

GORLICKA S / GORLICKA S GS-PIR
GORLICKA U / GORLICKA U GS-PIR
GORLICKA D / GORLICKA D GS-PIR

TECHNICAL CATALOGUE



I. GENERAL INFORMATION

Introduction	2
About the company	2
About the product	2
Structure of panels	2
Certificates	2
Production programme	3
Guidelines for transport	3
Guidelines for mounting	3
Technical support	3

II. TECHNICAL SPECIFICATIONS OF PRODUCTS:

1. Wall sandwich panel GORLICKA S / GORLICKA S GS-PIR (Standard cam-lock)

Application	4
Physical properties	4
Technical parameters of PUR core	4
Technical parameters of PIR core	4
Production programme – panel thickness and lining profiles	5
Span tables	6
Packing and shipment	6
Selected details of cladding made of GORLICKA S / GORLICKA S GS-PIR sandwich panels	7-39

2. Wall sandwich panel GORLICKA U / GORLICKA U GS-PIR (Hidden cam-lock)

Application	40
Physical properties	40
Technical parameters of PUR core	40
Technical parameters of PIR core	40
Packing and shipment	40
Production programme – panel thickness and lining profiles	41
Span tables	42
Selected details of cladding made of GORLICKA U / GORLICKA U GS-PIR sandwich panels	43-75

3. Wall sandwich panel GORLICKA D / GORLICKA D GS-PIR (Roof panel)

Application	76
Physical properties	76
Technical parameters of PUR core	76
Technical parameters of PIR core	76
Production programme – panel thickness and lining profiles	77
Span tables	78
Packing and shipment	78
Selected details of cladding made of GORLICKA D / GORLICKA D GS-PIR roof panel	79-95

4. Additional elements

Accessories	96
Flashings	96
Seals	96
Fasteners	96
Selected flashings accessories	97-113

5. Documentation

Sandwich panels order form	114
Standard ancillary materials order form	115
Custom-made flashings order form	116
PZH Hygienic Certificate	117
PN-EN ISO 9001:2009 Certificate	118

INTRODUCTION

This publication is intended to present an assortment and technical properties of **GORLICKA** panels to our customers. With over 12 years of experience and extensive knowledge we perfectly know the needs of the market. As a result, we create products and solutions that give our customers real benefits.

ABOUT THE COMPANY

Gór-Stal is a Polish company founded in 2003. It had originally produced and sold finished steel construction elements. The increase in demand for building materials for light industrial facilities forced co-owners to buy the line for the production of sandwich panels with a polyurethane core. It is one of the most modern and technologically advanced production lines in Europe. Gór-Stal manufactures sandwich panels and termPIR insulating panels. Sandwich panels are commonly used building materials for light cladding of industrial halls, warehouses, production halls and commercial buildings, offices, administrative buildings, freezers and cold storages. Since the beginning of the company's operation it has rapidly developed and extensively expanded its operations both geographically and in terms of product offerings. Gór-Stal is recognized by customers in Poland, Czech Republic, Austria, Romania, Belgium, the Netherlands, Luxembourg, Great Britain, France, Germany, Estonia and the Nordic countries, Slovakia, Hungary, Ukraine, Lithuania and Latvia. We currently have two factories, one in Gorlice and the other in Bochnia, where we manufacture termPIR insulation panels.

ABOUT THE PRODUCT

Gór-Stal offers a wide range of modern wall, roof and coldstore sandwich panels with **polyurethane (PUR)** or **polyisocyanurate (PIR)** core. **GORLICKA** sandwich panels consist of two steel claddings and a structural insulation core of rigid, HCFC-free self-extinguishing PUR or PIR foam with very good thermal insulation. When building with composite panels, you can create an object with excellent insulation properties, with a significant reduction in the thickness and weight. Speed and ease of installation, possibility of carrying out the work even in difficult weather conditions, low cost of implementation and ease of wall cleaning, modernity and versatility of the system make **GORLICKA** composite panels the best building material. A wide range of colors and varied shape of panels profiles allow for the implementation of ambitious architectural projects. Gór-Stal owes its leader position in the production of sandwich panels to high technological advancement of production lines, well-qualified team of employees and special attention to the quality of the products.

STRUCTURE OF PANELS

GORLICKA sandwich panels have two types of cores of polyurethane (**PUR**) or polyisocyanurate (**PIR**) foam with a density of **40 kg/m³**. The heat conductivity calculation value of the foam is: $\lambda = 0.022 \text{ W/m}\cdot\text{K}$. Bonds in PUR foams disintegrate at temperatures above **200 °C**, and carbonization during burning is approximately **20%**. PIR foams are characterized by an increased resistance to high temperatures. Isocyanurate structures of PIR foams decompose at temperatures above **325 °C**, and carbonization is approximately **50%**. The carbonized layer protects against heat transition through the panel, which in turn provides an effective protection against fire. Sheet metal grade **S220-S280GD DIN EN 10346** galvanized on both sides with the organic polyester lacquer with a film thickness of **25 microns** is used as cladding of GORLICKA sandwich panels. Due to the increased anticorrosion requirements, it is possible to make panels with metal plate dedicated for environments **C4** and **C5**, and the prevailing aggressive environments inside the buildings. It is possible to use stainless steel **1.4301** coating. Panels are protected against mechanical damage that may occur during transport or installation with a protective foil.

CERTIFICATES

GORLICKA sandwich panel have the following certificates and technical approvals:

- Quality Management System certificate **ISO 9001: 2009**;
- CE declaration of conformity in accordance with **EN 14509: 2013 - GORLICKA** sandwich panels with a core of rigid **polyurethane (PUR)** or **polyisocyanurate** foam in sheet metal facing;
- **Declaration of Performance** in accordance with Regulation (EU) **No. 305/2011 CE**;
- **Hygienic Approval No. HK/B/0250/01/2012** - allowing for use in service, commercial, industrial, food processing, refrigeration facilities, residential and public buildings, including health service.

PRODUCTION PROGRAMME

The production program for **GORLICKA** sandwich panel systems includes the following items:

Wall sandwich panels:

GORLICKA S / GORLICKA S GS-**PIR** – (standard cam-lock) – thickness: 40, 60, 80 and 100 mm;

GORLICKA U / GORLICKA U GS-**PIR** – (hidden cam-lock) – thickness: 60, 80, 100 and 120 mm

Roof sandwich panels:

GORLICKA D / GORLICKA D GS-**PIR** – (roof cam-lock) – thickness: 40, 60, 80, 100, 120 and 160 mm;

Coldstore panels:

GORLICKA CH / GORLICKA CH GS-**PIR** – (cold storage cam-lock) – thickness: 100, 120, 160 and 200 mm;

Flashings: typical and custom made according to the client's design with a maximum length of 6m.

This publication provides detailed characteristics of GORLICKA sandwich panels.

GUIDELINES FOR TRANSPORT

GORLICKA sandwich panels are packed in batches. Loading and unloading of the batches may be done by means of forklift trucks or a lift equipped with an appropriate bar lifting sling, however:

- one forklift can be used to transport batches up to **8 m** long. Longer panels shall be unloaded with two forklifts. The space between supports of the transported batch may not exceed **4 m**.
- for unloading with a lift equipped with rope slings use spacers preventing the panels from being squeezed.

The transportation of sandwich panels shall be carried out by vehicles adapted for that purpose, while maintaining the following conditions:

- free access on both sides of the trailer along its entire length.
- up to 2 batches of panels in one stake.
- the width of the loading area: minimum **2450 mm** (in case of 2 stakes of panel).
- support for the batch provided on the entire length of the load-carrying body.
- panels may not contact one another, the load-carrying body or the transportation belts.
- the vehicle must be equipped with load fixing belts; flexible separators shall be placed under the belts. Tensioned belts must not deform the panels.
- Plates indicating the number of panels in a batch are available in the technical specification of specific panels.

GUIDELINES FOR MOUNTING

The manufacturer of GORLICKA sandwich panels recommends using flashings and cam-locks supplied with the panel as part of the GORLICKA panels light housing system.

When mounting the panels, follow the guidelines provided below:

- cut the plates and flashings with a fine-toothed sawing machine or tinman's shears – do not use cut-off wheels!
- cut the panels and flashings at a properly prepared station in order not to damage the lacquer and tin coatings.
- remove the protection foil after the panels have been installed, but not later than 3 months after purchase.
- after installation thoroughly clean the surface of the panels, particularly off steel filings.

Typical panel mounting solutions are presented farther in this publication.

TECHNICAL SUPPORT

We pay great importance to friendly and professional service to our customers. Technical department and sales representatives provide assistance for designers, engineers and contractors in the designing, ordering and advising on the application of our products and their installation. Customers are offered active support from the design stage to installation. We provide instant technical advice and cost calculation. The process of ordering and delivery is coordinated by our **Customer Service Department**. For more information visit our website www.gor-stal.pl

APPLICATION

GORLICKA S/GORLICKA S GS-PIR wall panel is designed for outer screening walls and inner partition walls in structural frame buildings. Panels can be mounted in both vertical and horizontal position, as single-span or multi-span wall elements.

PHYSICAL PROPERTIES

GORLICKA S / GORLICKA S GS-PIR wall panel is produced in the four thicknesses of the core **40, 60, 80** and **100 mm**. Panels facing is made of double-sided galvanized steel sheets, 0.50 mm thick as per **PN-EN 10326:2006**, with organic polyester coating **25µm** thick. Thermal insulation core of the panels is a rigid polyurethane (**PUR**) or polyisocyanurate (**PIR**) foam with a thickness of **40 kg/m³**. The heat conductivity calculation value of the foam is: $\lambda = 0.022 \text{ W/m} \cdot \text{K}$. Modular width of plates is **1000 mm** or **1140 mm**. The standard panel length is between **2.0 to 12 m**. On special request we deliver panels shorter than **2 m** and longer than **12 m**, with a maximum length of **16.5 meters**. Tightness of panel joints is provided by impregnated polyurethane seals applied in the manufacturing process.

Thickness [mm]	Weight [kg/m ²]	Modular width [mm]	Length: typical/available [m]	Lining standard RAL colours
40	9,38	1000 1140 - for thickness 60 mm or higher and proflation L or M	2,0 - 12,0 / 16,5	9002 9010 9006*
60	10,43			
80	11,23			
100	12,03			

*colour is inaccessible for thickness 40

Thermal insulation of panels depends on the thickness of the core characterized by **U** thermal coefficient, taking into account the impact of linear thermal bridge appearing on panel joint and point thermal bridge appearing because of connectors. **Acoustic parameters** were determined on the basis of **EN ISO 10140-3**. Coldstore plates can be used as partitions of the requirements of sound insulation no greater than those specified below. **Resistance to chemical corrosion** - **GORLICKA** sandwich panels can be used in environments with atmosphere corrosiveness category **C1, C2, C3** according to **EN ISO 12944-2**.

TECHNICAL PARAMETERS OF PUR CORE

Thickness [mm]	Heat-transfer coefficient U [W/m²·K]	Acoustic insulation	Reaction to fire	Fire resistance	NRO
	PN-EN 14509	EN ISO 717-1	PN-EN 13501-1	PN-EN 13501-2	PN-B-02867:2013:06
40	0,58	R _w = 23 dB R _{a1} = 21 dB R _{a2} = 19 dB	B-s2, d0	NPD	„NRO“
60	0,38			E15, Conditions by classification	
80	0,28				
100	0,23				

TECHNICAL PARAMETERS OF PIR CORE

Thickness [mm]	Heat-transfer coefficient U [W/m²·K]	Acoustic insulation	Reaction to fire	Fire resistance	NRO
	PN-EN 14509	EN ISO 717-1	PN-EN 13501-1	PN-EN 13501-2	PN-B-02867:2013:06
40	0,58	R _w = 23 dB R _{a1} = 21 dB R _{a2} = 20 dB	B-s2, d0	NPD	„NRO“
60	0,38		B-s1, d0		
80	0,28				
100	0,23				

Production programme of panels **Gorlicka S / Gorlicka S GS-PIR:**

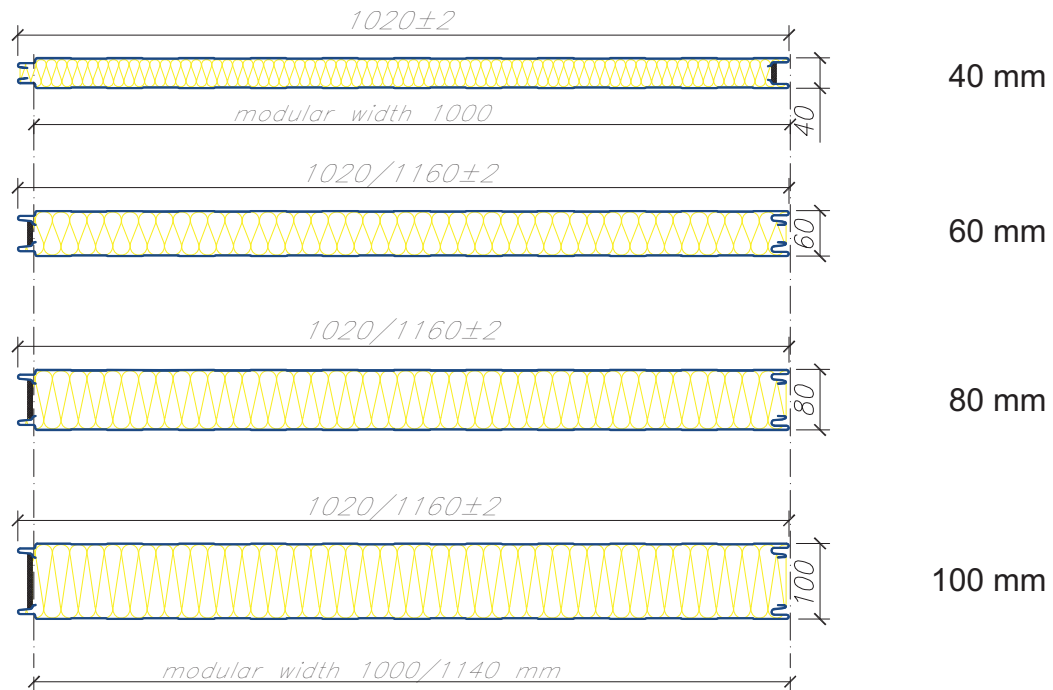
- Panel thicknesses
- Profiles of outer and inner facing

Scale

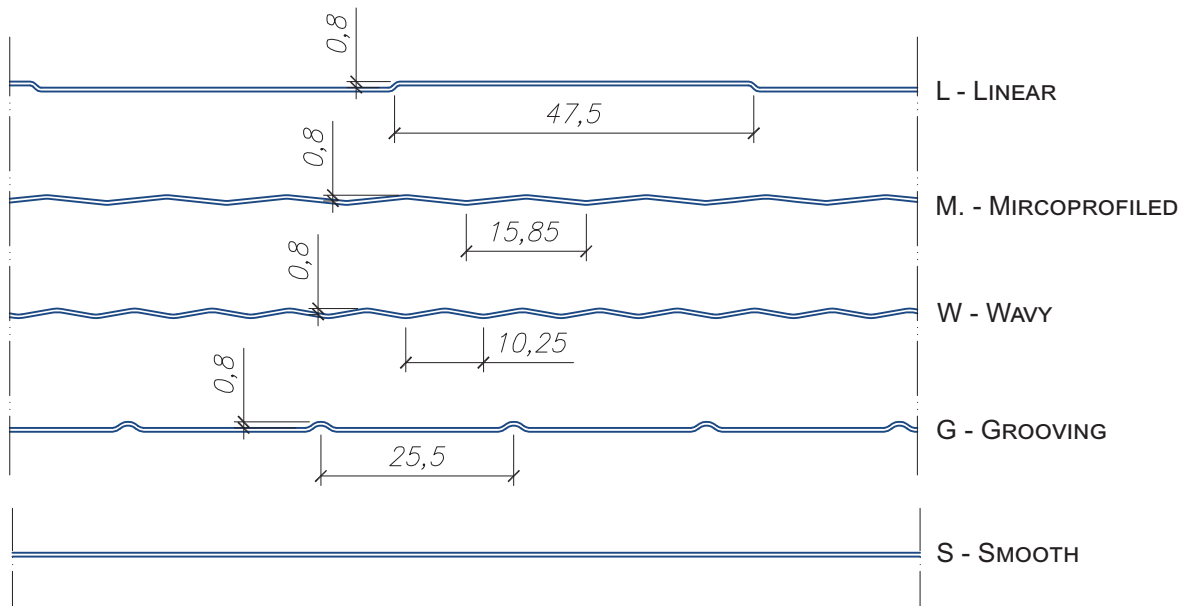
1:10

1:1

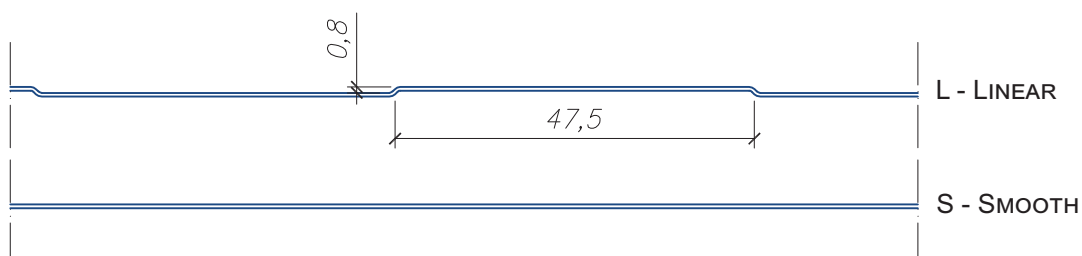
Panel thickness



External lining profiles



Internal lining profiles



LOAD SPAN TABLES FOR GORLICKA S

Table of allowed loads for **GORLICKA S** sandwich panel with **0.5 mm** facing in bright colours, mounted as a single-span element, in direction to and from support.

Panel thickness	The load due to:	The maximum load [kN/m ²] on the span length [m]:										
		1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5
40	SGN (q_d)	4,232	2,908	1,845	1,274	0,932	0,711	0,560	0,453	0,373	0,313	0,266
	SGU (q_k)	3,063	2,281	1,793	1,112	0,577	0,261	0,077	-	-	-	-
60	SGN (q_d)	4,232	3,154	2,511	1,920	1,405	1,072	0,845	0,683	0,563	0,472	0,402
	SGU (q_k)	3,369	2,509	1,999	1,661	1,421	1,204	0,859	0,551	0,337	0,193	0,093
80	SGN (q_d)	4,232	3,152	2,511	2,086	1,785	1,559	1,370	1,107	0,913	0,766	0,652
	SGU (q_k)	3,369	2,509	1,999	1,661	1,421	1,241	1,102	0,991	0,900	0,699	0,499
100	SGN (q_d)	4,232	3,152	2,511	2,086	1,785	1,559	1,384	1,245	1,130	0,959	0,816
	SGU (q_k)	3,369	2,509	1,999	1,661	1,421	1,241	1,102	0,991	0,900	0,825	0,761

Table of allowed loads for **GORLICKA S** sandwich panel with **0.5 mm** facing in bright colours, mounted as a multi-span element, in direction to and from support.

Panel thickness	The load due to:	The maximum load [kN/m ²] on the span length [m]:										
		1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5
40	SGN (q_d)	2,562	1,878	1,501	1,111	0,777	0,569	0,435	0,344	0,279	0,231	0,195
	SGU (q_k)	2,063	1,533	1,223	1,018	0,873	0,764	0,649	0,519	0,402	0,367	0,300
60	SGN (q_d)	2,483	1,845	1,475	1,231	1,057	0,913	0,692	0,542	0,437	0,360	0,302
	SGU (q_k)	2,040	1,513	1,207	1,005	0,862	0,755	0,672	0,606	0,551	0,506	0,458
80	SGN (q_d)	2,452	1,819	1,451	1,212	1,042	0,915	0,816	0,736	0,671	0,601	0,506
	SGU (q_k)	2,012	1,495	1,192	0,993	0,853	0,747	0,666	0,600	0,546	0,502	0,464
100	SGN (q_d)	2,426	1,792	1,430	1,194	1,028	0,903	0,806	0,728	0,664	0,610	0,564
	SGU (q_k)	2,006	1,480	1,178	0,982	0,843	0,740	0,659	0,595	0,542	0,498	0,460

Load tables are prepared according to **PN-EN 14 509** for panels with PUR core, linings in bright colors and for internal temperature **T = 20°C**. Deflection condition was adopted to **L/100**. In the case of different sheet thickness, temperature, mounting or dark colors lining it is necessary to perform separate calculations.

Minimum width of the support - **40 mm** and **60 mm** (indirect). Number of connectors - **4** on the intermediate support, **3** on the extreme support. A detailed list of loads is available on the website.

PACKING AND SHIPPING

GORLICKA sandwich panels are packed in packages on pallets to allow their transport. The number of panels in each package depends on their thickness. Details in the table below.

