Glos SV

I. Description

 system of solutions for natural daylight, natural ventilation and smoke and heat ventilation in case of fire.

1.1.Integrity in

- All types of roof packages and constructions
- Roof lights
- Glass construction

1.2. Function

- Natural daylight
- Natural ventilation
- Smoke and heat ventilation

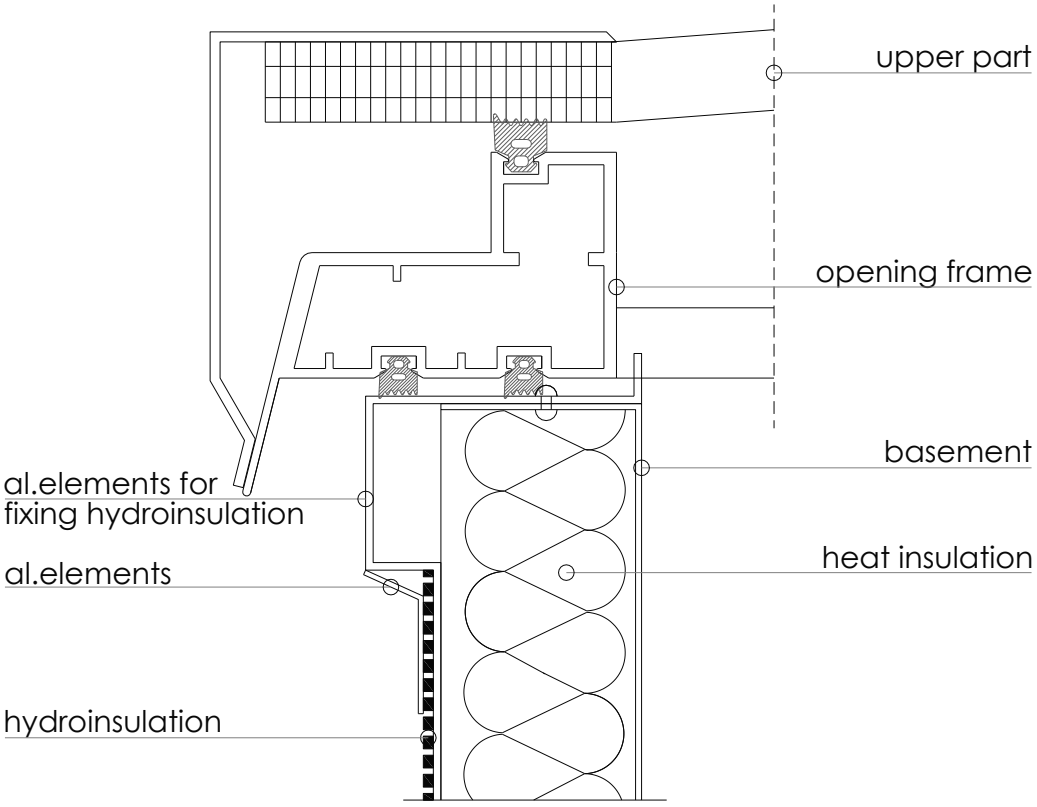
1.3. Standards

Glos SV is in accordance with the following Directives and Standards:

General standarts		
1	EN 12 101-2	1396-CPD-0030
2	ISO 9001: 2008	
Additional test and approvals		
3	EN 10 077-1,2	SP-Pr.3, SP-Pr.34, SP-Pr.35, SP-Pr.36/2014r.

