Glos FF EL BLOCK10

I. Description

A system of solutions for heat and smoke extraction, natural ventilation and natural daylight.

1.1 Integrity in

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

1.2 Function

- Natural daylight
- Natural ventilation
- Smoke and heat ventilation

1.3 Standards

Glos FF EL BLOCK10 is in accordance with the following Directives and Standards:

General standards		
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., SP-Pr.06/29.01.2016

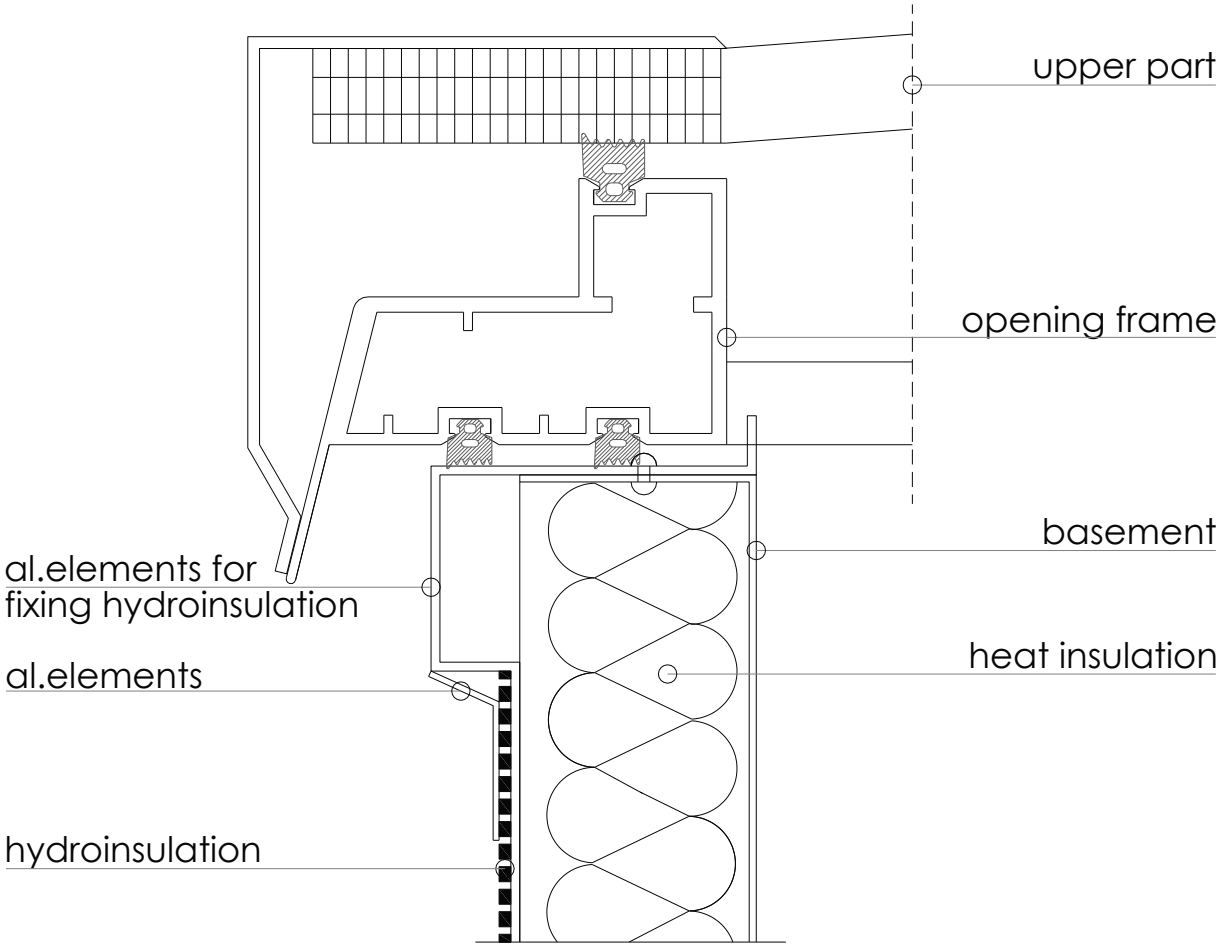
1.4 Product parameters

Reliability	Re 50 (Le 10000)
Snow load	SL 250÷750
Low ambient temperature	T (00)
Wind load	WL 550÷1500
Resistance to heat	B 600