Panel thickness [mm]	40	60	80	100
Maximum number of panels in one batch	25	19	14	11

Selected details of cladding made of GORLICKA S / GORLICKA S GS-PIR sandwich panels

Details of cam-lock and panel joints for panels 40, 60, 80, 100 mm thick	8
Details of 40 mm thick panels' connection	9
Details of 60, 80, 100 mm thick panels' connection	10

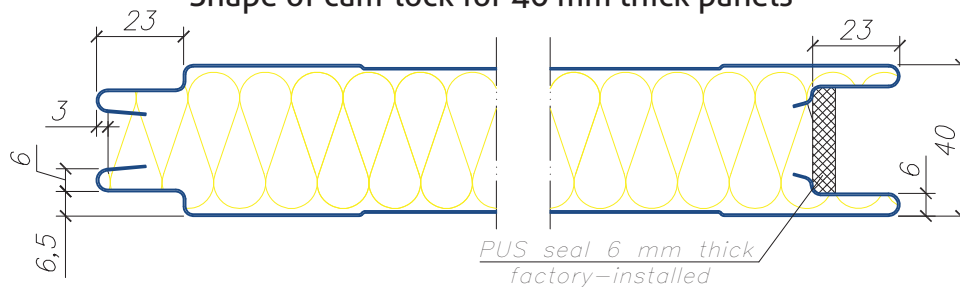
VERTICAL ARRANGEMENT of panels

Details of panel connection to grade beam – variant I	11
Details of panel connection to grade beam – variant II	12
Detail of panel connection to flooring	13
Detail of panels' connection in a corner – variant I	14
Detail of panels' connection in a corner – variant II	15
Detail of panels' connection in an optional angle corner	16
Detail of panel connection to wall	17
Detail of roll-up door post	18
Detail of roll-up door lintel	19
Window assembly in sandwich panel – variant I – profile	20
Window assembly in sandwich panel – variant I – cross-section	21
Window assembly in sandwich panel – variant II – profile	22
Window assembly in sandwich panel – variant II – cross-section	23

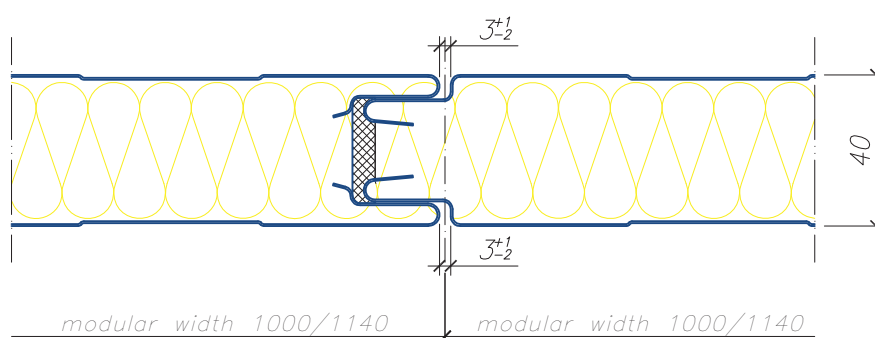
HORIZONTAL ARRANGEMENT of panels

Details of panel connection to grade beam – variant I	24
Details of panel connection to grade beam – variant II	25
Detail of panels' connection in a corner	26
Detail of panels' connection in an optional angle corner	27
Detail of panel connection to flooring	28
Detail of panel connection to wall	29
Detail of panel connection to edge support	30
Detail of panel connection to intermediate support	31
Detail of building expansion joint	32
Detail of panel connection to reinforced concrete support	33
Detail of roll-up door post	34
Detail of roll-up door lintel	35
Window assembly in sandwich panel – variant I – profile	36
Window assembly in sandwich panel – variant I – cross-section	37
Window assembly in sandwich panel – variant II – profile	38
Window assembly in sandwich panel – variant II – cross-section	39

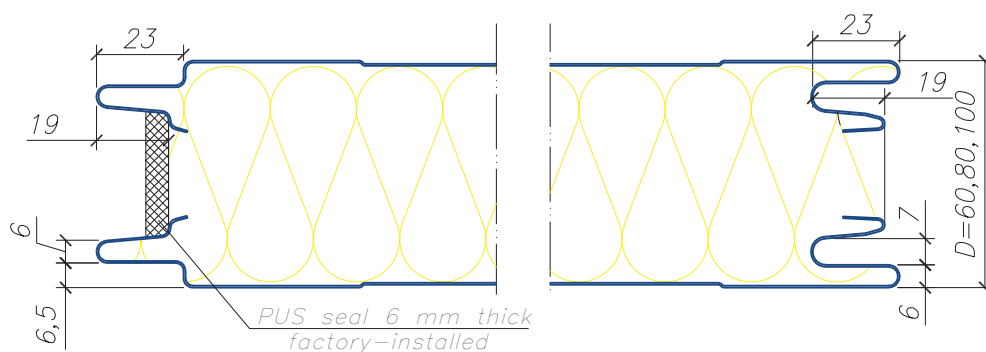
Shape of cam-lock for 40 mm thick panels



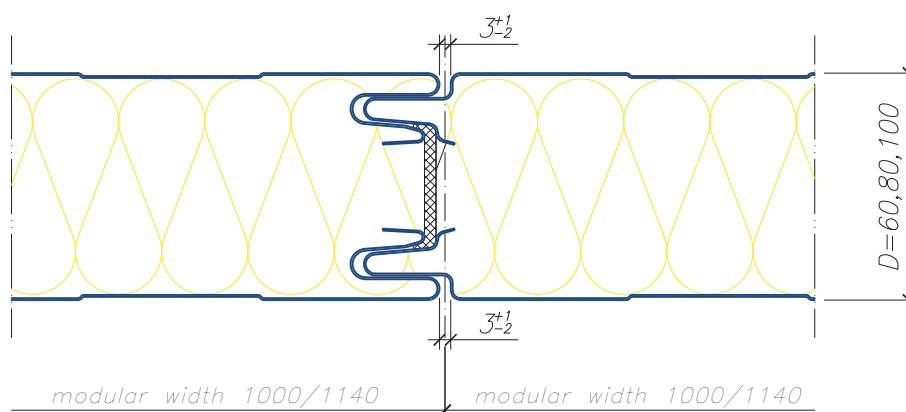
Detail of 40 mm thick panels connection



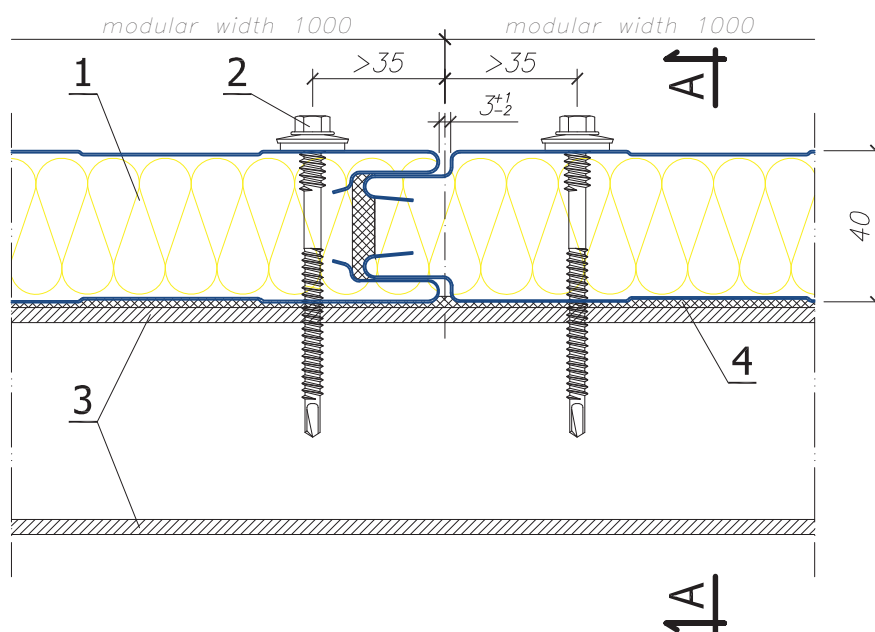
Shape of cam-lock for 60, 80 and 100 mm thick panels



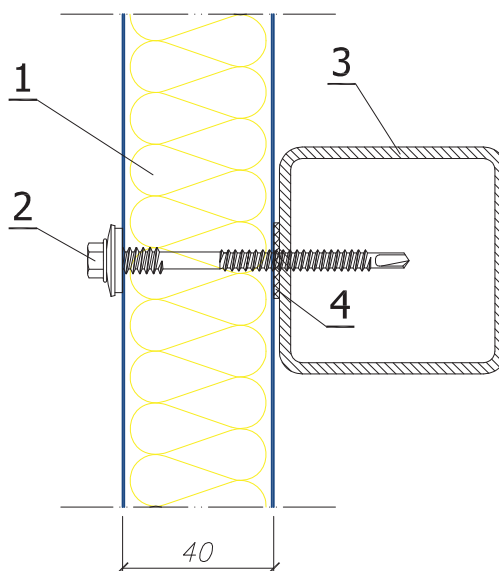
Detail of 60, 80 and 100 mm thick panels' connection



Details of 40 mm thick panels' connection



A-A cross-section

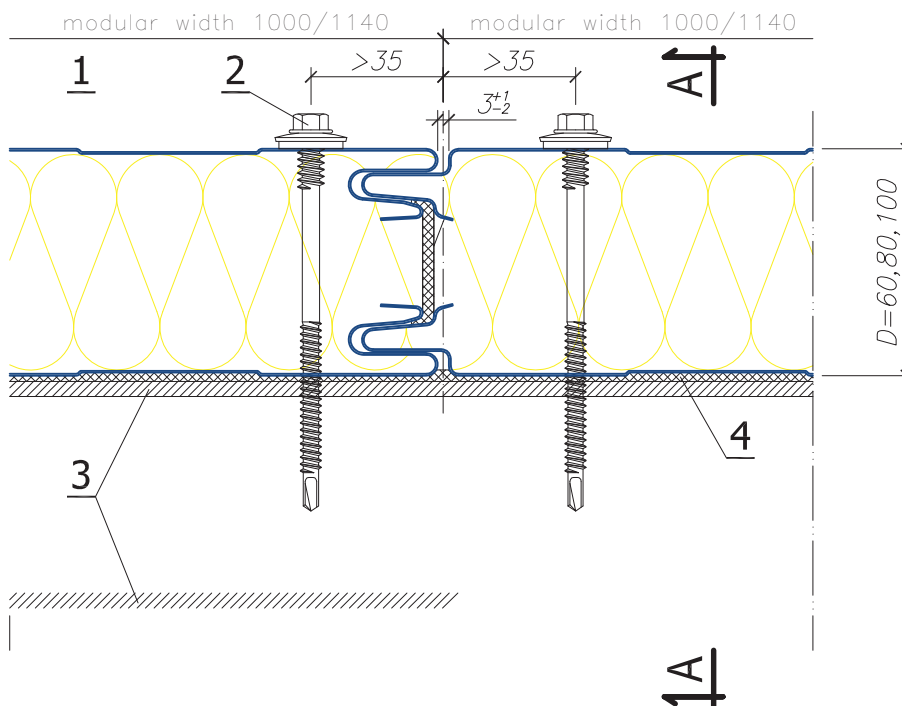


LEGEND:

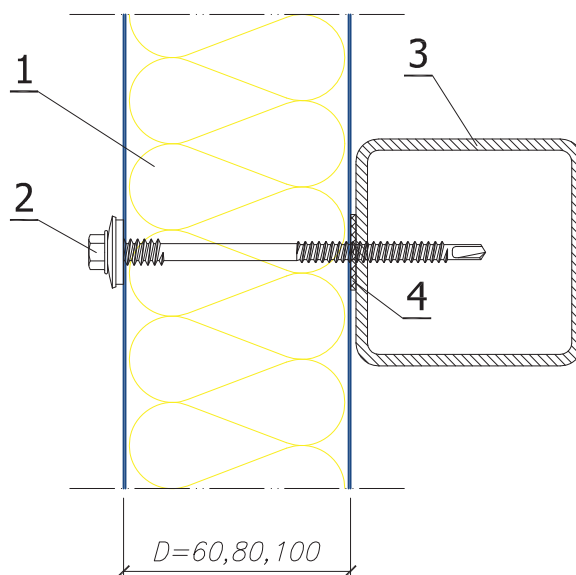
1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Self-drilling connector for sandwich panels
3. Transom acc. to structure design
4. Polyethylene, self-adhesive sealing tape (**PES**)

NOTE: Every panel should be fastened to the structure with three connectors along its width

Details of 60, 80 and 100 mm thick panels' connection



A-A cross-section



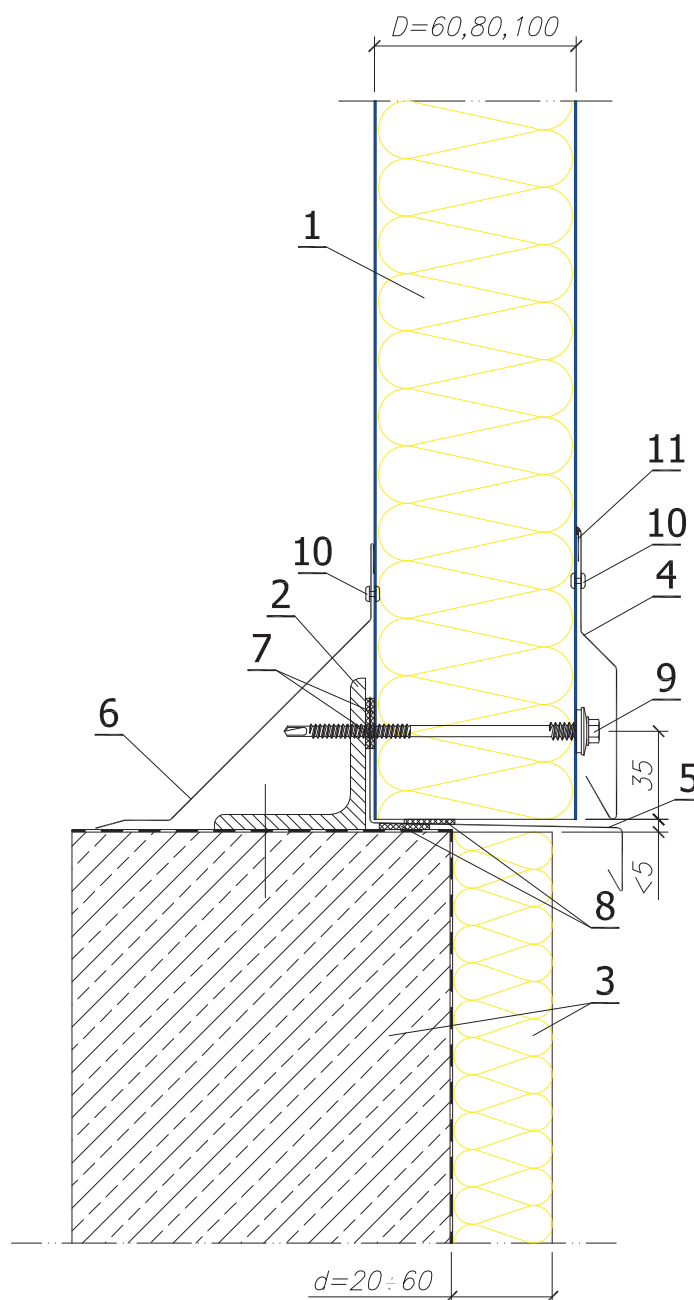
LEGEND:

1. GORLICKA S / GORLICKA S GS-PIR wall panel
2. Self-drilling connector for sandwich panels
3. Transom acc. to structure design
4. Polyethylene, self-adhesive sealing tape (PES)

NOTE: Every panel should be fastened to the structure with three connectors along its width

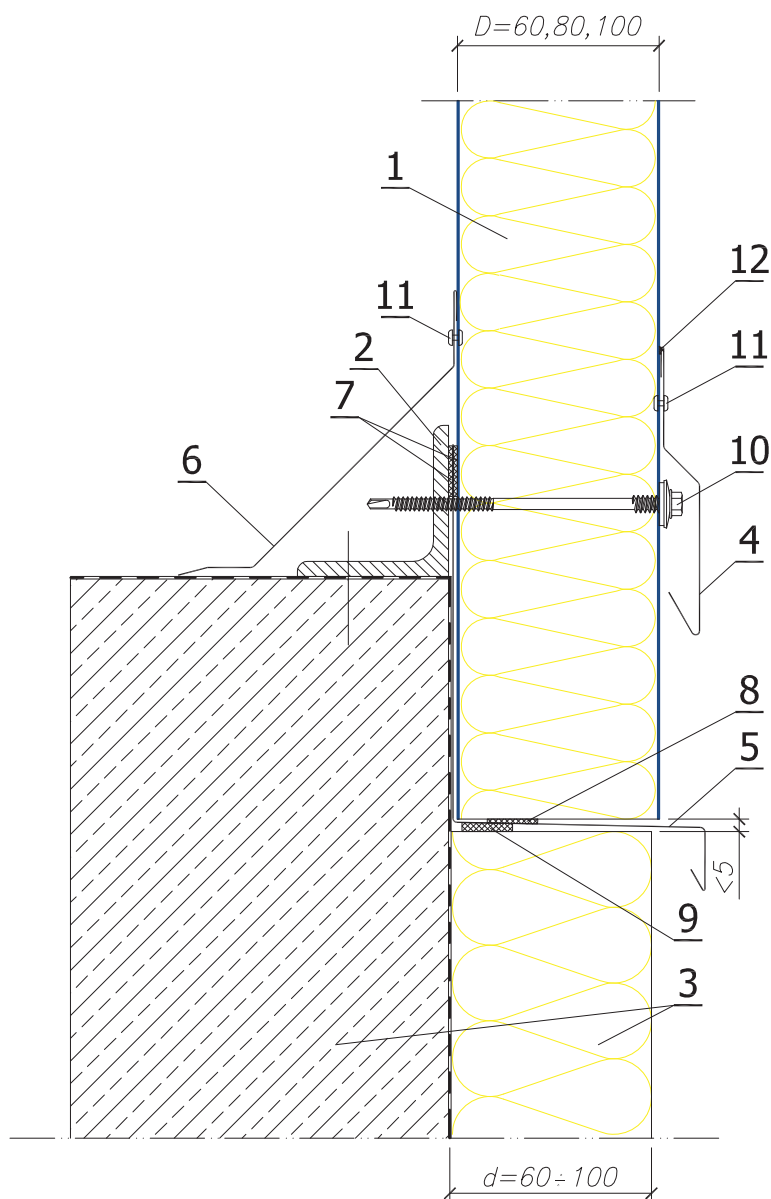
VERTICAL ARRANGEMENT of panels
Details of panel connection to grade beam
Variant I

Scale
1:3



LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Steel section acc. to structure design
3. Grade beam with insulation and thermal insulation acc. to detailed design
4. Drip edge **OB-10** (option)
5. Eaves **OB-13**
6. Covering flashing **OB-08**
7. Polyethylene, self-adhesive sealing tape (**PES**)
8. Impregnated polyurethane seal
9. Self-drilling connector for sandwich panels
10. Tight blind rivet **4.8 x 9.5**

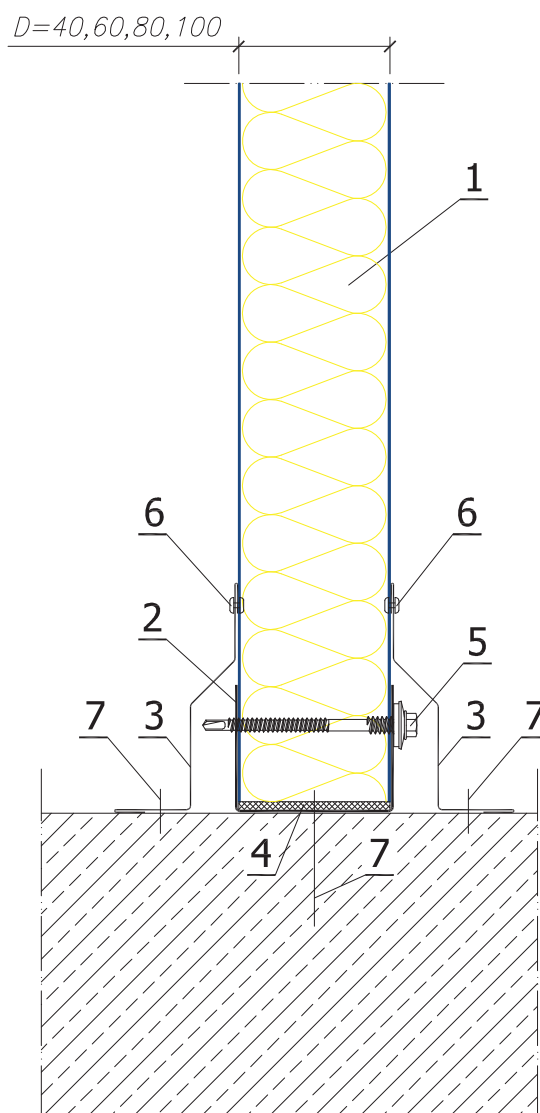


LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Steel section acc. to structure design
3. Grade beam with insulation and thermal insulation acc. to detailed design
4. Drip edge **OB-10** (option)
5. Eaves **OB-13** (extended)
6. Covering flashing **OB-08**
7. Polyethylene, self-adhesive sealing tape (**PES**)
8. Impregnated polyurethane seal
9. Self-adhesive expanding sealing tape
10. Self-drilling connector for sandwich panels
11. Tight blind rivet **4.8 x 9.5**
12. Neutral silicone sealant