II. Components

Application 1



Principal detail

2.1. Basement

№	Type of materials	Thikness	Height	Coefficient of thermal transmission
1	Galvanized steel	1,2 mm 1,5 mm 2,0 mm	150 mm 300 mm 450 mm	50mm mineral wool Ug=0,9W/m².K
2	Stainless steel			100mm mineral wool Ug=0,5W/m².K
3	Al/Mg alloy			

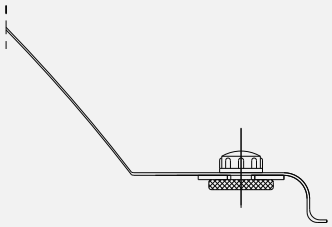
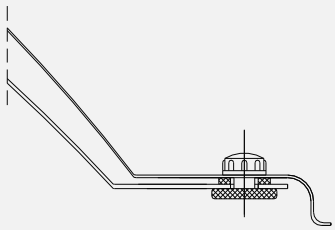
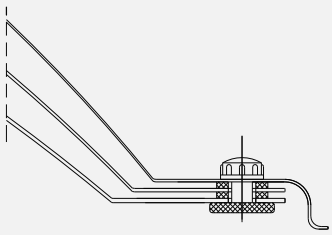
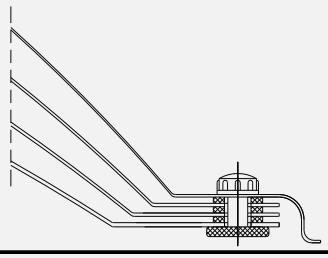
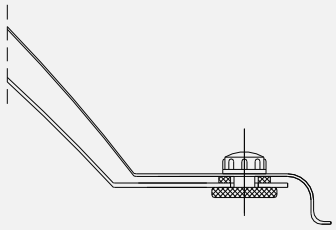
Sizes:

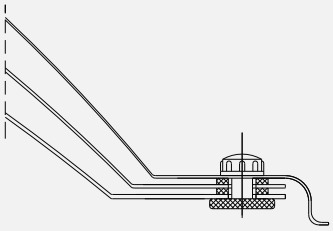
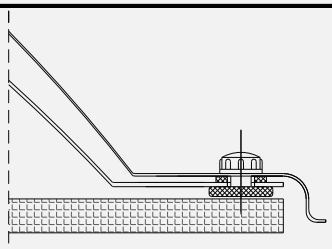
- From 500 to 2000mm width
- From 500 to 6000mm length

2.2.Types upper parts

2.2.1. Thermo formed upper parts - 1, 2, 3 or 4 layers:

Application 2

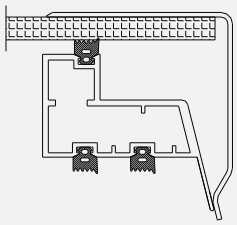
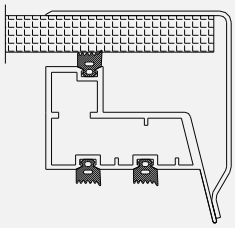
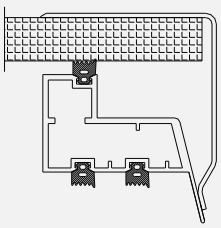
№	Types	View	Lt [%]	G value [%]	U value [W/m².K]	Si [db]
1	1 PMMA opal		83	73	5,4	17
2	2 PMMA clear/opal		69	53	2,7	24
3	3 PMMA cl/cl/opal		63	45	1,7	28
4	4 PMMA		55	41	1,3	31
5	Solid PC/ 2PMMA		73	61	2,7	25

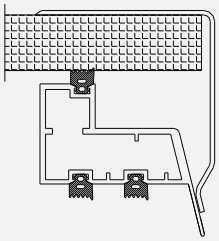
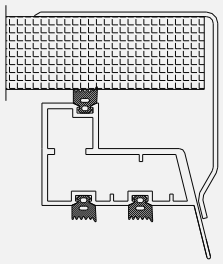
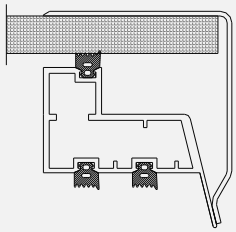
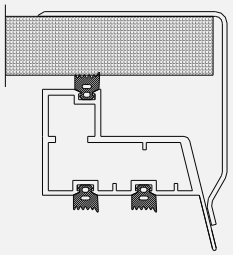
6	Solid PC/ 3PMMA		67	52	1,8	28
7	2PMMA + PC 16mm		40	39	1,3	24

Note: Triangular and circular shape of the thermo formed part are possible upon request!