II. Components

2.1 Structure

- Upstand
- Joining element (optional)
- Upper part*



Principal detail

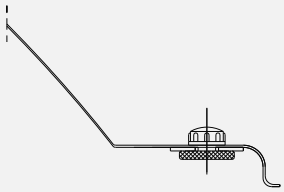
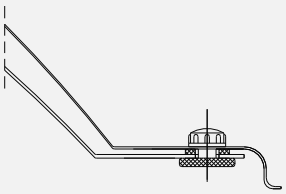
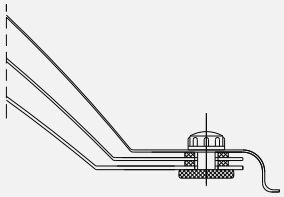
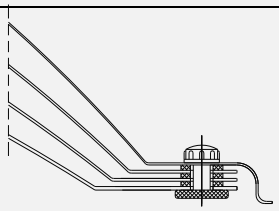
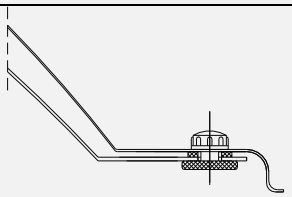
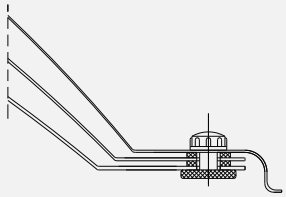
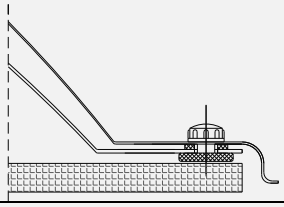
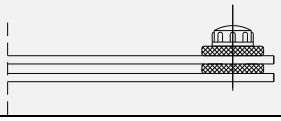
*Second bottom and upper gaskets are optional

2.2 Basement

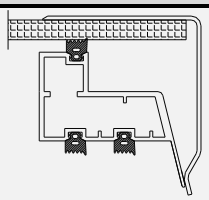
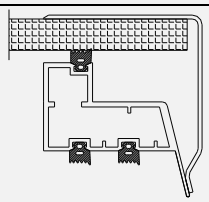
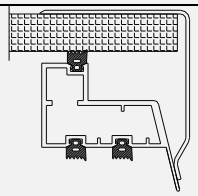
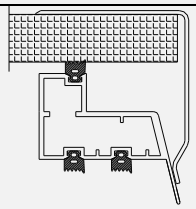
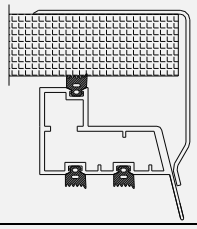
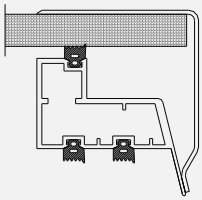
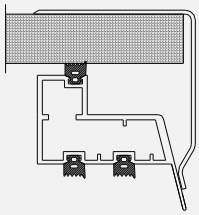
№	Type of materials	Thickness	Height	Coefficient of thermal transmission
1	Galvanized steel	1.2 mm 1.5mm 2.0mm	150mm 300mm 450mm	50mm mineral wool Ug=0.9W/m².K
2	Stainless steel			100mm mineral wool Ug=0.5W/m².K
3	Al/Mg alloy			

2.3 Types of upper part

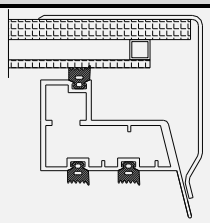
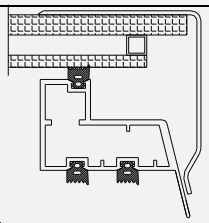
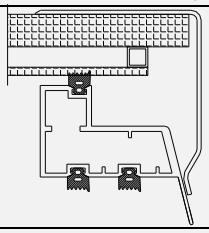
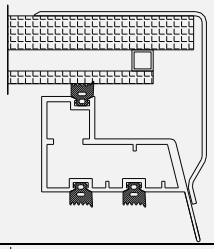
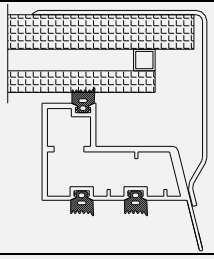
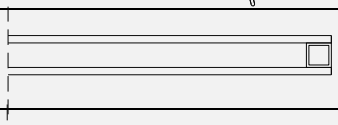
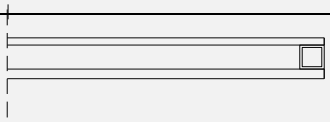
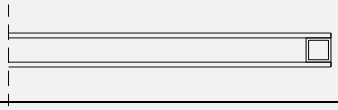
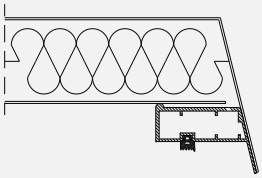
2.3.1. Thermal formed upper part

№	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
8	Insulation glazing		77	63	1,1	37