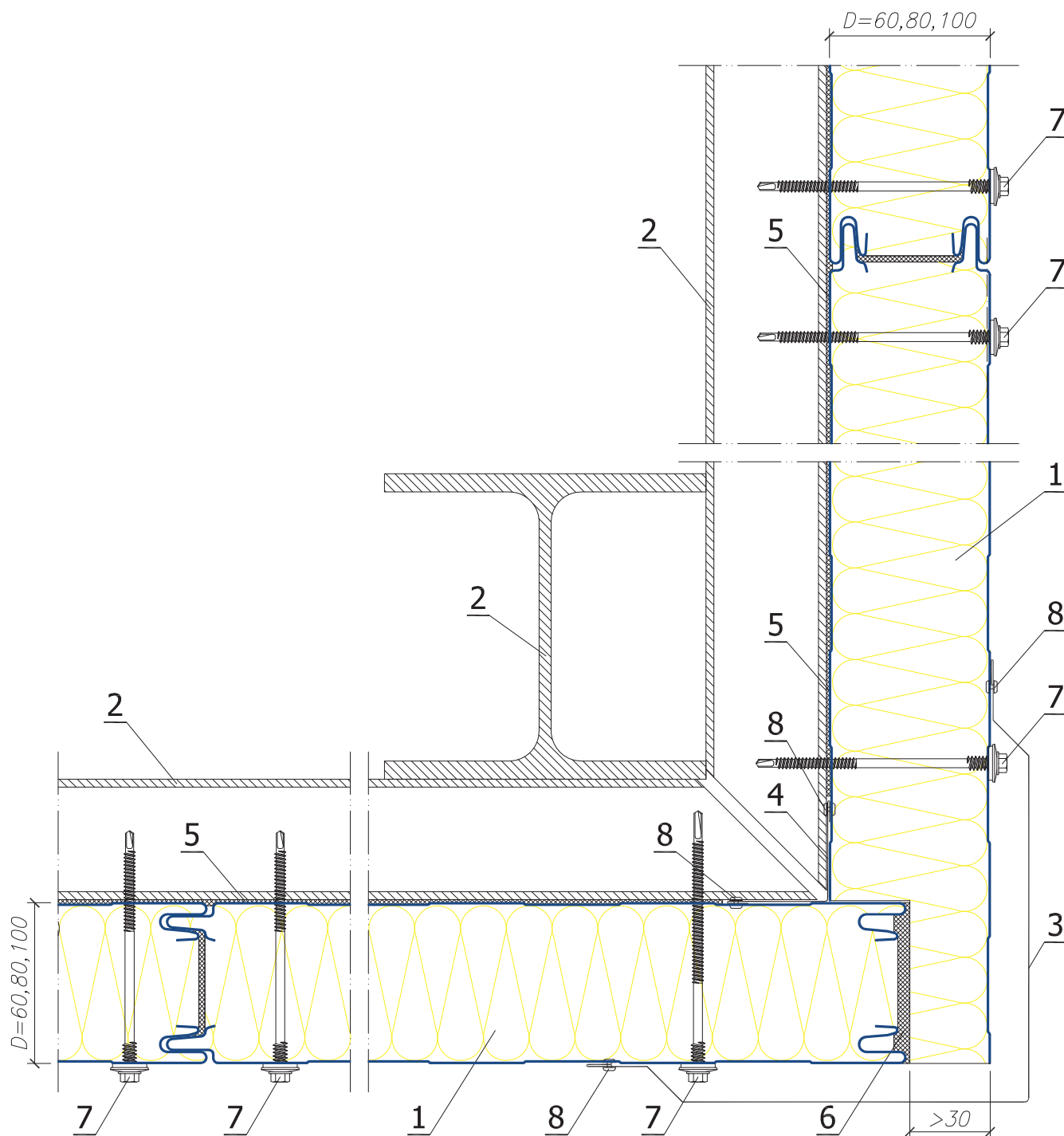
VERTICAL ARRANGEMENT of panels
Detail of panel connection to flooring

Scale
1:3



LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Edge channel section OB-42
3. Covering flashing OB-05
4. Impregnated polyurethane seal (PURS) or caulking foam
5. Self-drilling connector for sandwich panels
6. Tight blind rivet 4.8 x 9.5
7. Steel expansion joint for fast assembly

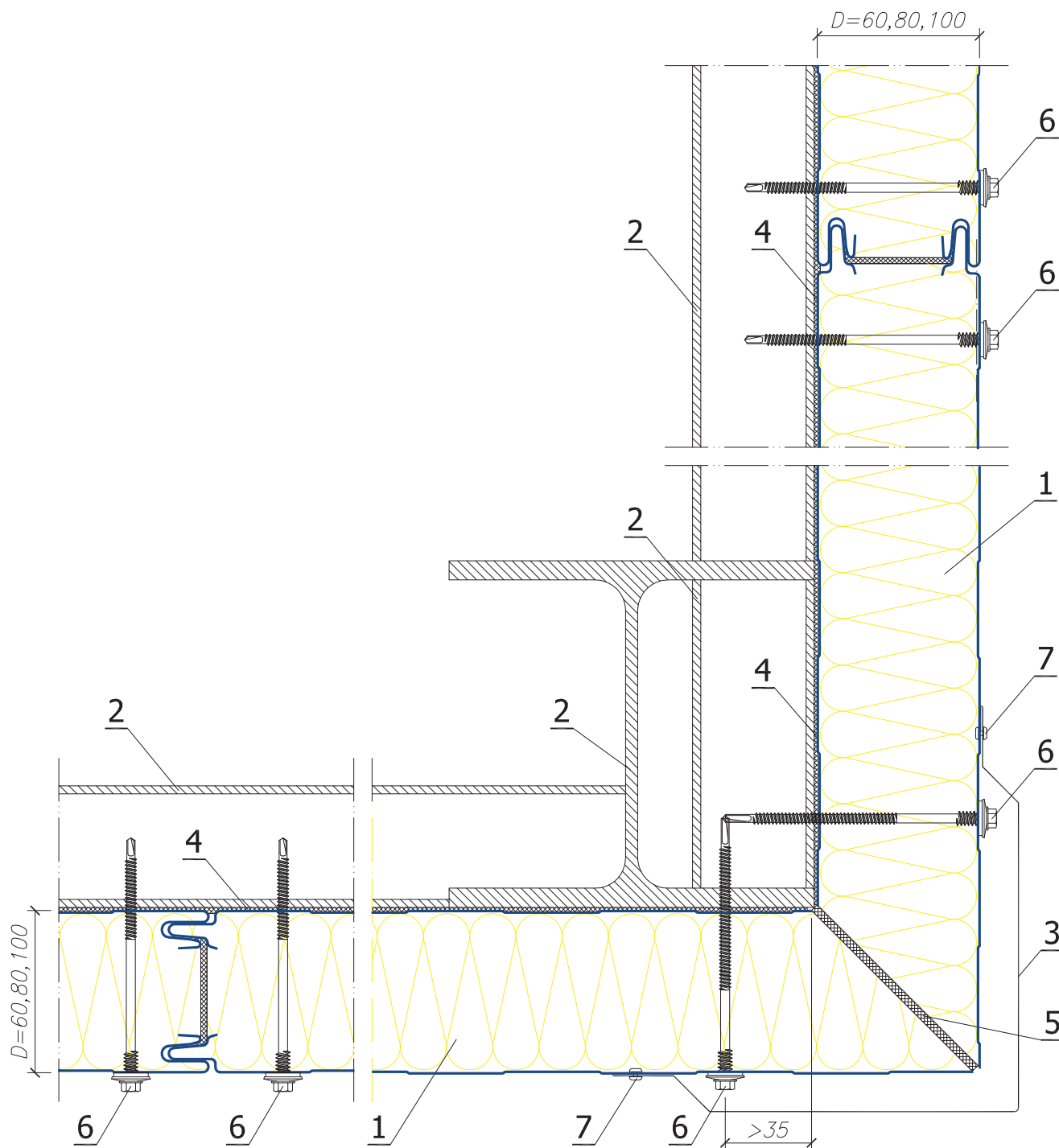


LEGEND:

1. GORLICKA S / GORLICKA S GS-PIR wall panel
2. Steel post and transom acc. to structure design
3. Corner flashing **OB-03**
4. Corner flashing **OB-02**
5. Polyethylene, self-adhesive sealing tape (**PES**)
6. Impregnated polyurethane seal (**PURS**) or caulking foam
7. Self-drilling connector for sandwich panels
8. Tight blind rivet **4.8 x 9.5**

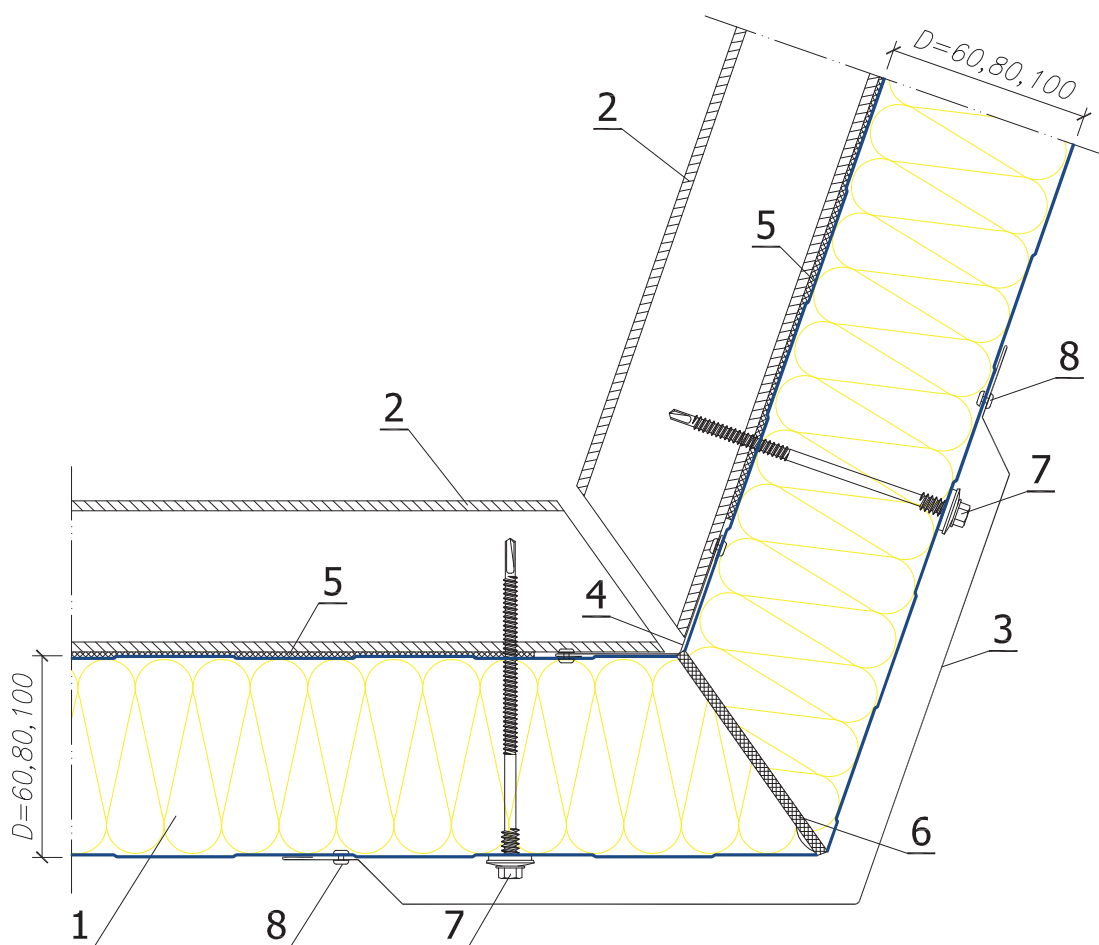
VERTICAL ARRANGEMENT of panels
Detail of panels' connection in a corne
Variant II

Scale
1:3



LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Steel post and transom acc. to structure design
3. Corner flashing **OB-03**
4. Polyethylene, self-adhesive sealing tape (**PES**)
5. Polyurethane caulking foam
6. Self-drilling connector for sandwich panels
7. Tight blind rivet **4.8 x 9.5**

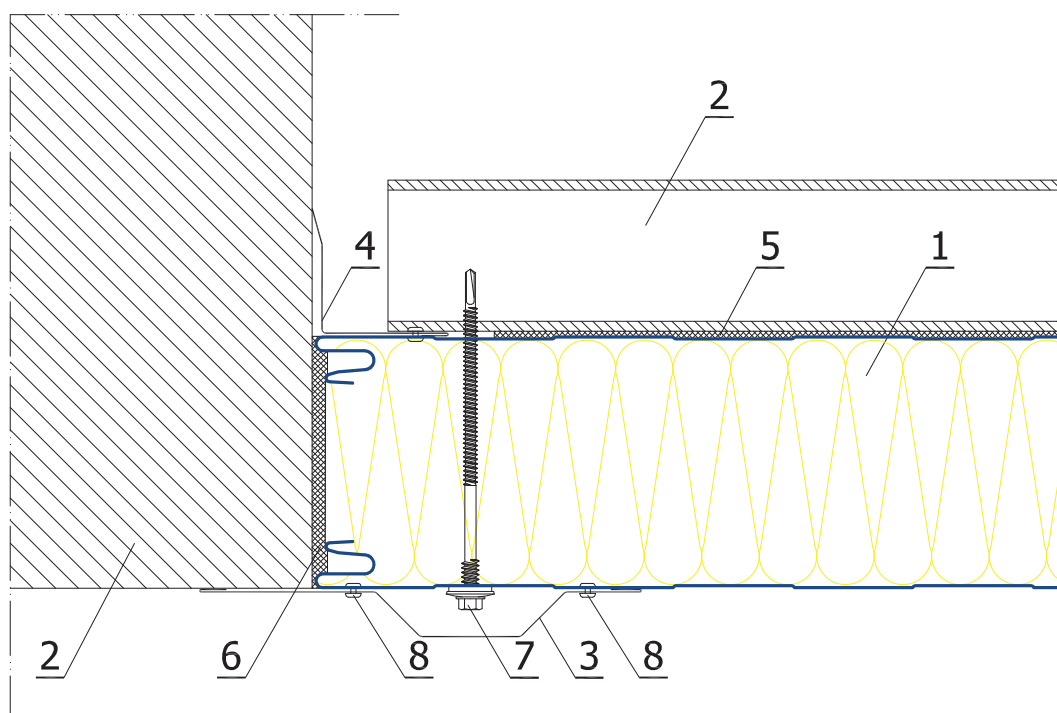


LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Transom acc. to structure design
3. Corner flashing **OB-03**
4. Corner flashing **OB-02**
5. Polyethylene, self-adhesive sealing tape (**PES**)
6. Polyurethane caulking foam
7. Self-drilling connector for sandwich panels
8. Tight blind rivet **4.8 x 9.5**

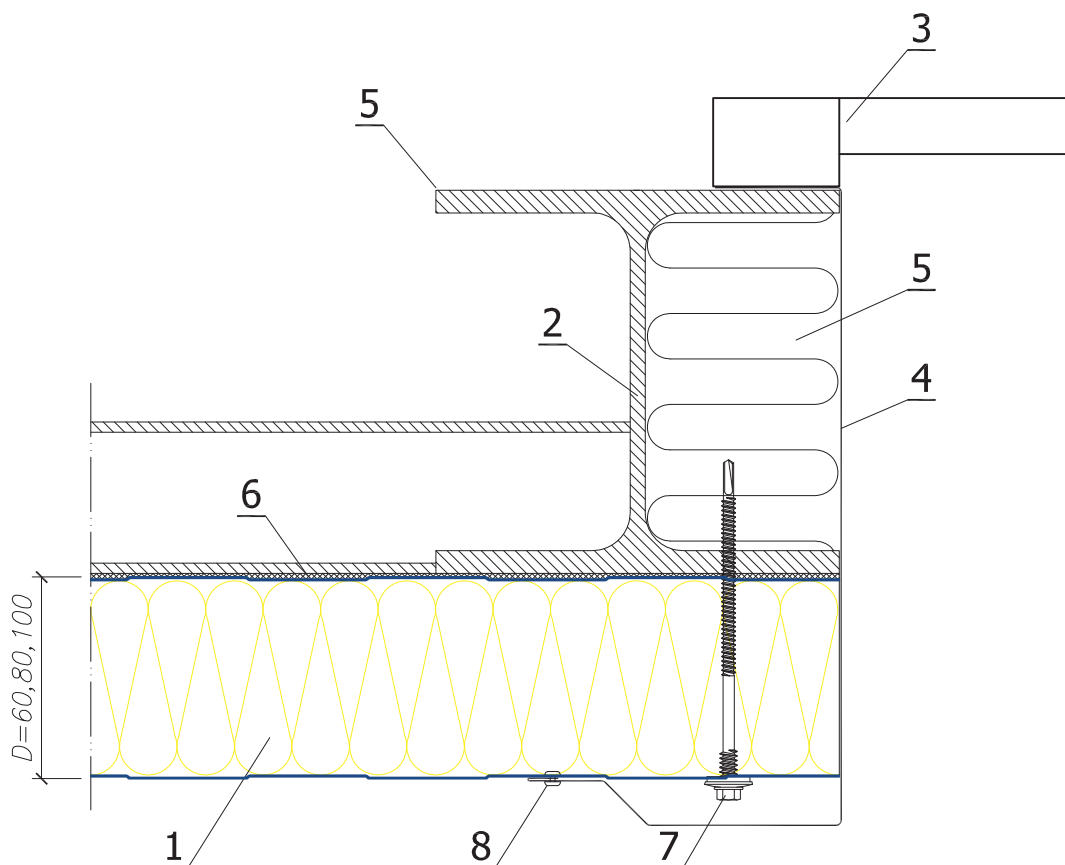
VERTICAL ARRANGEMENT of panels
Detail of panel connection to wall

Scale
1:3



LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Wall and transom acc. to structure design
3. Covering flashing **OB-19**
4. Inner corner flashing **OB-07**
5. Polyethylene, self-adhesive sealing tape (**PES**)
6. Impregnated polyurethane seal (**PURS**) or polyurethane caulking foam
7. Self-drilling connector for sandwich panels
8. Tight blind rivet **4.8 x 9.5**

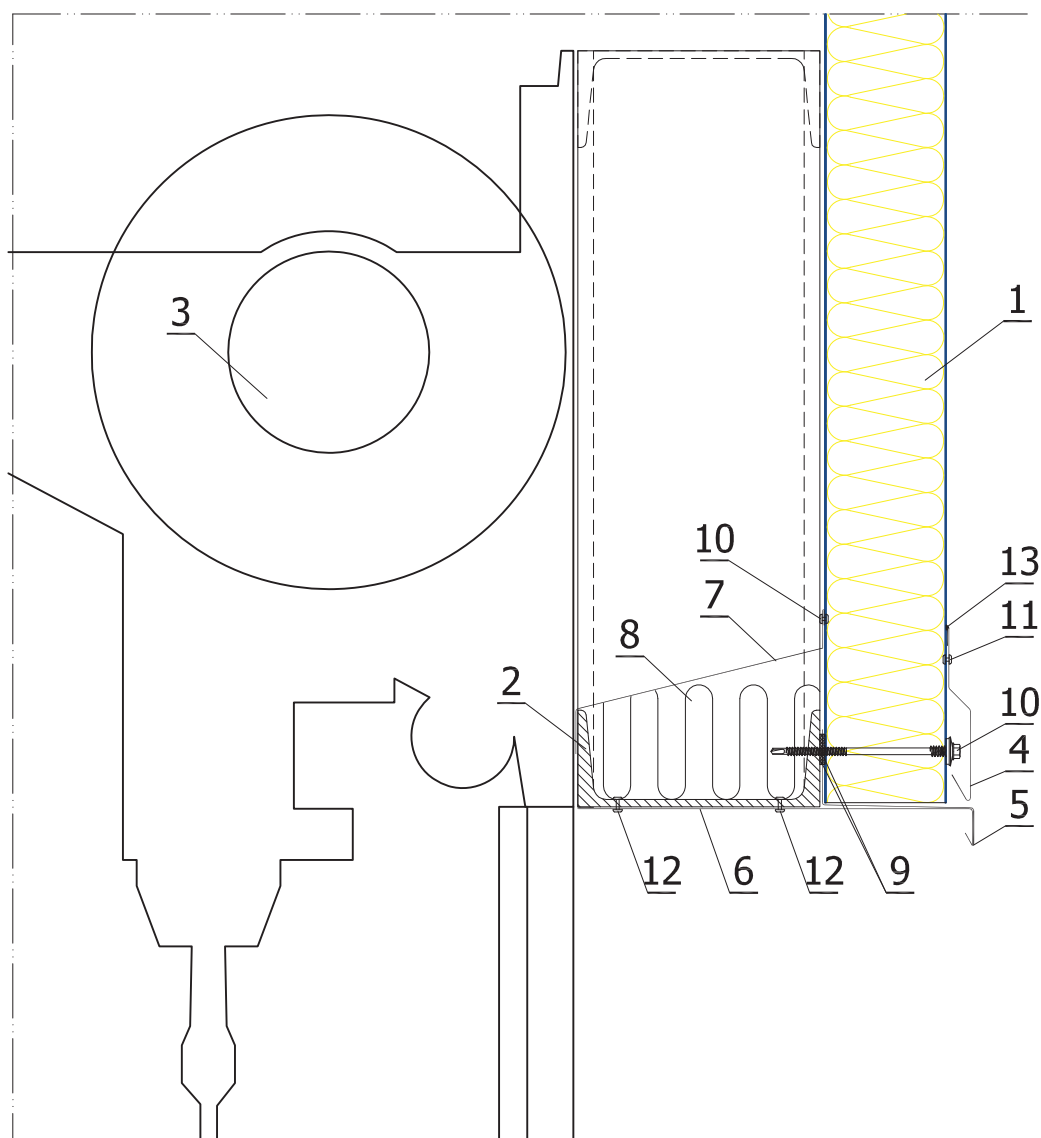


LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Steel post and transom acc. to structure design
3. Industrial door
4. Door flashing **OB-21**
5. Thermal insulation on the fastening
6. Polyethylene, self-adhesive sealing tape (**PES**)
7. Self-drilling connector for sandwich panels
8. Tight blind rivet **4.8 x 9.5**