2.2.2. Cellular polycarbonate upper parts:

Application 3

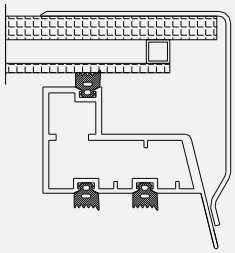
№	Types	View	Lt [%]	G value [%]	U value [W/m².K]	Si [db]
1	PC 10mm		61	61	2,5	17
2	PC 16mm		54	55	2	18
3	PC 20mm		47	47	1,67	20

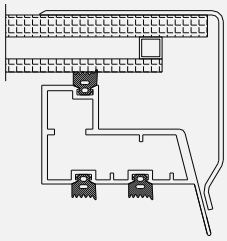
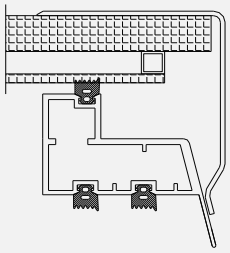
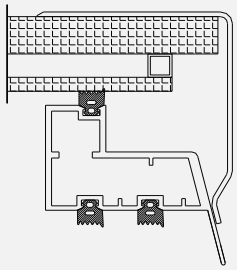
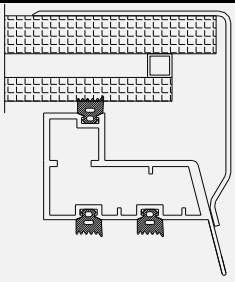
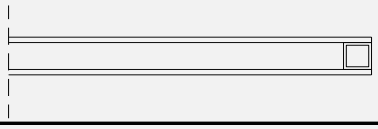
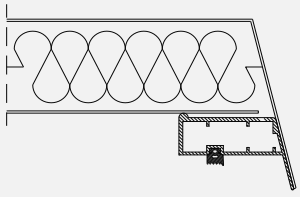
4	PC 25mm		40	42	1,3	22
5	PC 32mm		38	41	1,1	24
6	PC 16mm, NG		64	50	1,31	21
7	PC 25mm, NG		67	42	1,1	18

Note: Position 6 and 7 are with aerogel inside.

2.2.3. Package solutions:

Application 4

№	Types	View	Lt [%]	G value [%]	U value [W/m².K]	Si [db]
1	PC 10+4mm		52	52	2,2 - 2,0	21

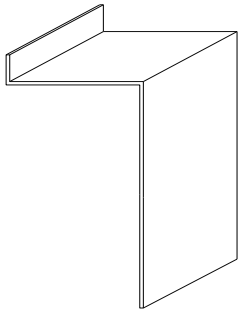
2	PC 10+6mm		50	51	1,9 - 1,7	22
3	PC 16+4mm		44	44	1,4 - 1,0	27
4	PC 16+6mm		42	43	1,2 - 1,0	28
5	PC 16+10mm		38	40	1,1 - 0,9	32
6	PMMA / PMMA		69	53	2,7	24
7	PC / PMMA		73	61	2,7	25
8	Glass package		77	63	1,7	37
9	DK 40÷80mm		0	0	1,2 - 0,65	24

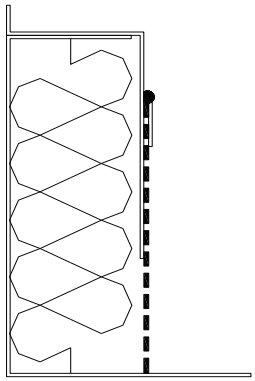
Note: The gasket kit is option of solution type "forced".