2.3.2. Cellular polycarbonate upper part

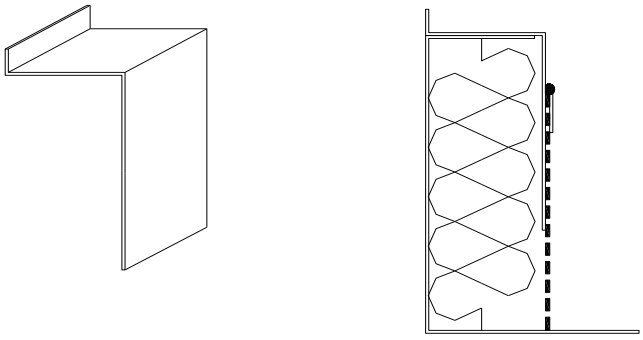
№	Types	View	Lt [%]	G value [%]	U value [W/m².K]	Si [dB]
1	PC 10mm		61	61	2,5	17
2	PC 16mm		54	55	2	18
3	PC 20mm		47	47	1,67	20
4	PC 25mm		40	42	1,3	22
5	PC 32mm		38	41	1,1	24
6	PC 16mm, NG		64	50	1,31	21
7	PC 25mm, NG		67	42	1,1	18

2.3.3. Package solutions

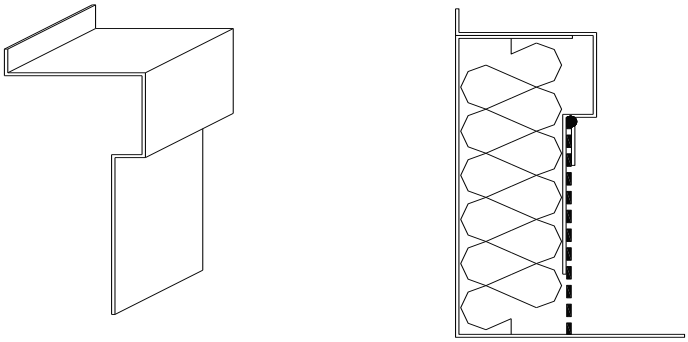
№	Types	View	Lt [%]	G value [%]	U value [W/m².K]	Si [dB]
1	PC 10+4mm		52	52	2,2 - 2,0	21
2	PC 10+6mm		50	51	1,9 - 1,7	22
3	PC 16+4mm		44	44	1,4 - 1,0	27
4	PC 16+6mm		42	43	1,2 - 1,0	28
5	PC 16+10mm		38	40	1,1 - 0,9	32
6	PMMA / PMMA		69	53	2,7	24
7	PC / PMMA		73	61	2,7	25
8	Glass package		77	63	1,7	37
9	DK 40÷80mm		0	0	1,2 - 0,65	24

2.2 Joining elements

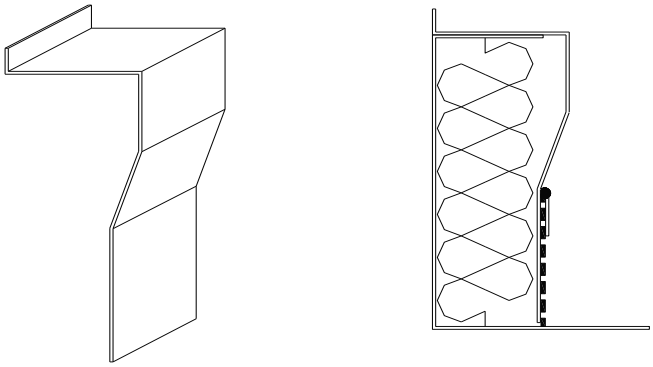
- Waterproof element for PVC / TPO / bitumen / EPDM / other hydroinsulation



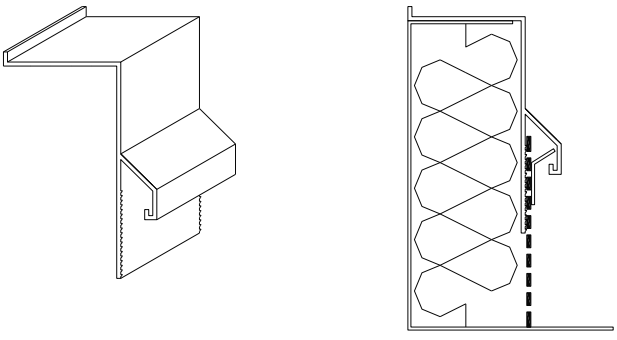
- Waterproof element for PVC hydroinsulation



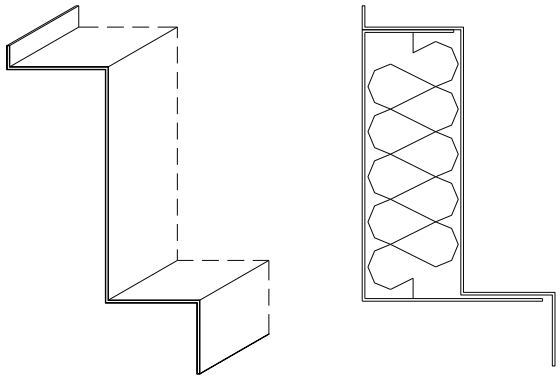
- Waterproof element for PVC hydroinsulation