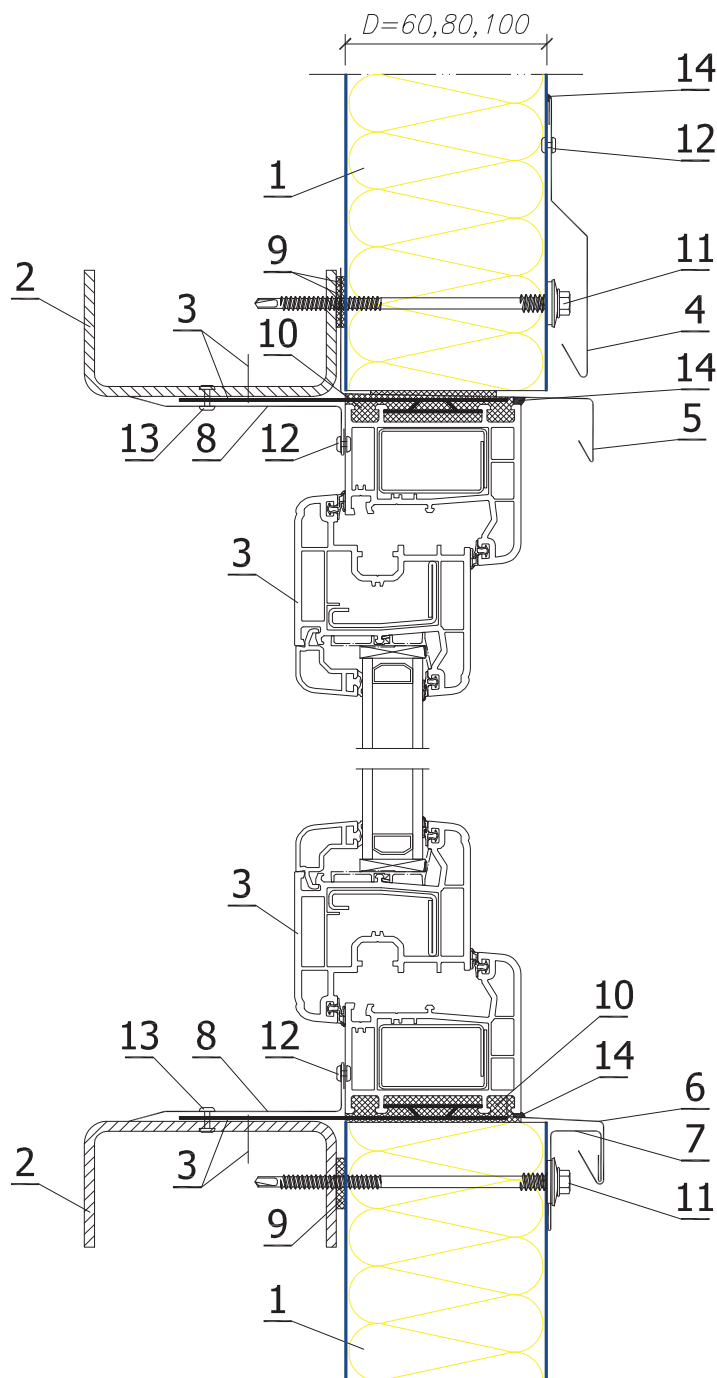
VERTICAL ARRANGEMENT of panels
Detail of roll-up door lintel

Scale
1:5



LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Transom acc. to structure design
3. Industrial door
4. Drip edge **OB-10**
5. Drip edge **OB-13**
6. Covering flashing **OB-20**
7. Individual covering flashing
8. Thermal insulation on the fastening
9. Polyethylene, self-adhesive sealing tape (**PES**)
10. Self-drilling connector for sandwich panels
11. Tight blind rivet **4.8 x 9.5**
12. Blind rivet **4.8 x 15.1** (for the structure)
13. Neutral silicone sealant

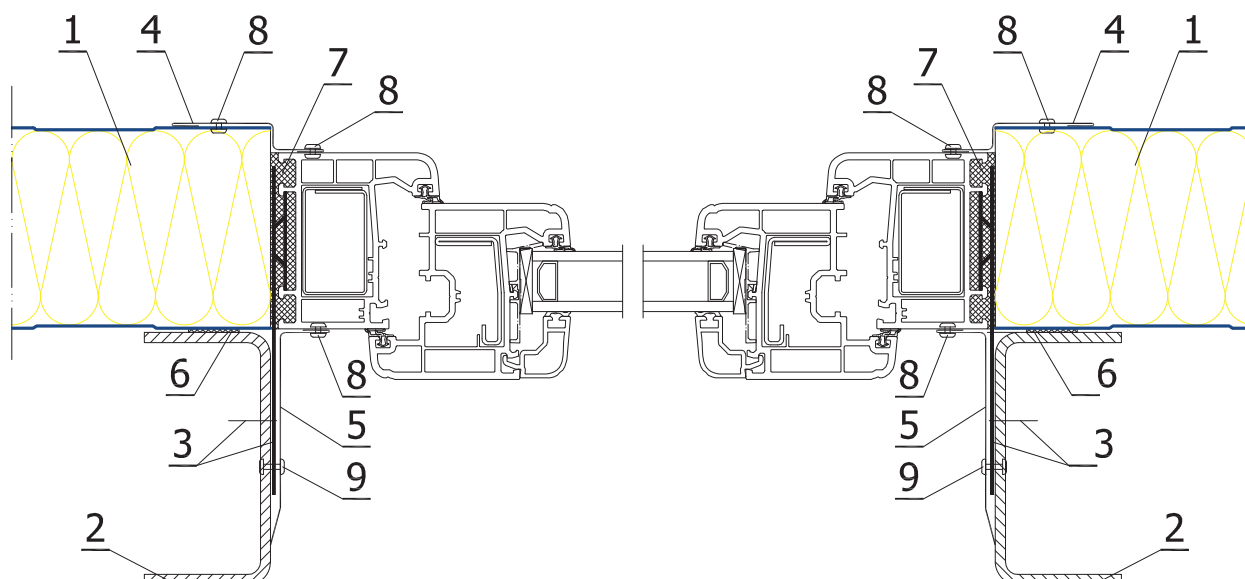


LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Transom acc. to structure design
3. PVC or aluminium window with a holder and connector
4. Drip edge **OB-10**
5. Drip edge **OB-13**
6. Cill **OB-37**
7. Rigid flashing **OB-16**
8. Individual inner corner
9. Polyethylene, self-adhesive sealing tape (**PES**)
10. Polyethylene caulking foam
11. Self-drilling connector for sandwich panels
12. Tight blind rivet **4.8 x 9.5**
13. Blind rivet **4.8 x 15.1** (for the structure)
14. Neutral silicone sealant

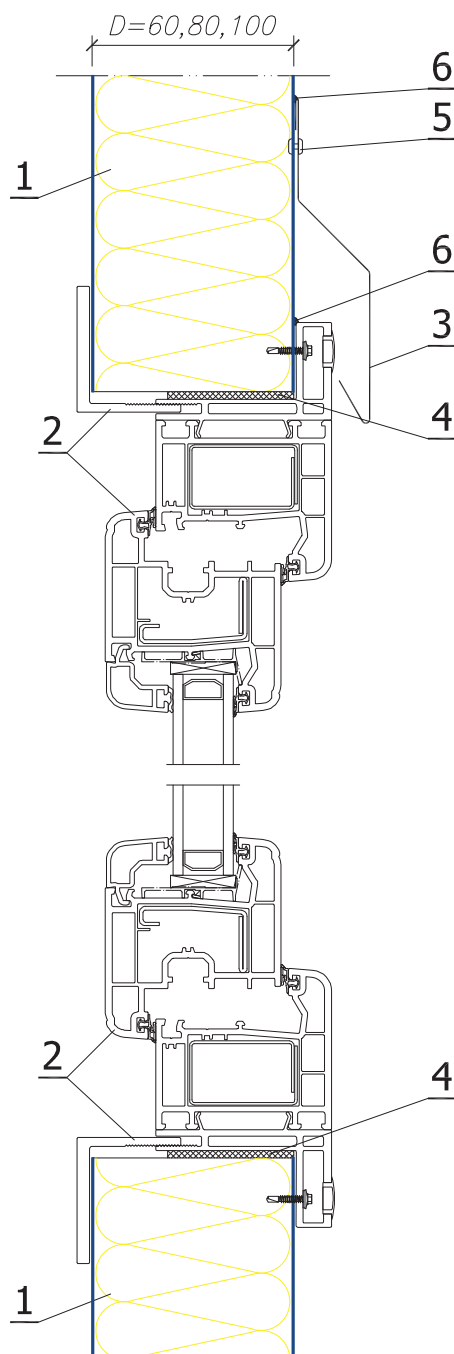
VERTICAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant I – cross-section

Scale
1:3



LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Transom acc. to structure design
3. PVC or aluminium window with a holder and connector
4. Individual covering flashing
5. Individual inner corner
6. Polyethylene, self-adhesive sealing tape (**PES**)
7. Polyethylene caulking foam
8. Tight blind rivet **4.8 x 9.5**
9. Blind rivet **4.8 x 15.1** (for the structure)

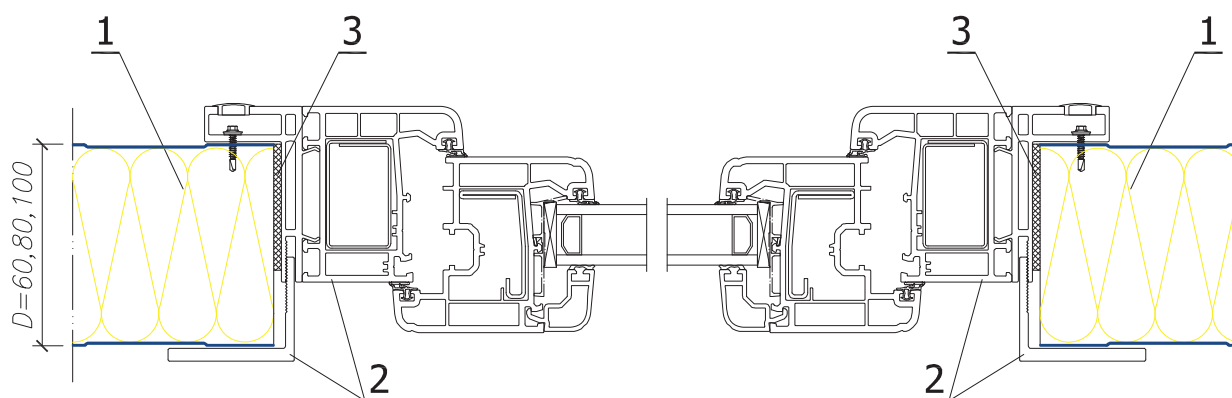


LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. PVC or aluminium window with a fastening profile
3. Drip edge **OB-11** (option)
4. Impregnated polyurethane seal (**PURS**) or caulking foam
5. Tight blind rivet **4.8 x 9.5**
6. Neutral silicone sealant

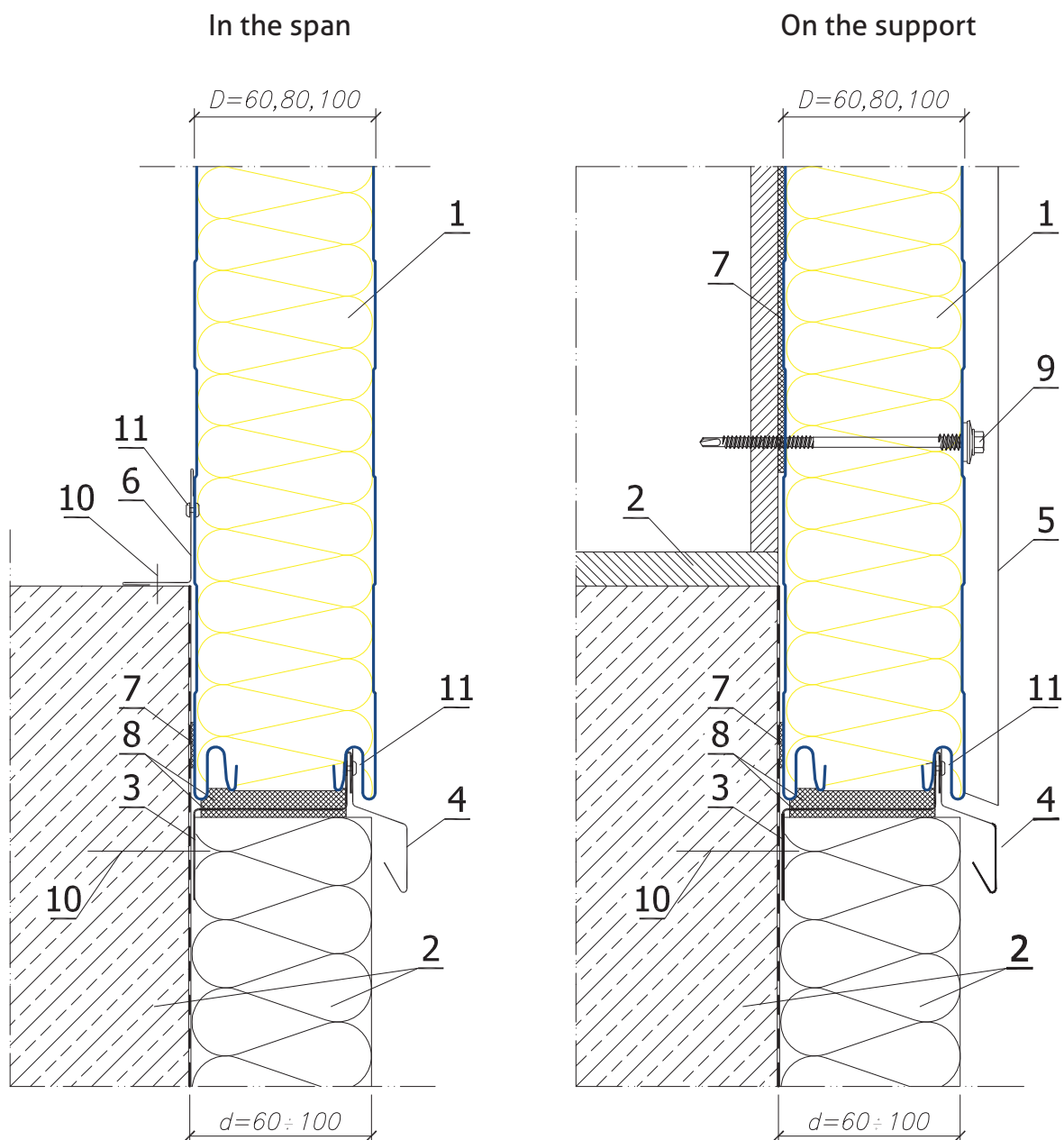
VERTICAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant II – cross-section

Scale
1:3



LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. PVC or aluminium window with a fastening profile
3. Impregnated polyurethane seal (**PURS**) or caulking foam

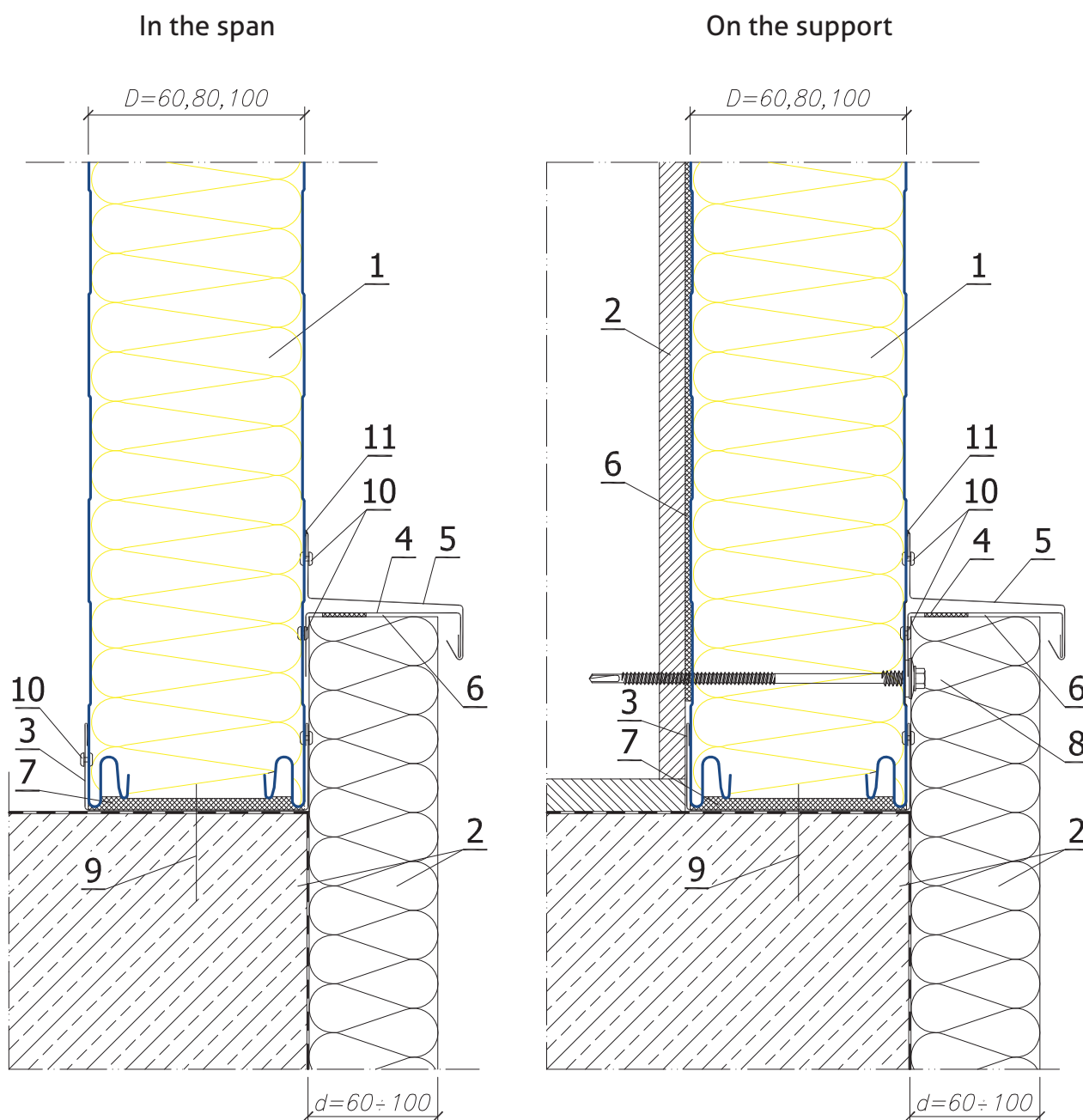


LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Structural elements acc. to detailed design and thermal insulation carried out after assembly of panel
3. Edge Z-bar **OB-38**
4. Drip edge **OB-14**
5. Covering flashing for panel junction
6. Corner flashing **OB-06**
7. Polyethylene, self-adhesive sealing tape (**PES**)
8. Impregnated polyurethane seal (**PURS**) or polyurethane caulking foam
9. Self-drilling connector for sandwich panels
10. Steel expansion joint for quick assembly
11. Tight blind rivet **4.8 x 9.5**

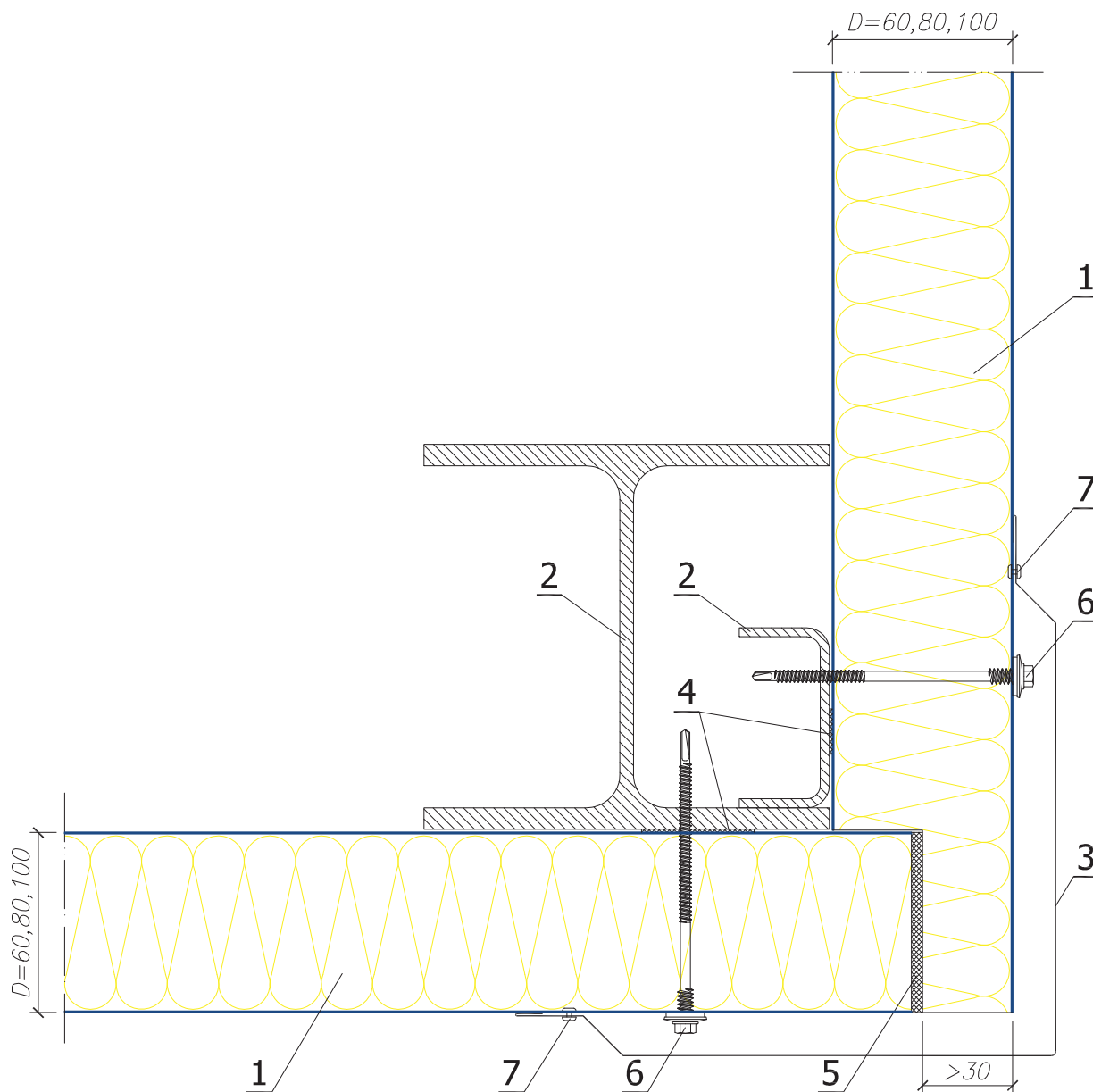
HORIZONTAL ARRANGEMENT of panels
Details of panel connection to grade beam
Variant II