2.3. Joining elements

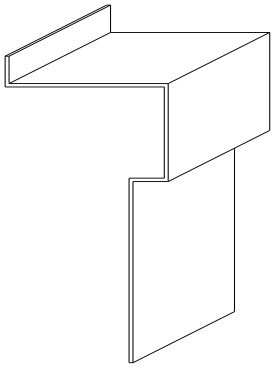
2.3.1.Hydro insulation fixing

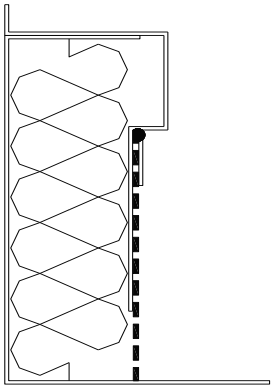
- **Type 1** – Fitting for PVC / TPO / bitumen / EPDM / other hydroinsulation



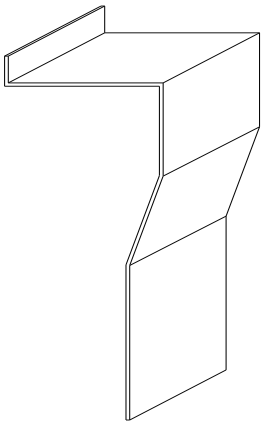


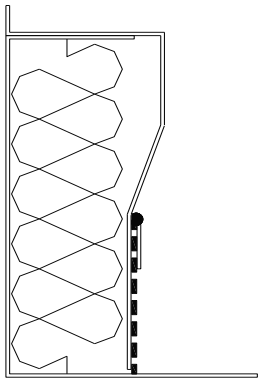
- **Type 2** – Fitting with PVC hydroinsulation



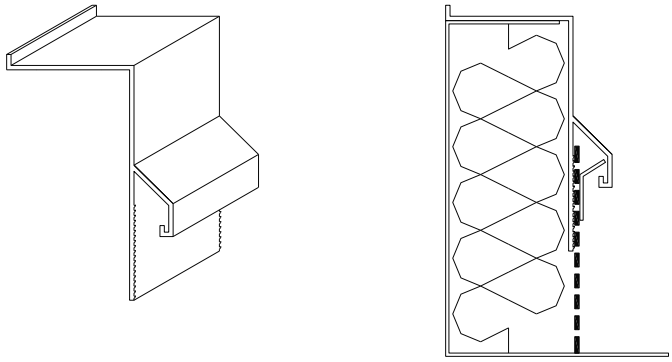


- **Type 3** – Fitting with PVC hydroinsulation





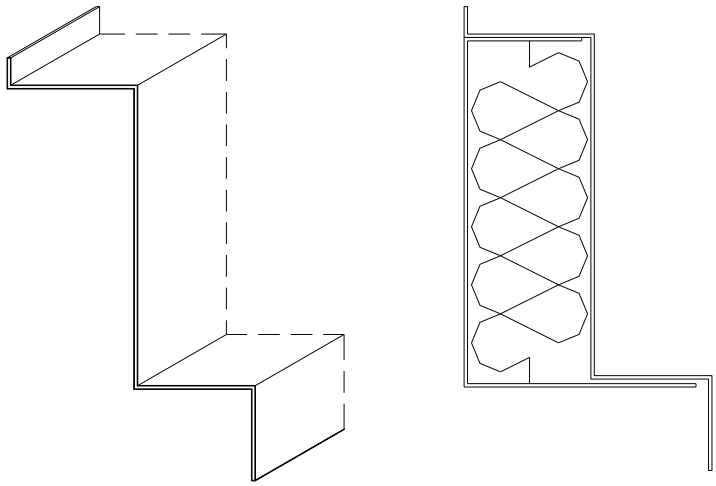
- **Type 4** – Fitting with PVC hydroinsulation