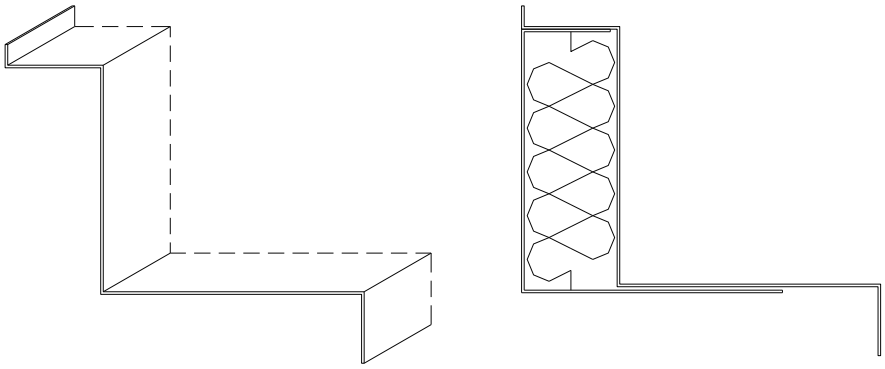
- Waterproof element for PVC hydroinsulation



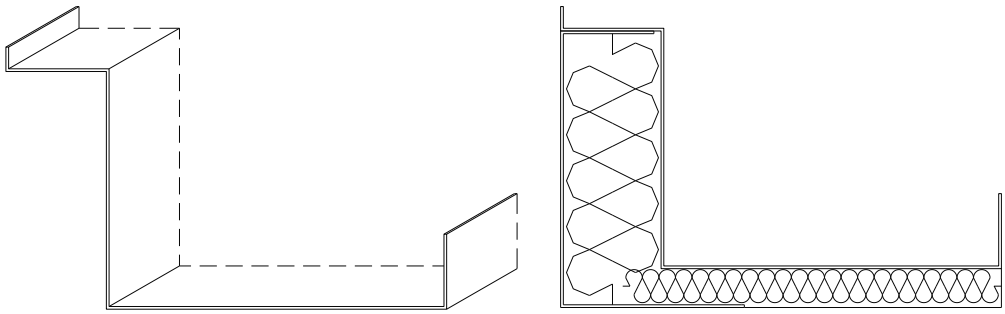
- Aluminum case for installation on reinforced board



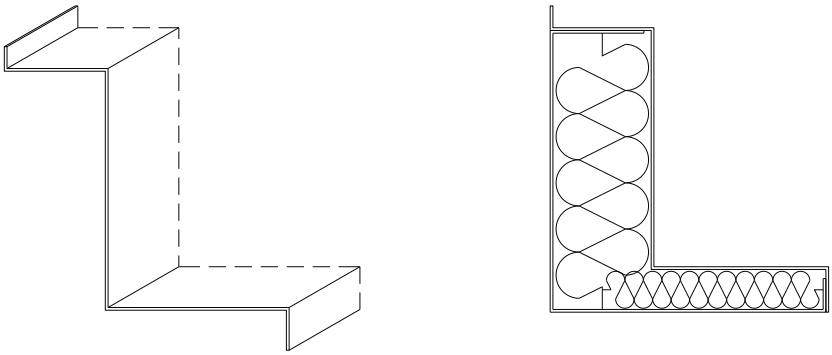
- Aluminum case for installation on sandwich panel



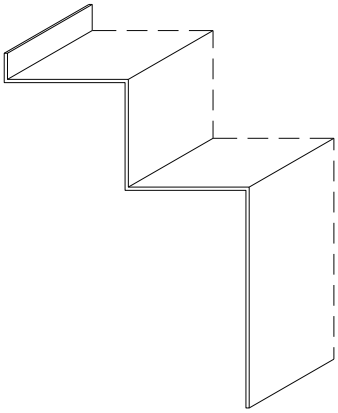
- Aluminum case for installation in roof light

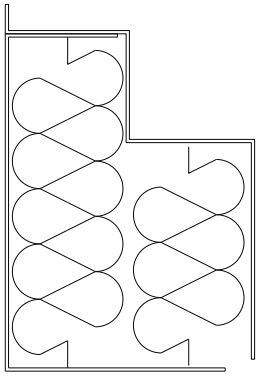


- Aluminum case for installation in glass construction



- Aluminum case with forced thermal insulation





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

2.4 Function upgrade elements

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

2.5 Product parameters of Glos FF EL Block 10 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** $W/m^2.K$

2.6 Product parameters of Glos FF EL Block 10 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.