Scale
1:3



LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Structural elements acc. to detailed design and thermal insulation carried out after assembly of panel
3. Edge channel section **OB-36**
4. Drip edge **OB-15**
5. Rigid flashing **OB-15a**
6. Polyethylene, self-adhesive sealing tape (**PES**)
7. Impregnated polyurethane seal (**PURS**) or polyurethane caulking foam
8. Self-drilling connector for sandwich panels
9. Steel expansion joint for quick assembly
10. Tight blind rivet **4.8 x 9.5**
11. Neutral silicone sealant



LEGEND:

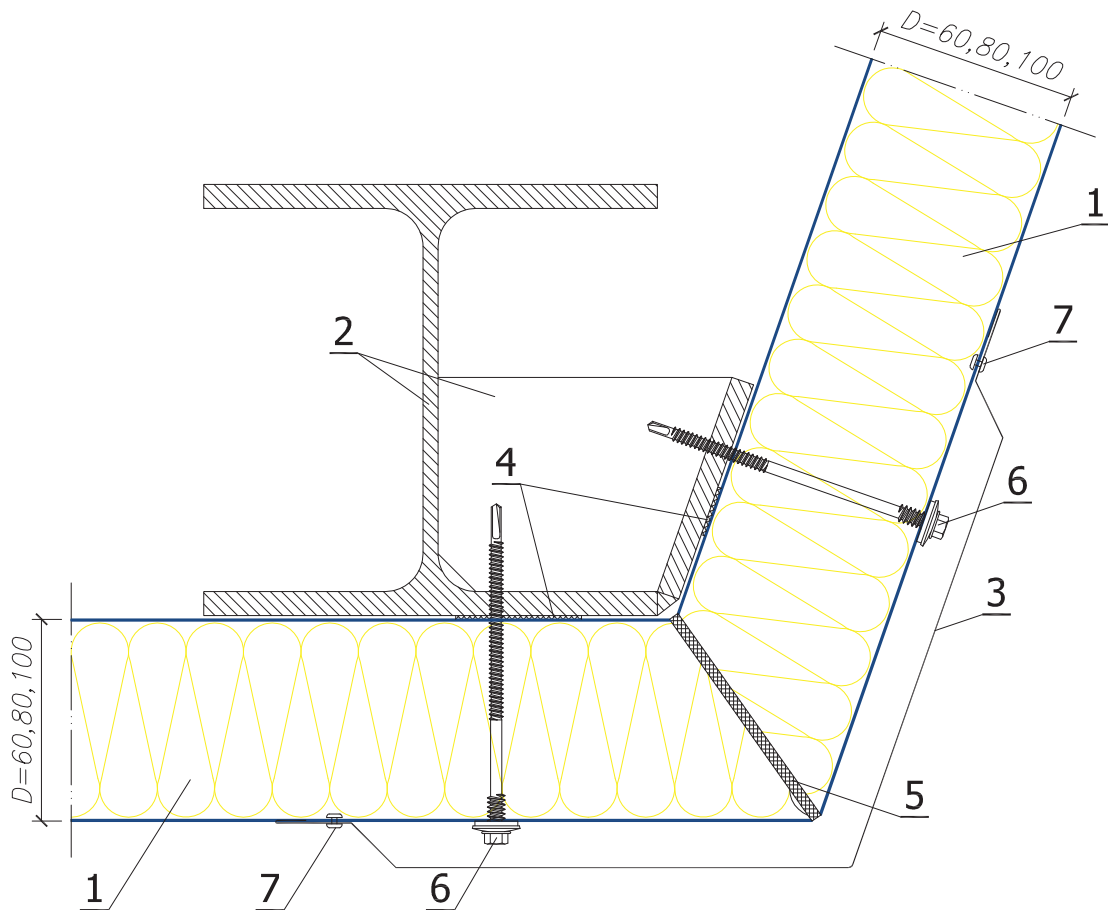
1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Steel post acc. to structure design
3. Corner flashing **OB-03**
4. Polyethylene, self-adhesive sealing tape (**PES**)
5. Impregnated polyurethane seal (**PURS**) or caulking foam
6. Self-drilling connector for sandwich panels
7. Tight blind rivet **4.8 x 9.5**

HORIZONTAL ARRANGEMENT of panels

Detail of panels' connection in an optional angle corner

Scale

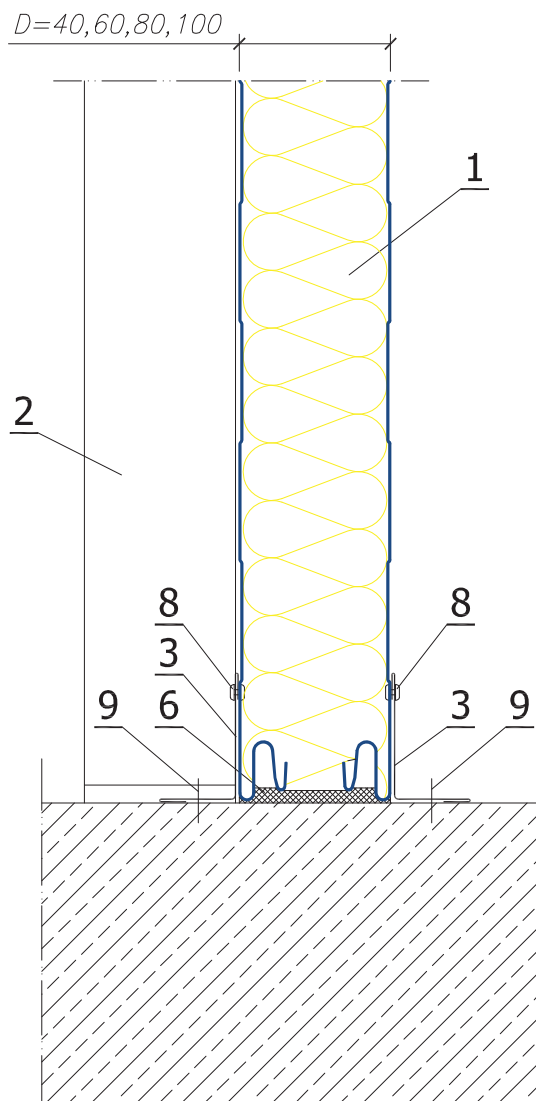
1:3



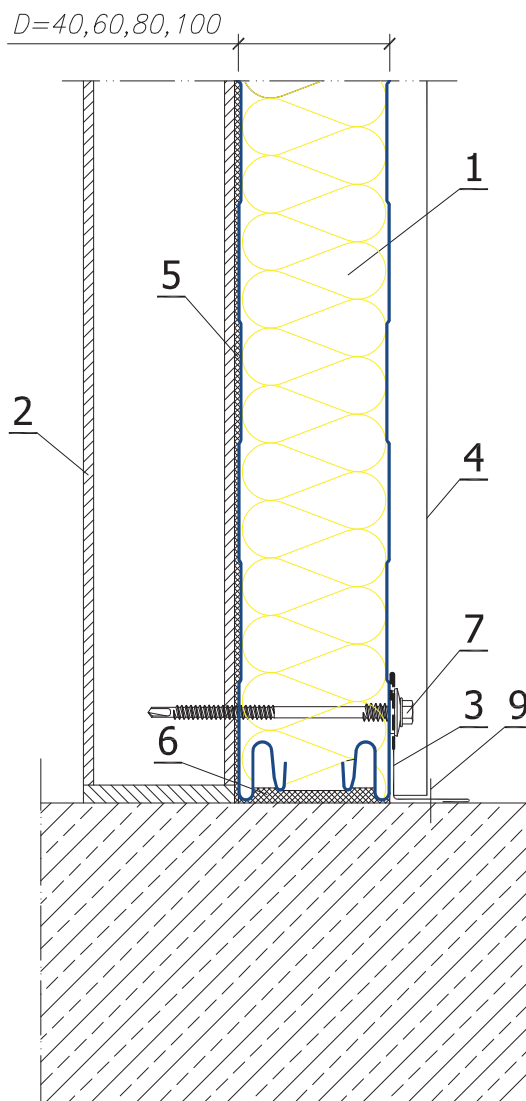
LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Steel post acc. to structure design
3. Corner flashing **OB-03**
4. Polyethylene, self-adhesive sealing tape (**PES**)
5. Polyurethane caulking foam
6. Self-drilling connector for sandwich panels
7. Tight blind rivet **4.8 x 9.5**

In the span



On the support

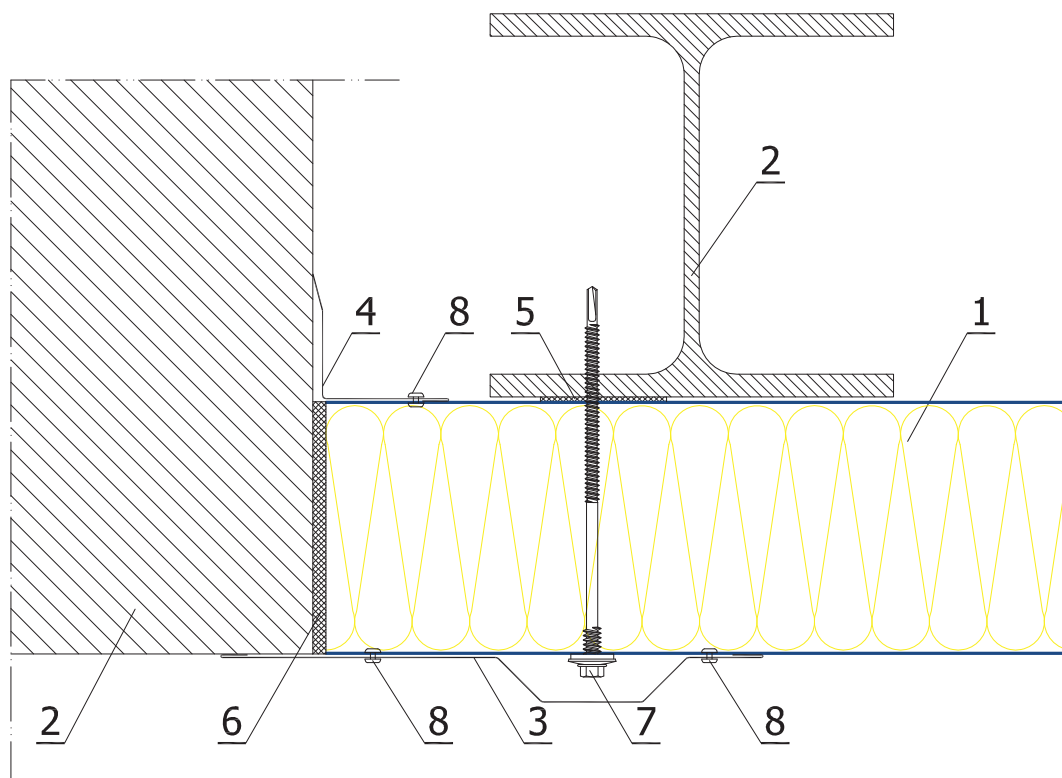


LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Steel post acc. to structure design
3. Corner flashing **OB-06**
4. Covering flashing for panel junction
5. Polyethylene, self-adhesive sealing tape (**PES**)
6. Impregnated polyurethane seal (**PURS**) or polyurethane caulking foam
7. Self-drilling connector for sandwich panels
8. Tight blind rivet **4.8 x 9.5**
9. Steel expansion joint for quick assembly

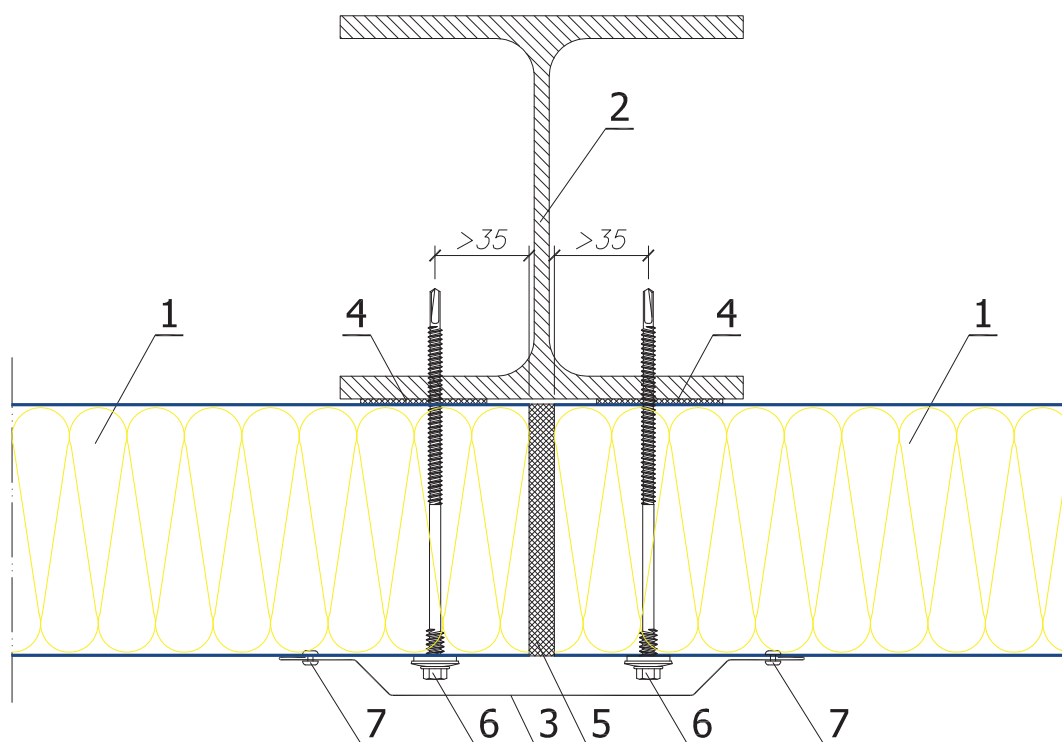
Poziomy układ płyt
Szczegół połączenia płyty z murem

Scale
1:3



LEGEND:

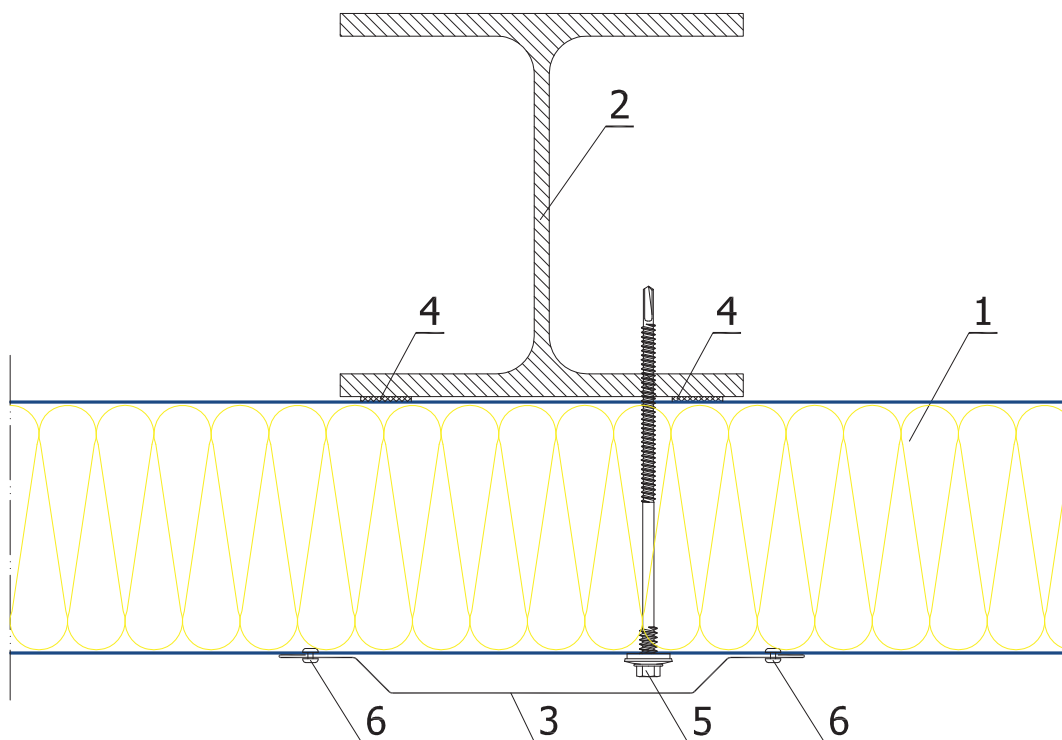
1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Wall and post acc. to structure design
3. Covering flashing **OB-19**
4. Inner corner flashing **OB-07**
5. Polyethylene, self-adhesive sealing tape (**PES**)
6. Impregnated polyurethane seal (**PURS**) or polyurethane caulking foam
7. Self-drilling connector for sandwich panels
8. Tight blind rivet **4.8 x 9.5**


LEGEND:

1. GORLICKA S / GORLICKA S GS-PIR wall panel
2. Post acc. to structure design
3. Covering flashing **OB-17**
4. Polyethylene, self-adhesive sealing tape (**PE**)
5. Impregnated polyurethane seal (**PURS**) or polyurethane caulking foam
6. Self-drilling connector for sandwich panels
7. Tight blind rivet **4.8 x 9.5**

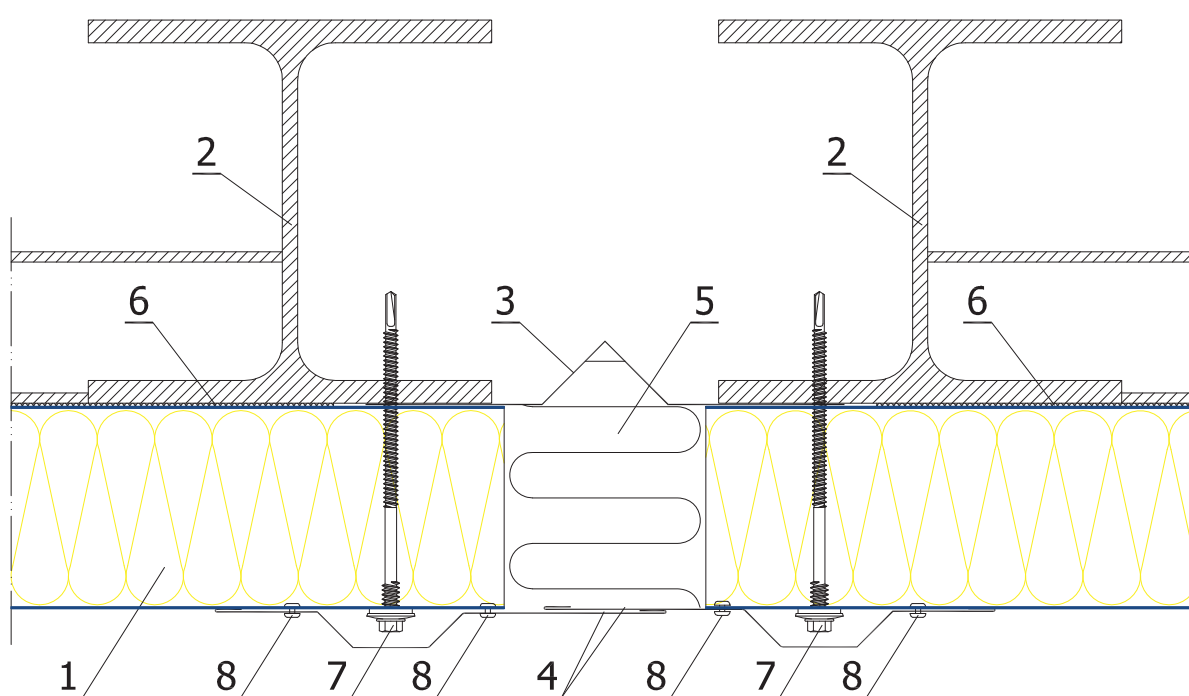
HORIZONTAL ARRANGEMENT of panels
Detail of panel connection to intermediate support

Scale
1:3



LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Post acc. to structure design
3. Covering flashing **OB-17**
4. Polyethylene, self-adhesive sealing tape (**PES**)
5. Self-drilling connector for sandwich panels
6. Tight blind rivet **4.8 x 9.5**

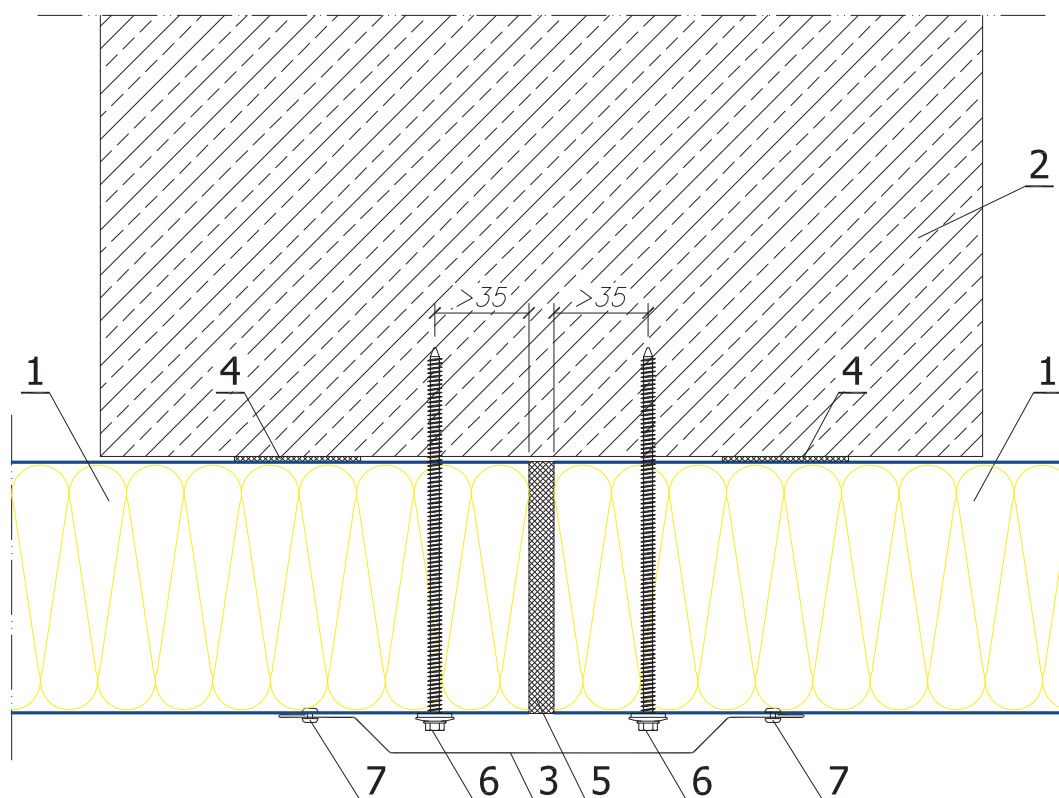


LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Steel posts and transom acc. to structure design
3. Individual expansion joint flashing
4. Covering flashing **OB-09**
5. Thermal insulation on the fastening
6. Polyethylene, self-adhesive sealing tape (**PES**)
7. Self-drilling connector for sandwich panels
8. Tight blind rivet **4.8 x 9.5**