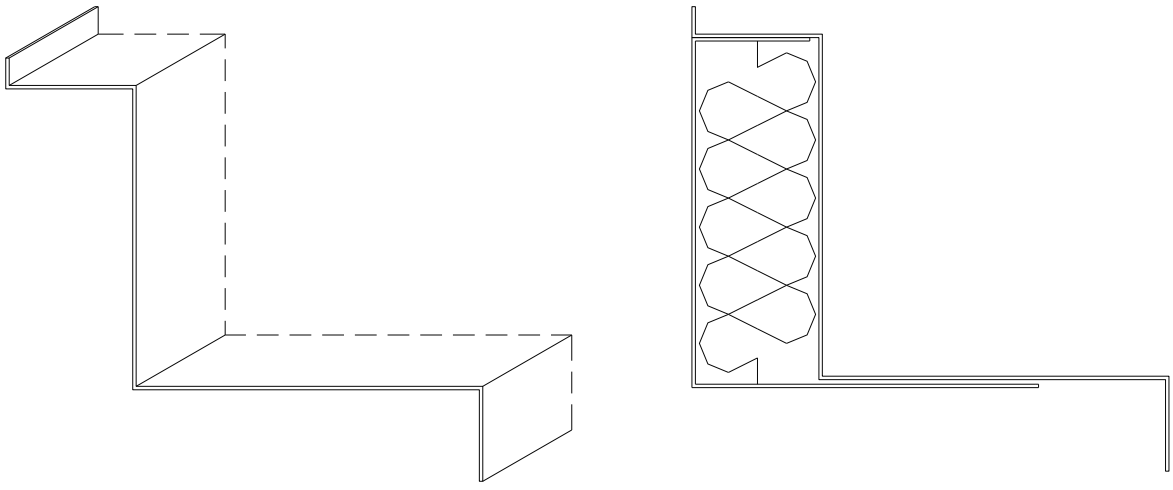
Note: Option for joining elements: powder coated, visible part(RAL).

2.3.2. Aluminium case

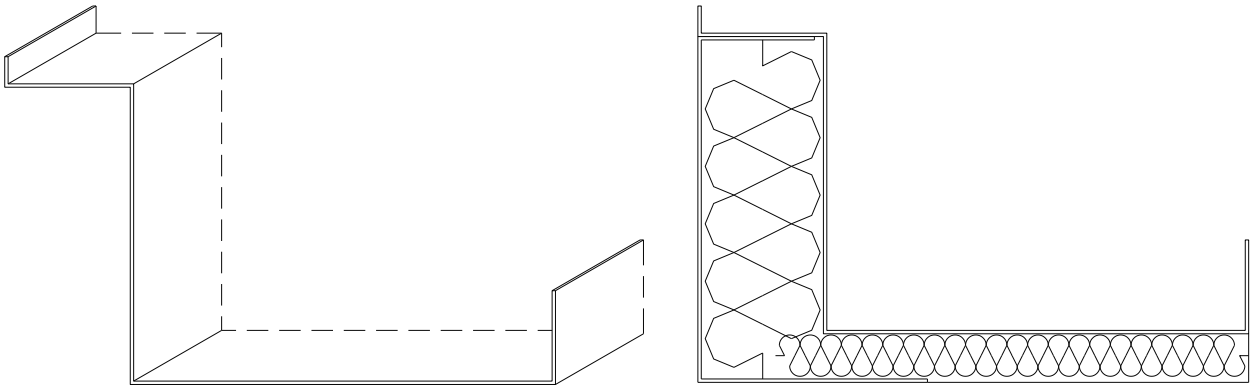
- **Type 1** – For installation on reinforced board



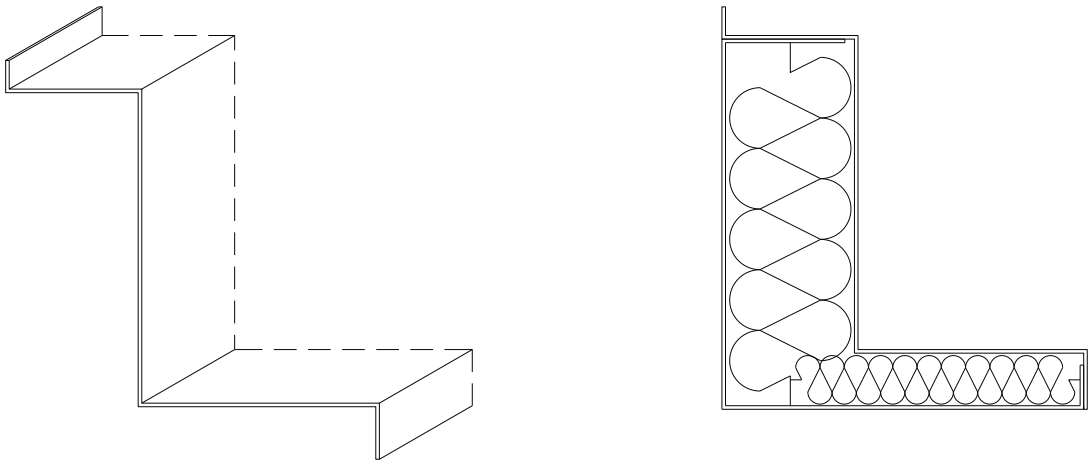
- **Type 2** – For installation on sandwich panel



