

Dome rooflights, VARIO light flaps and aluminium darkening flaps

VELUX®
Commercial


As SHEV units for effective smoke and heat exhaust
or used as a pure ventilation unit for daily ventilation

SHEV systems consisting of

- dome rooflight (see also dome rooflight product range) or aluminium darkening flap¹ or a VARIO light flap, with a barrel vault made of opal 10 mm polycarbonate double-skinned sheets
- upstand (see also upstand product range)
- the opening device
FIREJET® 165 J or
FIREJET® 165 J AZ or
FIREJET® 165 J SA 24V/48V/230V AZ
- all systems are approved according to DIN EN 12101-2²
- all units can also be optionally used for daily ventilation when equipped with corresponding auxiliary devices



SHEV dome rooflight with wind baffles for optimized aerodynamic efficiency



VARIO light flap with SHEV device and electrical motors in ventilation position

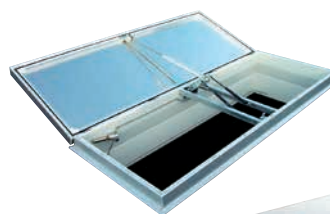
Ventilation possibilities

Electrically activated (230 V/AC or 24 V/DC)

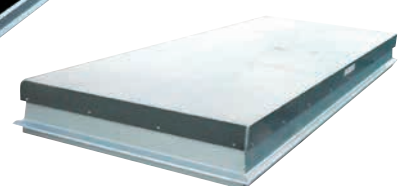
- upon plaster/under plaster ventilation double switch for motor opener with indicator lamp
- motor opener with thrust spindle approx. 300/500 mm lifting height (other lifting heights possible)
- rain detector unit or wind/rain detector unit
- central-"CLOSE"-control with pneumatically activated timer

Pneumatically activated

- pneumatic lifting cylinder 300/500/750/1,000/1,250 mm lifting height
- pneumatic manual control valve
- rain detector unit or wind/rain detector unit
- central-"CLOSE"-control with timer



Aluminium darkening flap opened in final position after SHEV activation and in closed position



Note:

- 1) The aluminium darkening flap is "fall-through" proof according to GS-BAU-18:2015-02 with DGUV test certificate.
- 2) Different SHEV component combinations are possible. Detailed SHEV unit specifications upon request.

1.1.1
TOP-90

1.1.2
TOP-90 PLUS

1.2.1
Dome rooflight upstands and roof connection systems

1.4.1
Dome rooflight safety concept

1.4.1
Revisions upstands for individual attachment points on flat roofs

1.4.5
LK-DDS

1.4.6
LK-DDN

Dome rooflights, darkening flaps und VARIO light flaps

SHEV systems	Hinge/ opener side	FIREJET® 165 J SA 24V/48V/230V AZ ¹				FIREJET® 165 J, FIREJET® 165 J AZ		FIREJET® 165 J FIREJET® 165 J AZ		FIREJET® 165 J FIREJET® 165 J AZ	
Order size		With RAK 30/40/45/50 upstand (RAK geometry)		With AK 30/40/50/60 ² upstand (AK geometry)		With metal raising frame 25 assembled on an upstand		With RAK 30/40/45/50 upstand (RAK geometry)		With AK 30/40/50/60 ² upstand (AK geometry)	
cm x cm		Without wind baffles lowest A _a -value	With wind baffles highest A _a -value	Without wind baffles lowest A _a -value	With wind baffles highest A _a -value	Without wind baffles lowest A _a -value	With wind baffles highest A _a -value	Without wind baffles lowest A _a -value	With wind baffles highest A _a -value	Without wind baffles lowest A _a -value	With wind baffles highest A _a -value
100 x 100		-	-	-	-	0.600	-	0.650	0.750	0.600	-
100 x 150		0.86	1.08	0.86	0.93	0.900	0.975	0.900	1.125	0.900	0.975
100 x 200		-	-	-	-	1.200	1.300	1.200	1.500	1.200	1.300
100 x 240		-	-	-	-	1.440	1.560	1.440	1.800	1.440	1.560
100 x 250		-	-	-	-	1.500	1.625	1.500	1.875	1.500	1.630
120 x 120		0.81	1.02	0.81	0.88	0.936	-	0.864	1.080	0.864	0.936
120 x 150		1.01	1.30	1.01	1.30	1.170	-	1.080	1.350	1.080	1.170
120 x 180		1.14	1.56	1.14	1.34	1.296	1.404	1.188	1.620	1.188	1.404
120 x 210		1.34	1.84	1.34	1.59	1.512	1.764	1.386	1.890	1.386	1.638
120 x 240		1.53	2.07	1.53	1.93	1.728	2.016	1.584	2.160	1.584	2.016
120 x 250		1.59	2.19	1.59	2.01	1.800	2.100	1.650	2.250	1.650	2.100
125 x 125		0.88	1.11	0.88	0.95	1.010	-	0.940	1.170	0.940	1.010
125 x 250		1.66	2.25	1.66	2.09	1.880	2.190	1.719	2.344	1.719	2.188
150 x 150		1.28	1.64	1.28	1.42	1.350	1.575	1.350	1.688	1.350	1.508
150 x 180		1.54	1.94	1.54	1.81	1.620	1.890	1.620	2.025	1.620	1.890
150 x 210		1.80	2.30	1.80	2.11	1.890	2.205	1.890	2.363	1.890	2.205
150 x 240		1.91	2.63	1.91	2.45	1.980	2.520	1.980	2.700	1.980	2.520
150 x 250		1.99	2.74	1.99	2.55	2.063	2.625	2.063	2.813	2.063	2.625
180 x 180		-	-	-	-	1.782	2.268	1.782	2.430	1.782	2.268
180 x 210		-	-	-	-	2.080	2.650	2.080	2.650	2.080	2.650
180 x 240		-	-	-	-	2.376	3.024	2.376	3.240	2.376	3.024
180 x 250		-	-	-	-	2.475	3.150	2.475	3.375	2.475	3.150
200 x 200 ⁴		-	-	-	-	2.200	2.800	2.200	3.000	2.200	2.800
200 x 300 ⁵		-	-	-	-	3.000	4.200	3.000	4.500	3.000	4.200

Note:

A_a value in m² (aerodynamical effective smoke exhaust surface) according to DIN EN 12101-2
Please consider the limitation of the order sizes (see brochure 6.1.1)

1) A_a values are approx. 5% less than the values in the table when the FIREJET® 165 J SA 24V/48V/230V AZ or the GRP AK 50 are used, detailed information upon request

2) Applies to ISO-Therm AK

3) Applies to electric SHEVS

4) Not for FIREJET® 165 J AZ

5) Not for FIREJET® 165 J AZ (only "OPEN" function)