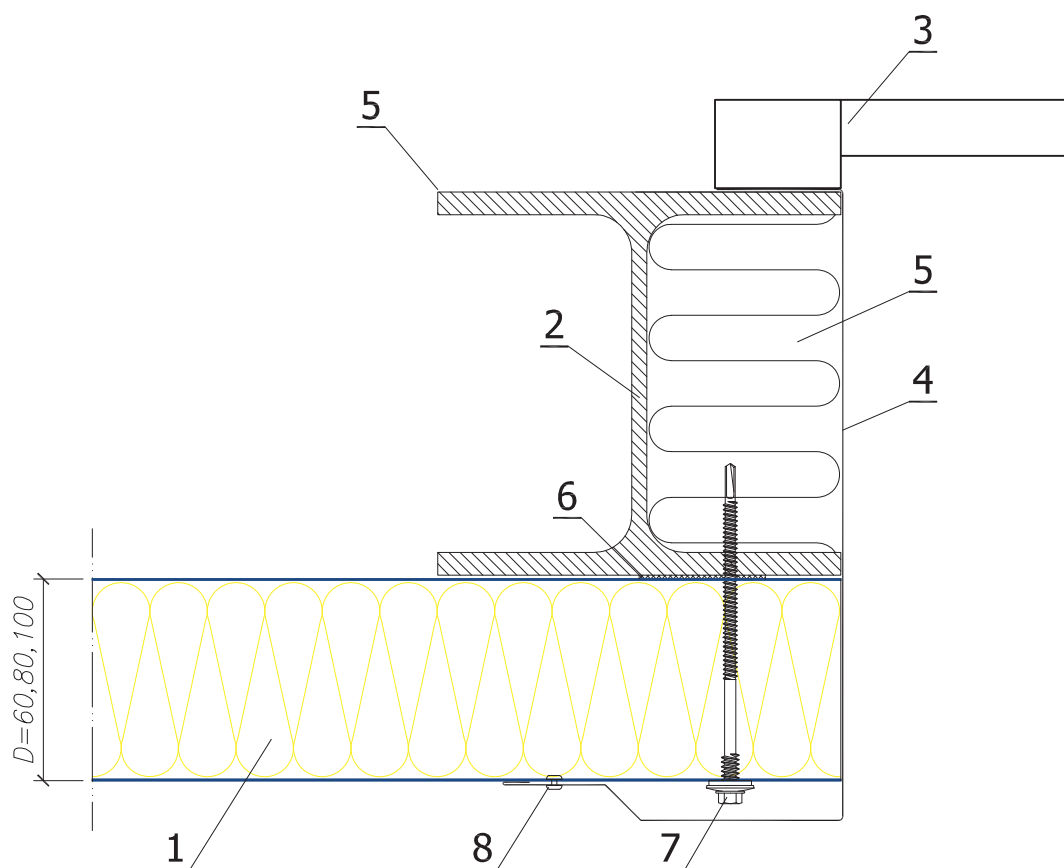
HORIZONTAL ARRANGEMENT of panels
Detail of panel connection to reinforced concrete support

Scale
1:3



LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Reinforced concrete post acc. to structure design
3. Covering flashing **OB-17**
4. Polyethylene, self-adhesive sealing tape (**PES**)
5. Impregnated polyurethane seal (**PURS**) or polyurethane caulking foam
6. Connector for fastening of sandwich panels to concrete
7. Tight blind rivet **4.8 x 9.5**

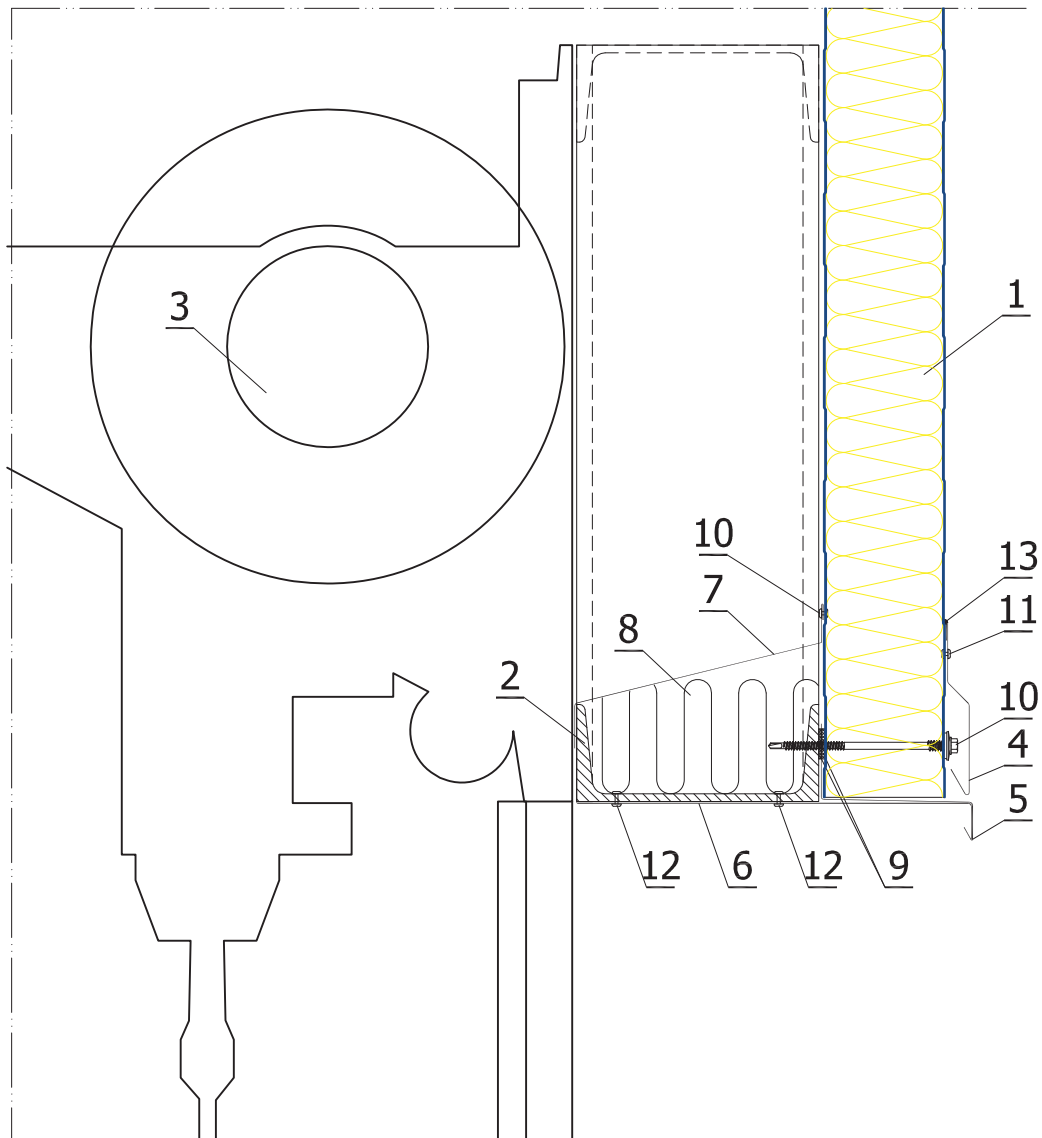


LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Steel post acc. to structure design
3. Industrial door
4. Door flashing **OB-21**
5. Thermal insulation on the fastening
6. Polyethylene, self-adhesive sealing tape (**PE**)
7. Self-drilling connector for sandwich panels
8. Tight blind rivet **4.8 x 9.5**

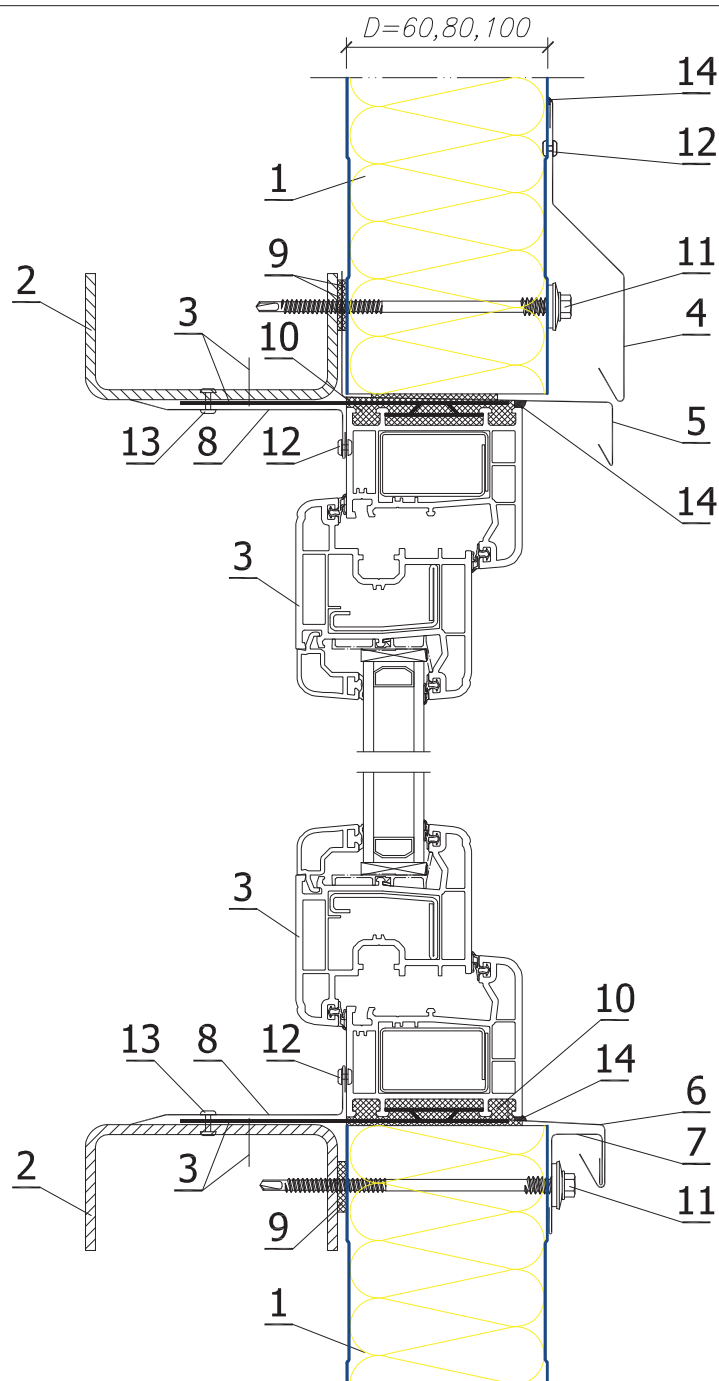
HORIZONTAL ARRANGEMENT of panels
Detail of roll-up door lintel

Scale
1:5



LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Transom acc. to structure design
3. Industrial door
4. Drip edge **OB-10**
5. Drip edge **OB-13**
6. Covering flashing **OB-20**
7. Individual covering flashing
8. Thermal insulation on the fastening
9. Polyethylene, self-adhesive sealing tape (**PES**)
10. Self-drilling connector for sandwich panels
11. Tight blind rivet **4.8 x 9.5**
12. Blind rivet **4.8 x 15.1** (for the structure)
13. Neutral silicone sealant



LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Transom acc. to structure design
3. PVC or aluminium window with a holder and connector
4. Drip edge **OB-10**
5. Drip edge **OB-13**
6. Cill **OB-37**
7. Rigid flashing **OB-16**
8. Individual inner corner
9. Polyethylene, self-adhesive sealing tape (**PES**)
10. Polyethylene caulking foam
11. Self-drilling connector for sandwich panels
12. Tight blind rivet **4.8 x 9.5**
13. Blind rivet **4.8 x 15.1** (for the structure)
14. Neutral silicone sealant

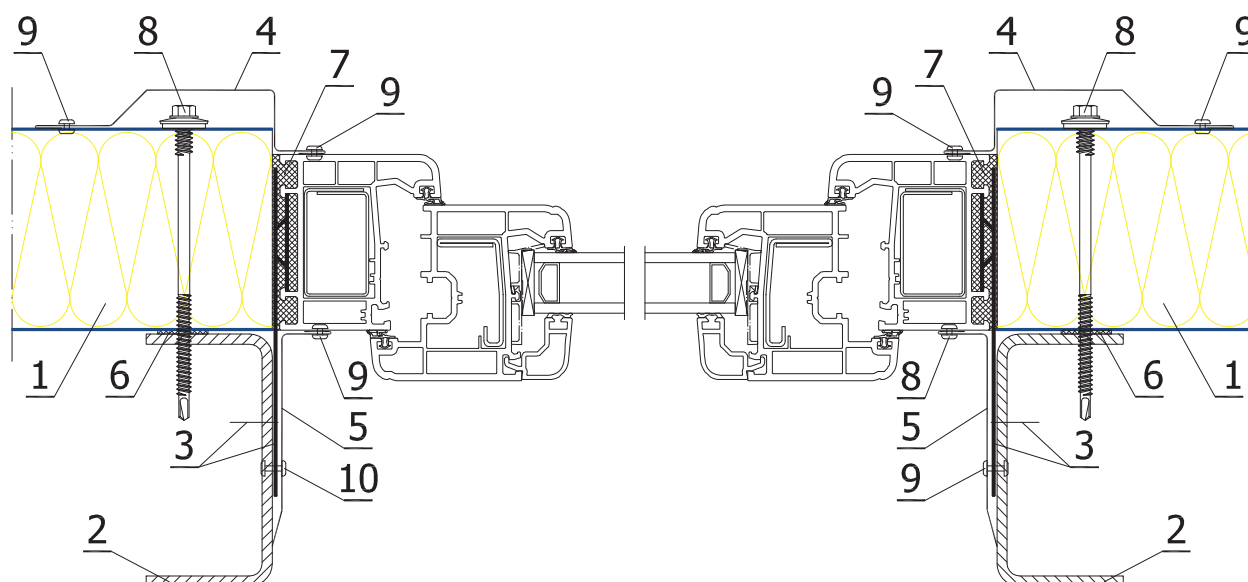
Poziomy układ płyt

Osadzenie okna w płycie warstwowej

Wariant I - przekrój boczny

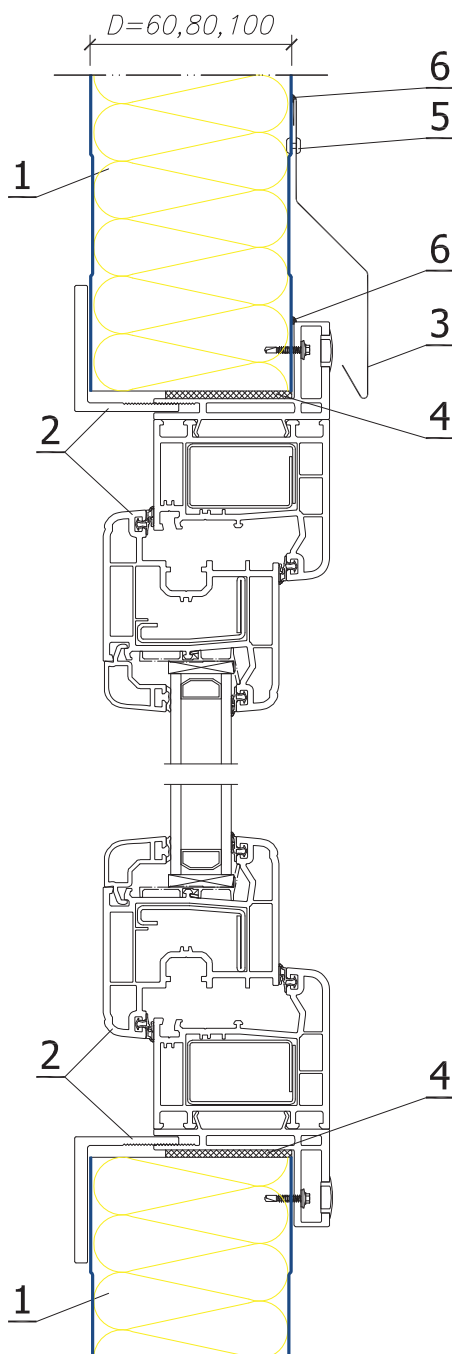
Scale

1:3



LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. Transom acc. to structure design
3. PVC or aluminium window with a holder and connector
4. Individual covering flashing
5. Individual inner corner
6. Polyethylene, self-adhesive sealing tape (**PES**)
7. Polyethylene caulking foam
8. Self-drilling connector for sandwich panels
9. Tight blind rivet **4.8 x 9.5**
10. Blind rivet **4.8 x 15.1** (for the structure)

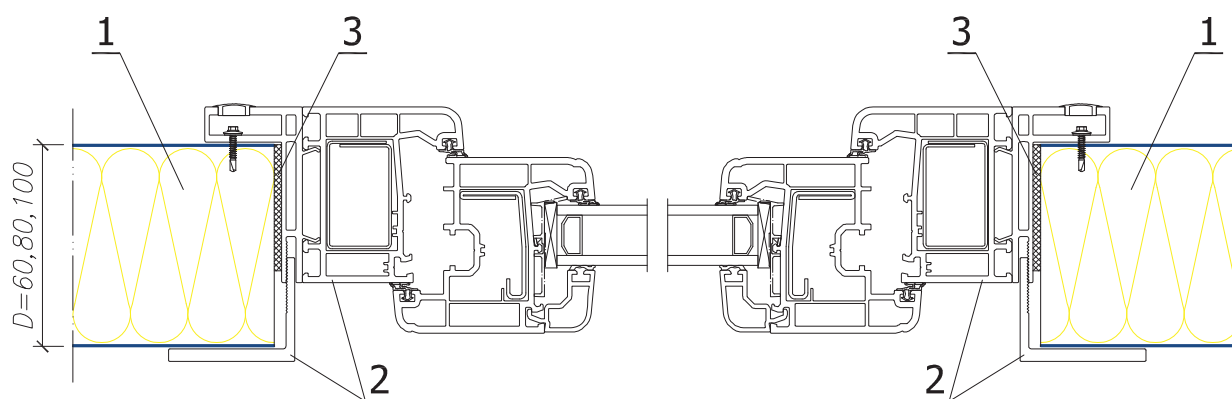


LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. PVC or aluminium window with a fastening profile
3. Drip edge **OB-11** (option)
4. Impregnated polyurethane seal (**PURS**) or caulking foam
5. Tight blind rivet **4.8 x 9.5**
6. Neutral silicone sealant

HORIZONTAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant II – cross-section

Scale
1:3



LEGEND:

1. **GORLICKA S / GORLICKA S GS-PIR** wall panel
2. PVC or aluminium window with a fastening profile
3. Impregnated polyurethane seal (**PURS**) or caulking foam

APPLICATION

GORLICKA S / GORLICKA S GS-PIR wall panel is designed for outer screening walls and inner partition walls in structural frame buildings. Panels can be mounted in both vertical and horizontal position, as single-span or multi-span wall elements.

PHYSICAL PROPERTIES

GORLICKA U / GORLICKA U GS-PIR wall panel is produced in the four thicknesses of the core: **60, 80, 100 and 120 mm**. Panels facing is made of double-sided galvanized steel sheets, 0.50 mm thick as per **PN-EN 10326:2006**, with organic polyester coating **25µm** thick. Thermal insulation core of the panels is a rigid polyurethane (**PUR**) or polyisocyanurate (**PIR**) foam with a thickness of **40 kg/m³**. The heat conductivity calculation value of the foam is: $\lambda = 0.022 \text{ W/m}^{\circ}\text{K}$. Modular width of plates is **1000 mm** or **1140 mm**. The standard panel length is between **2.0 to 12 m**. On special request we deliver panels shorter than **2 m** and longer than **12 m**, with a maximum length of **16.5 meters**. Tightness of panel joints is provided by impregnated polyurethane seals applied in the manufacturing process.

Thickness [mm]	Weight [kg/m ²]	Modular width [mm]	Length: typical/available [m]	Lining standard RAL colours
60	10,73	1000	2,0 - 12,0 / 16,5	9002, 9010, 9006 9007, 5010, 1015 3000, 6029, 7016, 7035, 8017
80	11,53			
100	12,33			
120	13,13			

Thermal insulation of panels depends on the thickness of the core characterized by **U** thermal coefficient, taking into account the impact of linear thermal bridge appearing on panel joint and point thermal bridge appearing because of connectors. **Acoustic parameters** were determined on the basis of **EN ISO 10140-3**. Coldstore plates can be used as partitions of the requirements of sound insulation no greater than those specified below. **Resistance to chemical corrosion** - **GORLICKA** sandwich panels can be used in environments with atmosphere corrosiveness category **C1, C2, C3** according to **EN ISO 12944-2**.

