements



Technical data CABRIO™ Roof Window Balcony System

Sizes



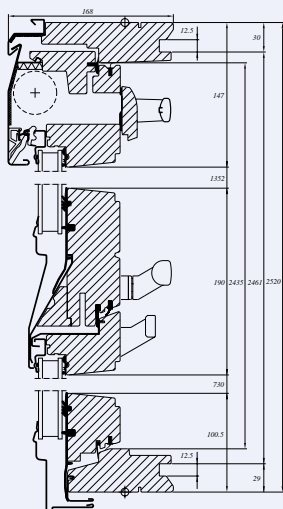
Technical data

	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

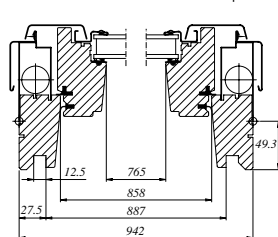
Thermal transmittance, U_w [W/m ² K]	--73	1.6	pr EN ISO 12567-2
Sound insulation, R_w [dB]	--73	35	EN ISO 140-3/EN ISO 717-1
Air permeability	--73	Class 3	EN 12207
Light transmittance, τ_v	--73	0.75	EN 410
Total solar energy transmittance, g	--73	0.54	EN 410

Cross-sections and measurements

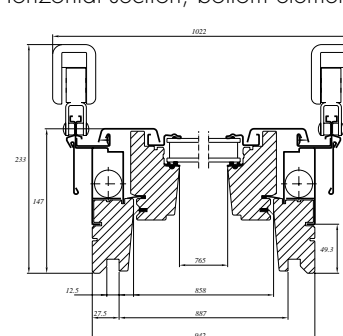
Vertical section



Horizontal section, top element

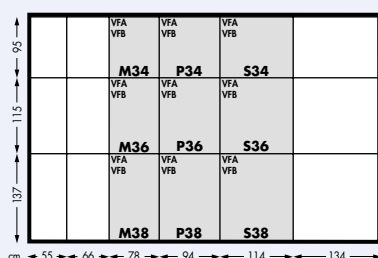


Horizontal section, bottom element



Technical data VFA/B

Sizes

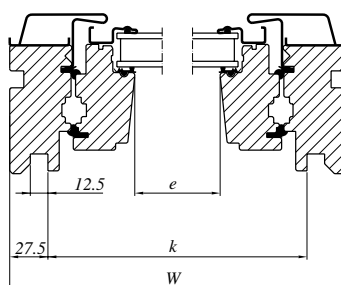
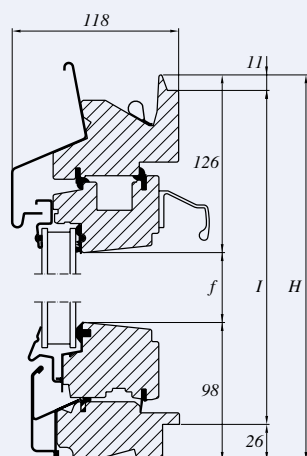


Technical data

	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



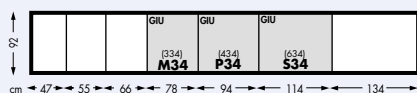
Measurements [mm]:

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	

Technical data GIU

Sizes



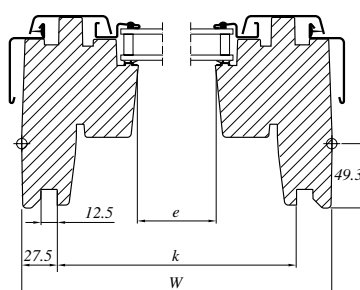
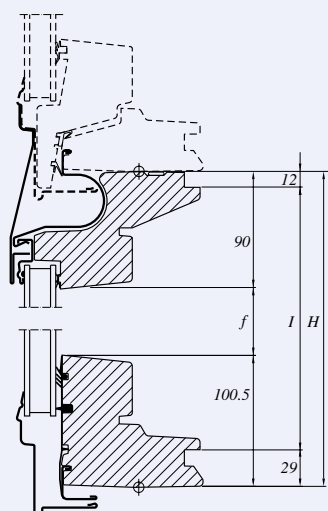
Available to order.

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

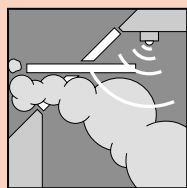
Cross-sections and measurements



Measurements [mm]:

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

Height	Size	H	f	l
	M34, P34, S34	920	729	879



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*