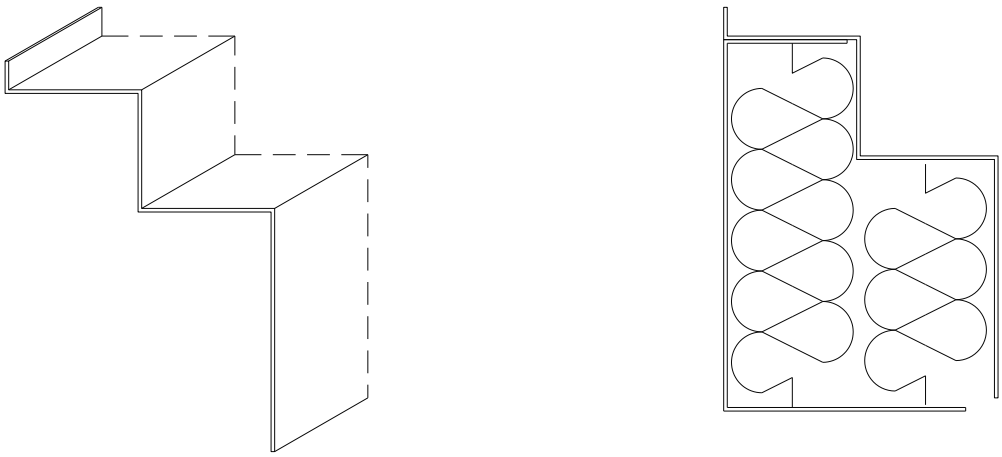
- **Type 3** – For installation in roof light



- **Type 4** – For integration in glass construction



- **Type 5** – Thermal insulation forced



2.4. Function upgrade elements

- Wind deflector
- Safety grid
- Burglar grid
- Insect and bird screen
- Belt conectors
- Sun protection elements – inside/outside
- Integration case
- Ventilated board

III. Ventilation function and roof access

3.1. Daily ventilation

- Motor 230V, AC. Opening height - 300/500mm

- Chain drive 24V, DC. Opening height 200/300/400/500mm

- Pneumatic cylinder. Opening height - 300/500mm

3.2. RWA function

Reliability	Re 1000
Snow load	SL 200 – SL 700
Low ambient temperature	T (00)
Wind load	WL 600 WL 1250
Resistance to heat classification	B 300
Reliability for daily ventilation	Le 10000

3.3. RA – solution for roof access

- Gas springs
- Handle
- Locking device

3.4. Product parameters for Glos SV EXT GA

- EN 10 077 – 1,2 tested
- Coefficient of thermal transmission of entire unit

Geometric area	Upper part 16+4mm	Upper part 20mm
1.00 m^2	**U = 1.00** $W/m^2.K$	**U = 1.52** $W/m^2.K$
1.44 m^2	**U = 1.30** $W/m^2.K$	**U = 1.36** $W/m^2.K$
2.00 m^2	**U = 1.20** $W/m^2.K$	**U = 1.15** $W/m^2.K$
3.75 m^2	**U = 1.39** $W/m^2.K$	**U = 1.04** $W/m^2.K$

3.5 Product parameters of Glos SV EXT GB

- With a maximum thermo insulation
- Coefficient of thermal transmission of entire unit

3.75 m^2	**U = 0.9** $W/m^2.K$

Note: For more information, please contact your consultant.