TECHNICAL PARAMETERS OF PUR CORE

Thickness [mm]	Heat-transfer coefficient U [W/m ² ·K]	Acoustic insulation	Reaction to fire	Fire resistance	NRO
	PN-EN 14509	EN ISO 717-1	PN-EN 13501-1	PN-EN 13501-2	PN-B-02867:2013:06
60	0,39	R _w = 23 dB R _{a1} = 21 dB R _{a2} = 19 dB	B-s2, dO	NPD	„NRO”
80	0,29			E15/EW15, Conditions by classification	
100	0,23				
120	0,19				

TECHNICAL PARAMETERS OF PIR CORE

Thickness [mm]	Heat-transfer coefficient U [W/m ² ·K]	Acoustic insulation	Reaction to fire	Fire resistance	NRO
	PN-EN 14509	EN ISO 717-1	PN-EN 13501-1	PN-EN 13501-2	PN-B-02867:2013:06
60	0,39	R _w = 23 dB R _{a1} = 21 dB R _{a2} = 20 dB	B-s1, dO	NPD	„NRO”
80	0,29				
100	0,23				
120	0,19				

PACKING AND SHIPPING

GORLICKA sandwich panels are provided in packs on pallets allowing their relocation. Typical height of a pack equals approx. **1000 mm**. The table below specifies number of panels in a pack depending on panel thickness.

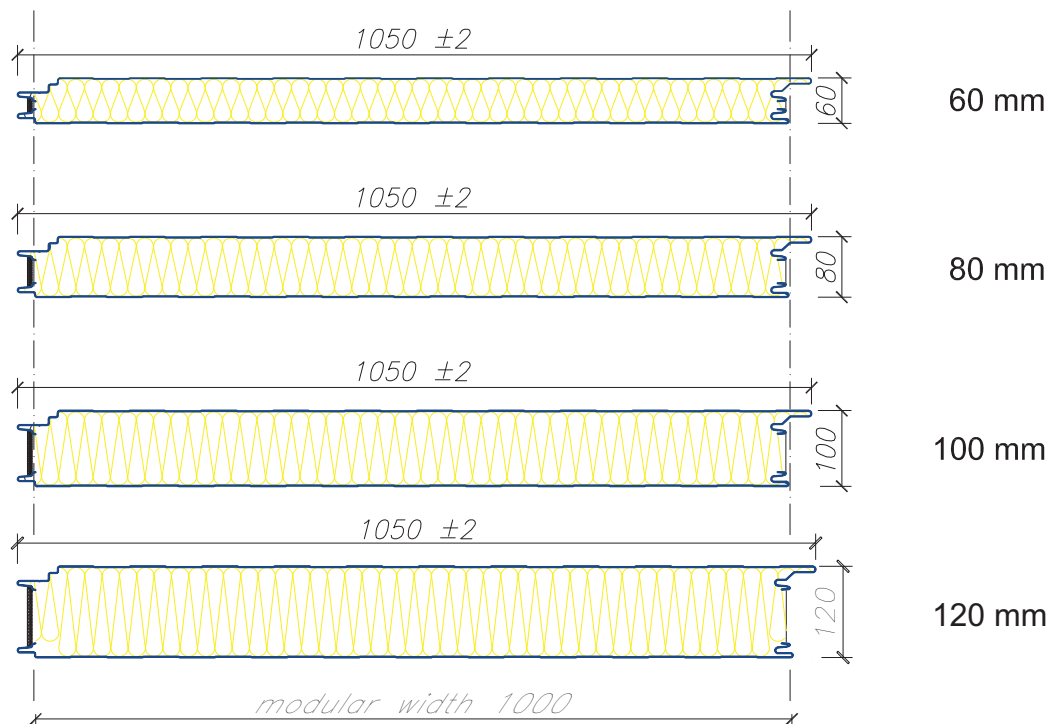
Panel thickness [mm]	60	80	100	120
Maximum number of panels in one batch	19	14	11	9

Production programme of panels **Gorlicka U / Gorlicka U GS-PIR:**

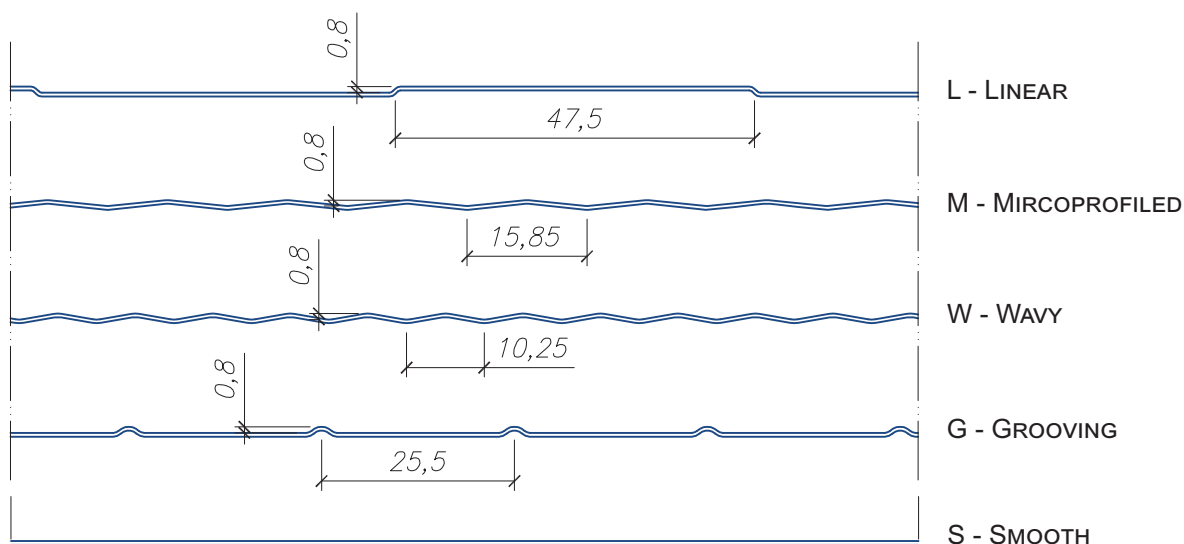
- Panel thicknesses
- Profiles of outer and inner facing

Scale
1:10
1:1

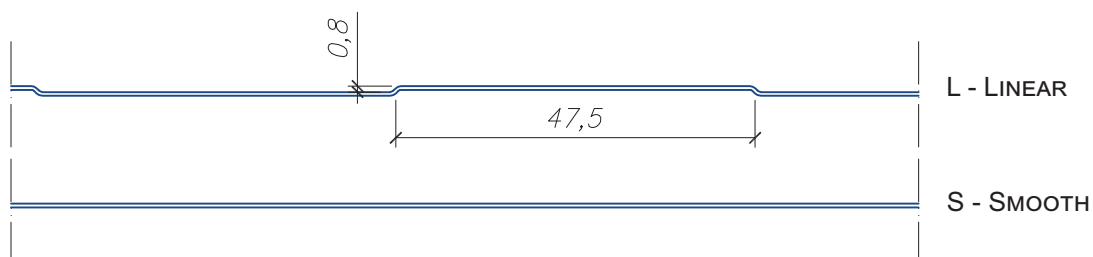
Panel thickness



External lining profiles



Internal lining profiles



LOAD SPAN TABLES FOR GORLICKA U

Load tables are prepared according to **PN-EN 14 509** for panels with PUR core, linings in bright colors with a thickness of **0,5 mm** and for internal temperature **T = 20°C**. In the case of different data it is necessary to perform separate calculations. Deflection condition was adopted to **L/100**. Minimum width of the support - **40/60 mm**. Number of connectors - 2 on support. A detailed list of loads is available on the website.

Table of allowed loads for GORLICKA U mounted as a **single-span** element, direction **to support**

Panel thickness	The load due to:	The maximum load [kN/m ²] on the span length [m]:										
		1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5
60	SGN (q _d)	6,443	4,380	2,780	1,920	1,405	1,072	0,845	0,683	0,563	0,472	0,402
	SGU (q _k)	7,918	4,978	3,160	2,182	1,597	1,204	0,859	0,551	0,337	0,193	0,093
80	SGN (q _d)	7,030	5,236	4,171	3,111	2,277	1,738	1,370	1,107	0,913	0,766	0,652
	SGU (q _k)	8,948	6,665	5,120	3,536	2,588	1,975	1,557	1,195	0,909	0,699	0,499
100	SGN (q _d)	7,617	5,673	4,520	3,756	2,849	2,175	1,714	1,386	1,143	0,959	0,816
	SGU (q _k)	9,695	7,222	5,754	4,426	3,239	2,472	1,949	1,575	1,300	1,091	0,913

Table of allowed loads for GORLICKA U mounted as a **single-span** element, direction **from support**

Panel thickness	The load due to:	The maximum load [kN/m ²] on the span length [m]:										
		1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5
60	SGN (q _d)	2,573	1,917	1,527	1,269	1,085	0,948	0,841	0,683	0,563	0,472	0,402
	SGU (q _k)	3,424	2,550	2,032	1,688	1,444	1,219	0,961	0,701	0,524	0,360	0,240
80	SGN (q _d)	2,573	1,917	1,527	1,269	1,085	0,948	0,841	0,756	0,687	0,629	0,580
	SGU (q _k)	3,424	2,550	2,032	1,688	1,444	1,262	1,120	1,007	0,915	0,775	0,610
100	SGN (q _d)	2,573	1,917	1,527	1,269	1,085	0,948	0,841	0,756	0,687	0,629	0,580
	SGU (q _k)	3,424	2,550	2,032	1,688	1,444	1,262	1,120	1,007	0,915	0,838	0,773

Table of allowed loads for GORLICKA U mounted as a **multi-span** element, direction **to support**

Panel thickness	The load due to:	The maximum load [kN/m ²] on the span length [m]:										
		1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5
60	SGN (q _d)	4,031	3,001	2,411	1,826	1,329	1,000	0,773	0,615	0,501	0,417	0,352
	SGU (q _k)	6,070	4,462	3,543	2,555	1,875	1,393	1,077	0,858	0,701	0,583	0,493
80	SGN (q _d)	5,316	3,918	3,108	2,580	2,132	1,563	1,197	0,947	0,769	0,638	0,537
	SGU (q _k)	6,925	5,094	4,033	3,340	2,825	1,698	1,602	1,272	1,036	0,860	0,726
100	SGN (q _d)	5,872	4,319	3,422	2,727	2,426	2,120	1,787	1,444	1,191	0,999	0,842
	SGU (q _k)	7,654	5,623	4,446	3,679	3,139	2,739	2,401	1,941	1,576	1,307	1,101

Table of allowed loads for GORLICKA U mounted as a **multi-span** element, direction **from support**

Panel thickness	The load due to:	The maximum load [kN/m ²] on the span length [m]:										
		1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5
60	SGN (q _d)	2,191	1,630	1,350	1,090	0,937	0,823	0,733	0,586	0,476	0,393	0,330
	SGU (q _k)	1,781	1,322	1,056	0,881	0,756	0,663	0,590	0,532	0,484	0,444	0,411
80	SGN (q _d)	2,157	1,601	1,281	1,071	0,922	0,810	0,723	0,653	0,595	0,547	0,506
	SGU (q _k)	1,695	1,260	1,010	0,845	0,729	0,641	0,573	0,517	0,472	0,434	0,402
100	SGN (q _d)	2,019	1,497	1,203	1,012	0,875	0,773	0,693	0,628	0,574	0,529	0,491
	SGU (q _k)	1,670	1,236	0,990	0,829	0,715	0,630	0,563	0,510	0,466	0,428	0,397

**Selected details of cladding
made of GORLICKA U / GORLICKA U GS-PIR
sandwich panels**

Details of cam-lock and panel joints	44
Details of panels' connection, PM1 spacer	45

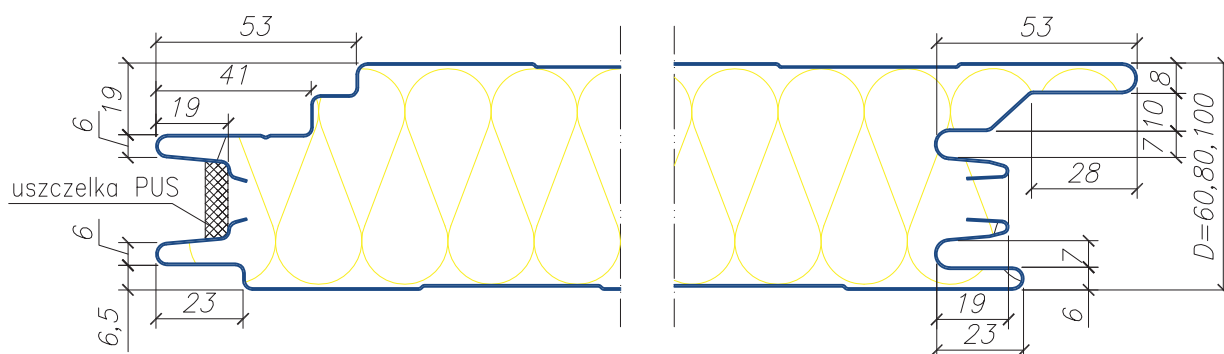
VERTICAL ARRANGEMENT of panels

Details of panel connection to grade beam – variant I	46
Details of panel connection to grade beam – variant II	47
Detail of panel connection to flooring	48
Detail of panel connection to wall	49
Detail of panels' connection in a corner – variant I	50
Detail of panels' connection in a corner – variant II	51
Detail of panels' connection in an optional angle corner	52
Detail of building expansion joint	53
Detail of roll-up door post – variant I	54
Detail of roll-up door lintel – variant I	55
Window assembly in sandwich panel – variant I – profile	56
Window assembly in sandwich panel – variant I – cross-section	57
Window assembly in sandwich panel – variant II – profile	58
Window assembly in sandwich panel – variant II – cross-section	59

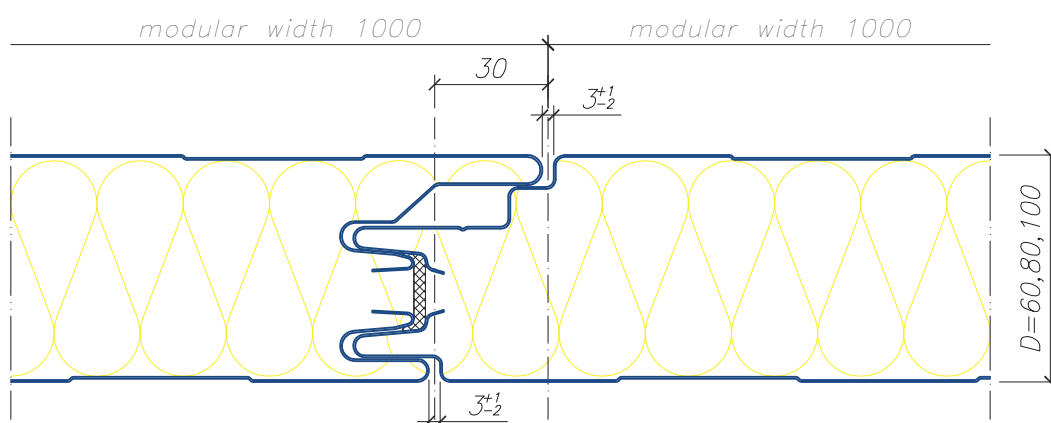
HORIZONTAL ARRANGEMENT of panels

Details of panel connection to grade beam – variant I	60
Details of panel connection to grade beam – variant II	61
Details of panel connection to grade beam – variant III	62
Detail of panel connection to flooring	63
Detail of panels' connection in a corner	64
Detail of panels' connection in an optional angle corner	65
Detail of panel connection to wall	66
Detail of panel connection to reinforced concrete support	67
Detail of panel connection to edge support	68
Detail of panel connection to intermediate support	69
Detail of roll-up door post	70
Detail of roll-up door lintel	71
Window assembly in sandwich panel – variant I – profile	72
Window assembly in sandwich panel – variant I – cross-section	73
Window assembly in sandwich panel – variant II – profile	74
Window assembly in sandwich panel – variant II – cross-section	75

Shape of cam-lock for panels



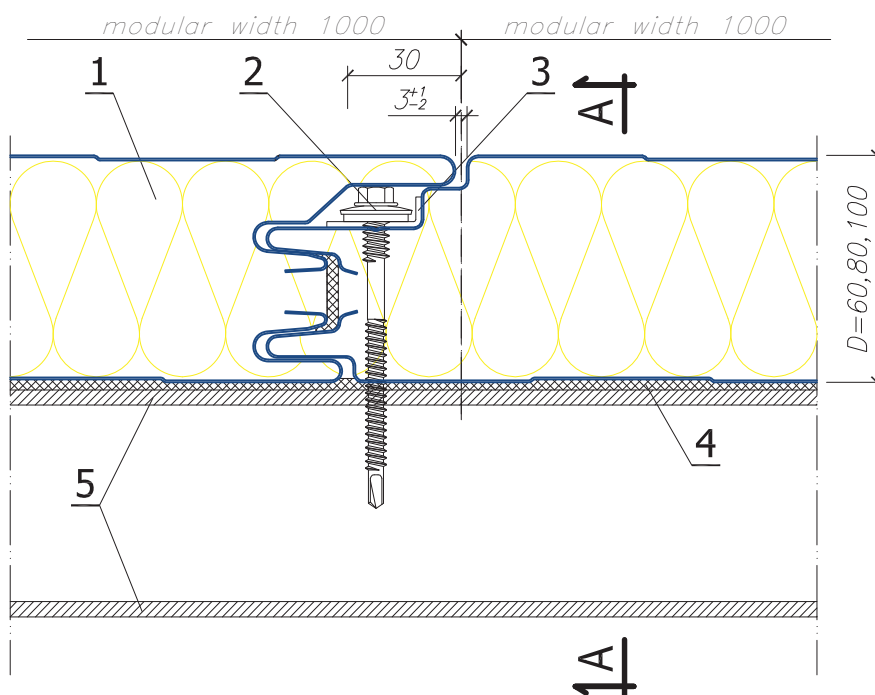
Detail of panels' connection



Details of panels' connection
Pm1 spacer

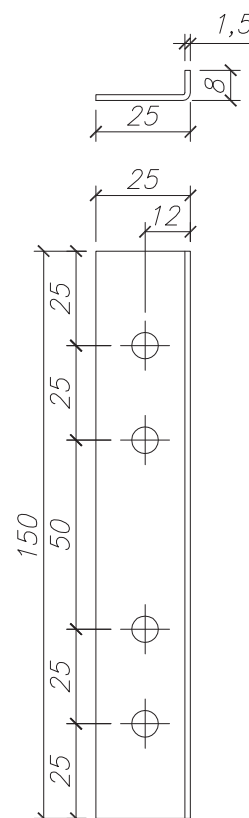
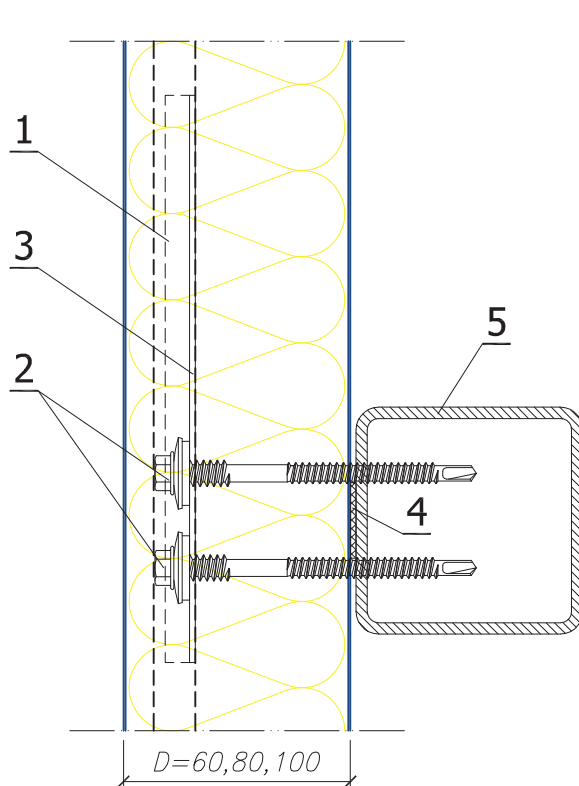
Scale
1:2

Details of panels' connection



A-A cross-section

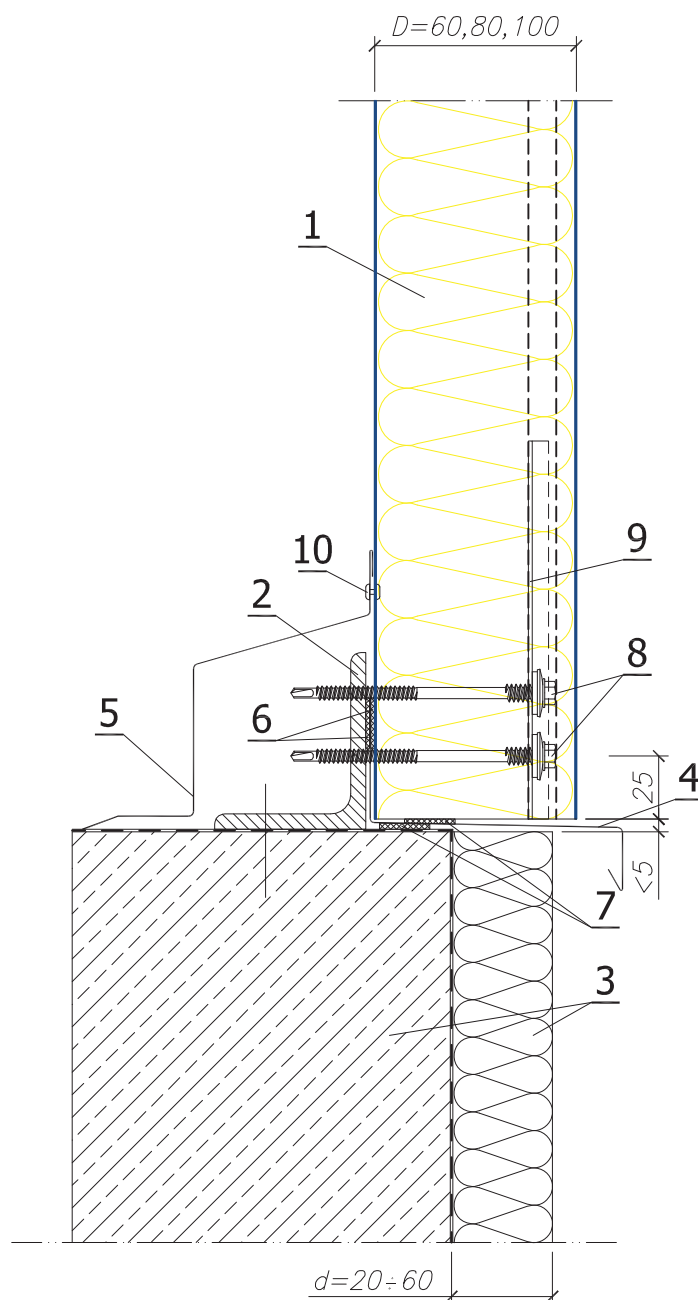
Pm1 spacer



LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Self-drilling connector for sandwich panels
3. PM1 spacer
4. Polyethylene, self-adhesive sealing tape (PE)
5. Transom acc. to structure design

NOTE: Every panel should be fastened to the structure with two connectors

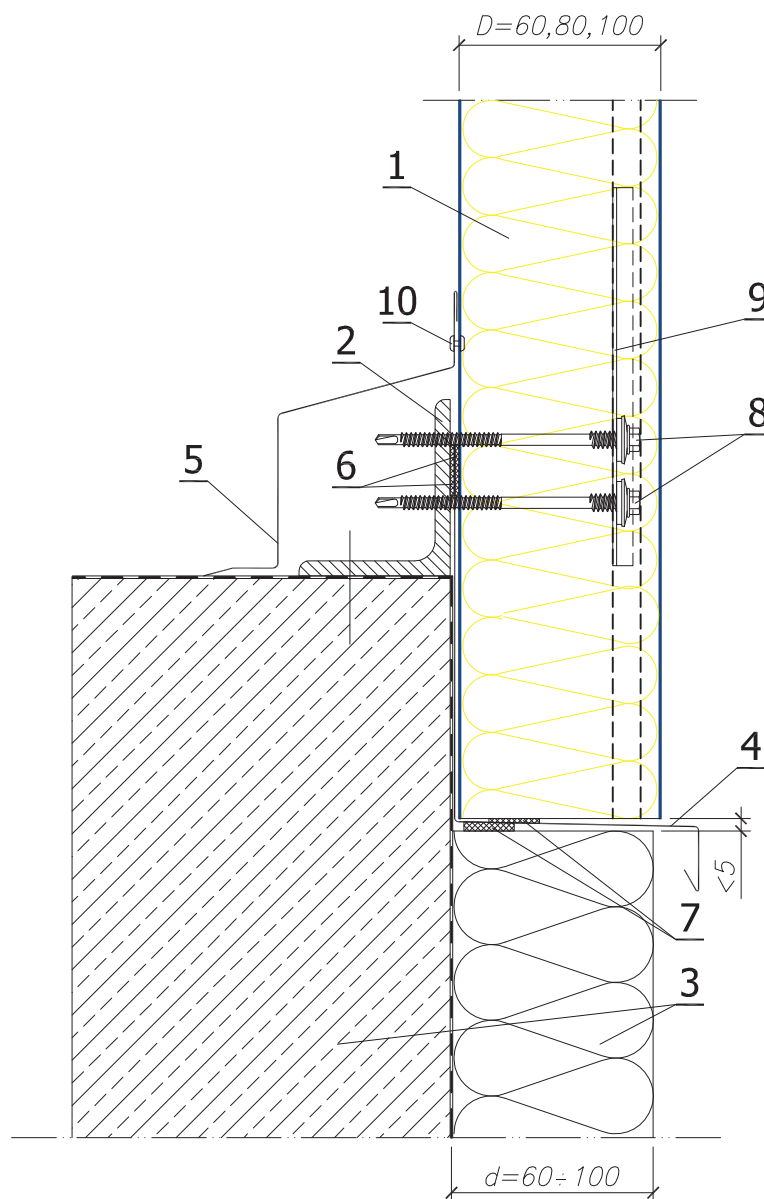


LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Steel section acc. to structure design
3. Grade beam with insulation and thermal insulation acc. to detailed design
4. Drip edge **OB-10**
5. Covering flashing **OB-09**
6. Polyethylene, self-adhesive sealing tape (**PES**)
7. Impregnated polyurethane seal
8. Self-drilling connector for sandwich panels
9. **PM1** spacer
10. Tight blind rivet **4.8 x 9.5**

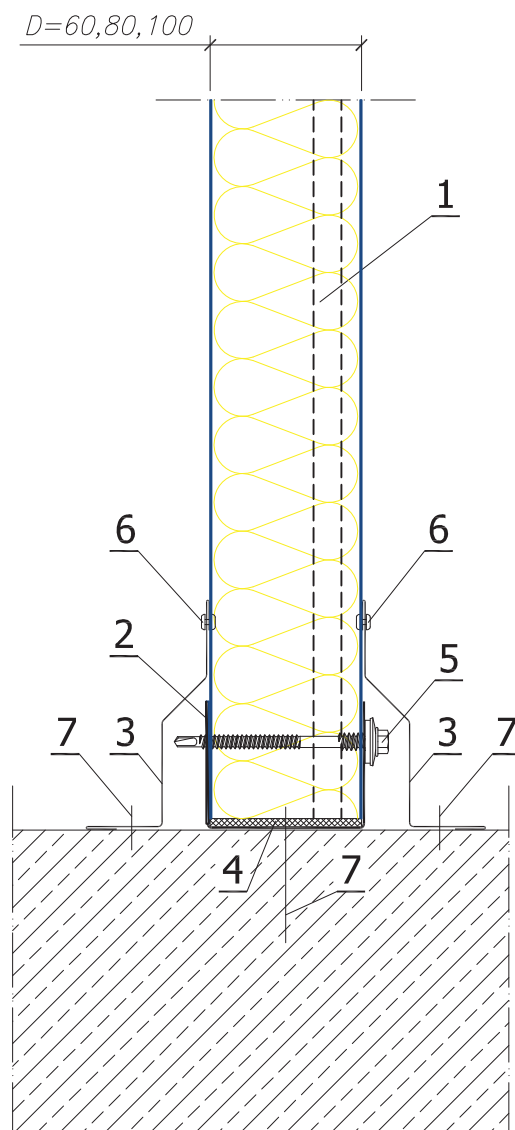
VERTICAL ARRANGEMENT of panels
Details of panel connection to grade beam
Variant II

Scale
1:3



LEGEND:

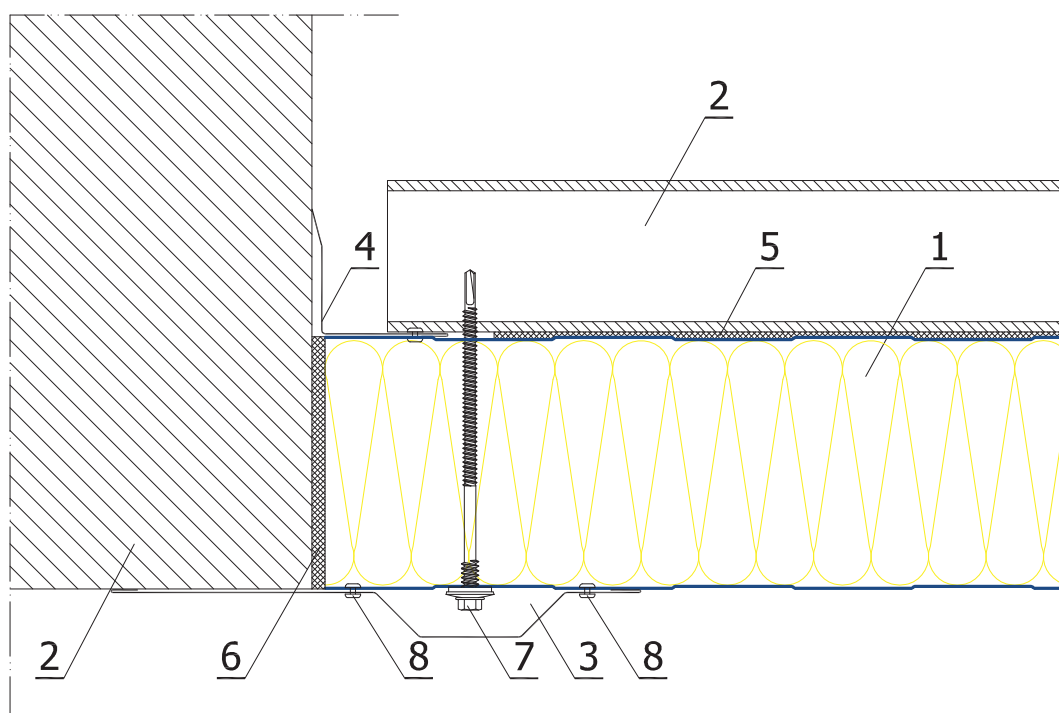
1. **GORLICKA U / GORLICKA U GS-PIR** wall panel
2. Steel section acc. to structure design
3. Grade beam with insulation and thermal insulation acc. to detailed design
4. Eaves **OB-13** (extended)
5. Covering flashing **OB-09**
6. Polyethylene, self-adhesive sealing tape (**PES**)
7. Impregnated polyurethane seal
8. Self-drilling connector for sandwich panels
9. **PM1** spacer
10. Tight blind rivet **4.8 x 9.5**


LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Edge channel section **OB-42**
3. Covering flashing **OB-05**
4. Impregnated polyurethane seal (**PURS**) or caulking foam
5. Self-drilling connector for sandwich panels
6. Tight blind rivet **4.8 x 9.5**
7. Steel expansion joint for fast assembly

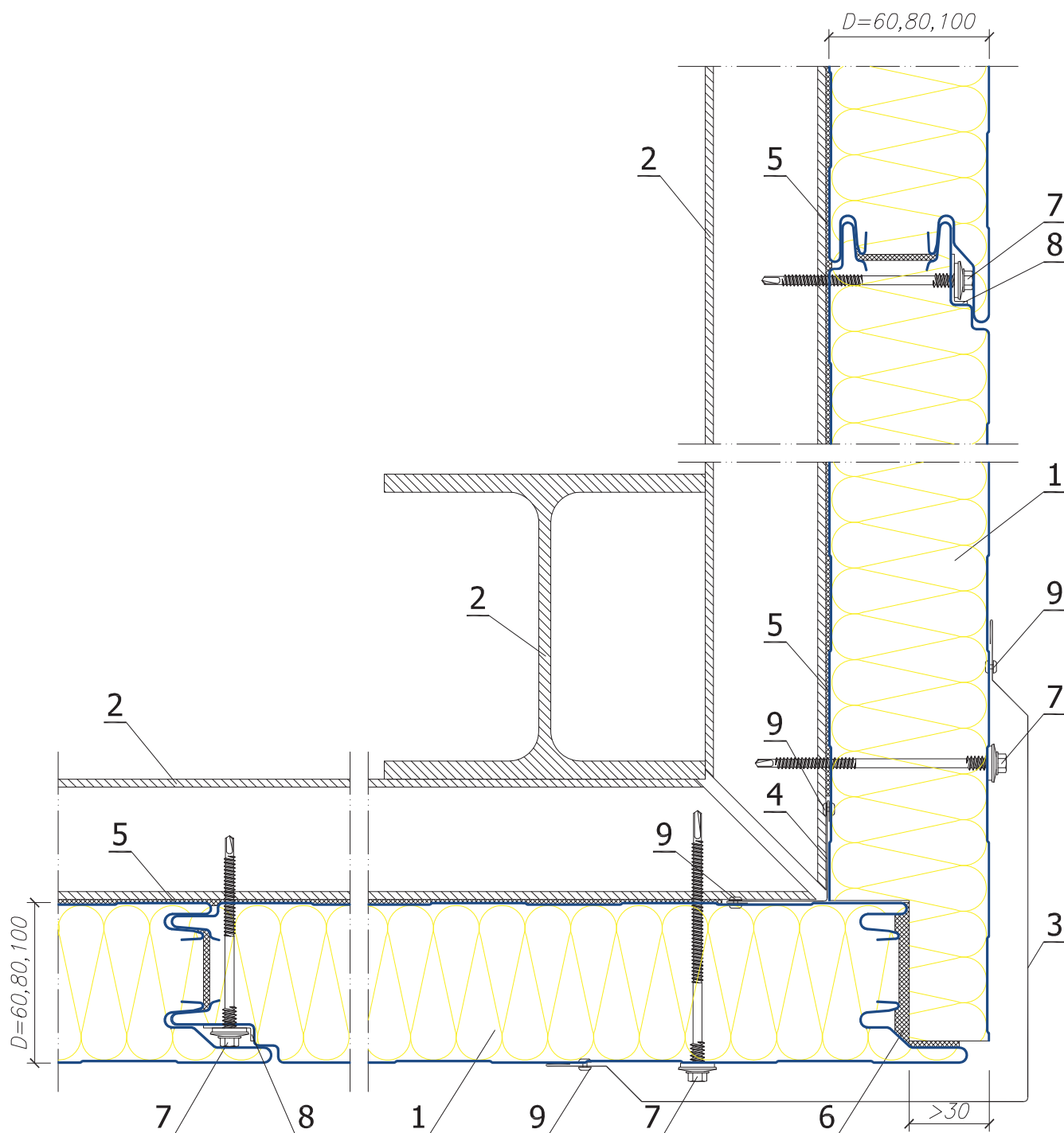
VERTICAL ARRANGEMENT of panels
Detail of panel connection to wall

Scale
1:3



LEGEND:

1. **GORLICKA U / GORLICKA U GS-PIR** wall panel
2. Wall and transom acc. to structure design
3. Covering flashing **OB-19**
4. Inner corner flashing **OB-07**
5. Polyethylene, self-adhesive sealing tape (**PES**)
6. Impregnated polyurethane seal (**PURS**) or polyurethane caulking foam
7. Self-drilling connector for sandwich panels
8. Tight blind rivet **4.8 x 9.5**

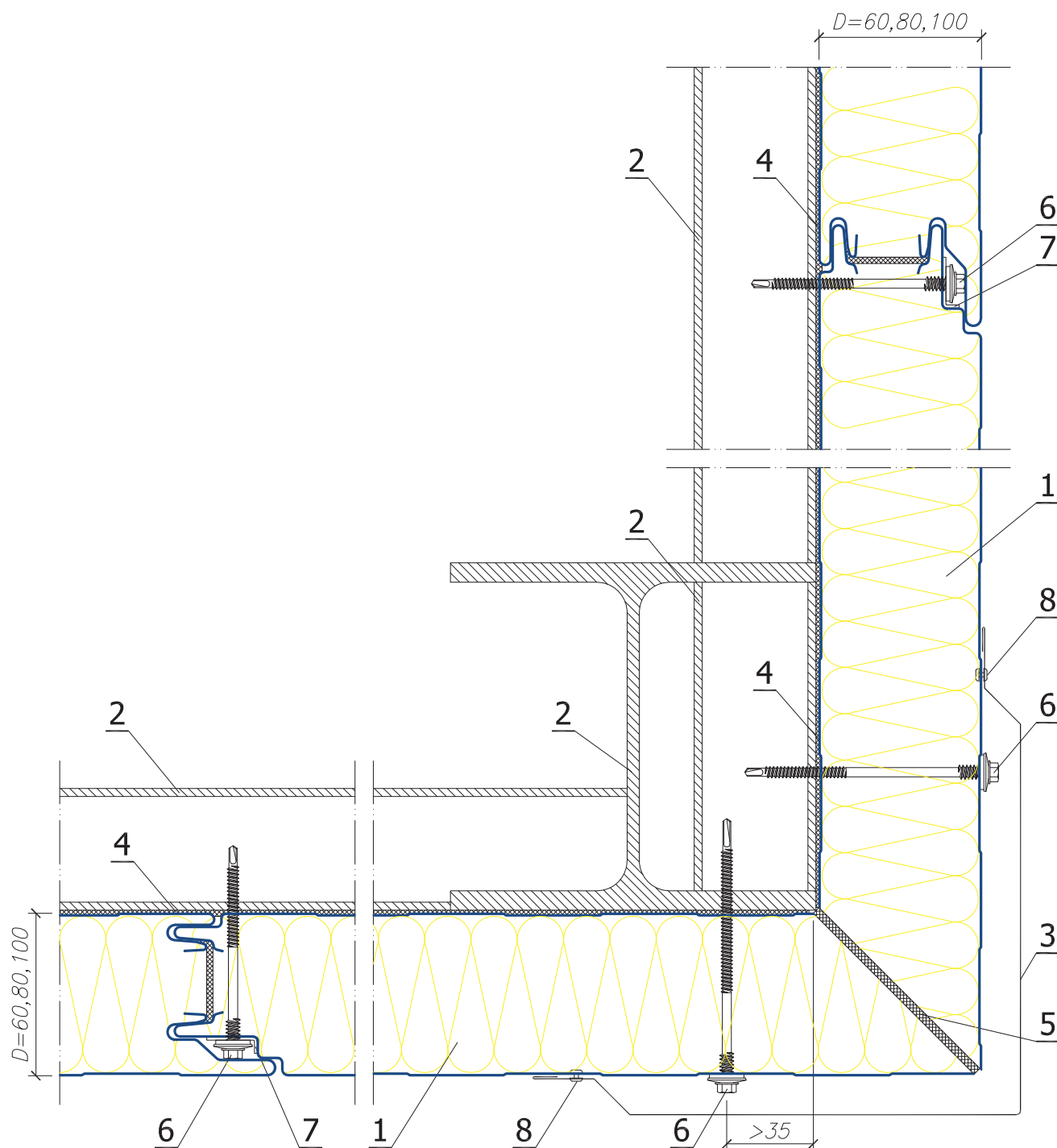


LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Steel post and transom acc. to structure design
3. Corner flashing **OB-03**
4. Corner flashing **OB-02**
5. Polyethylene, self-adhesive sealing tape (**PES**)
6. Impregnated polyurethane seal (**PURS**) or caulking foam
7. Self-drilling connector for sandwich panels
8. **PM1** spacer
9. Tight blind rivet **4.8 x 9.5**

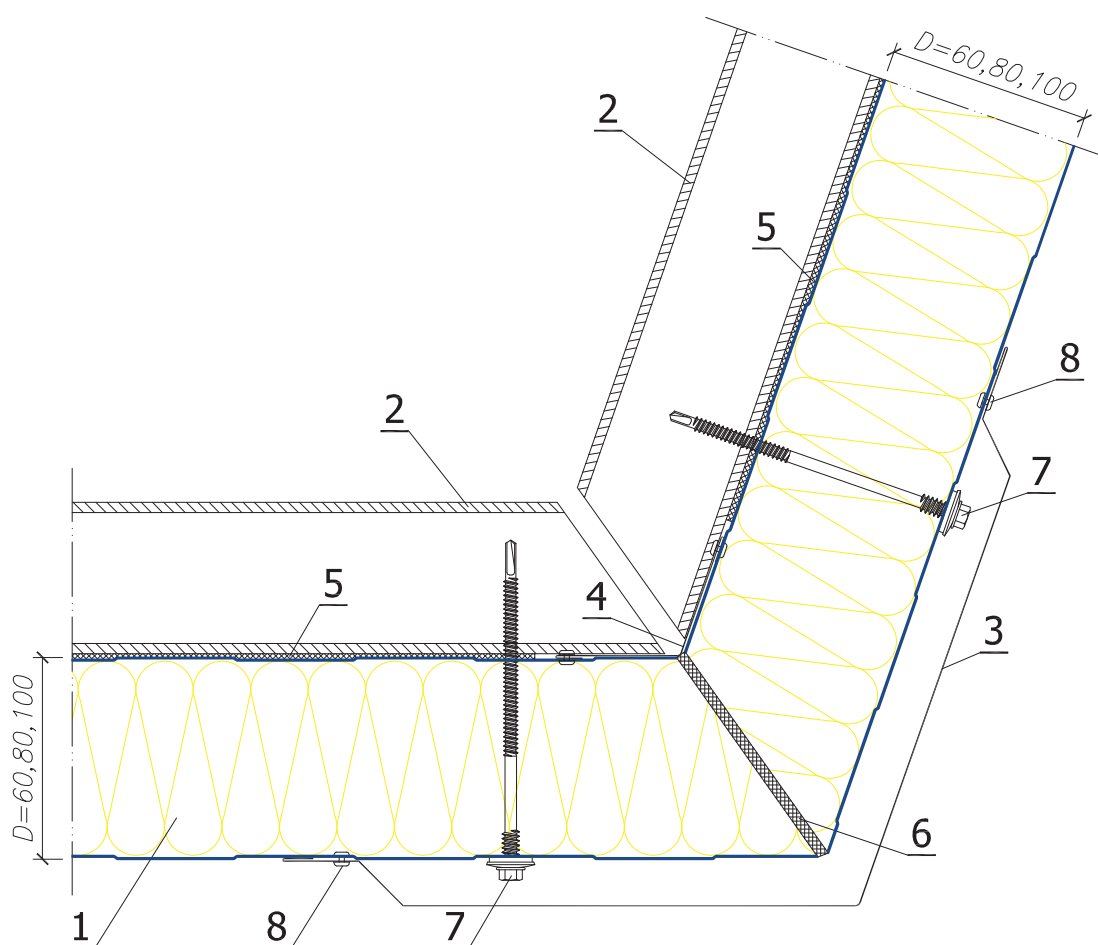
VERTICAL ARRANGEMENT of panels
Detail of panels' connection in a corner
Variant II

Scale
1:3



LEGEND:

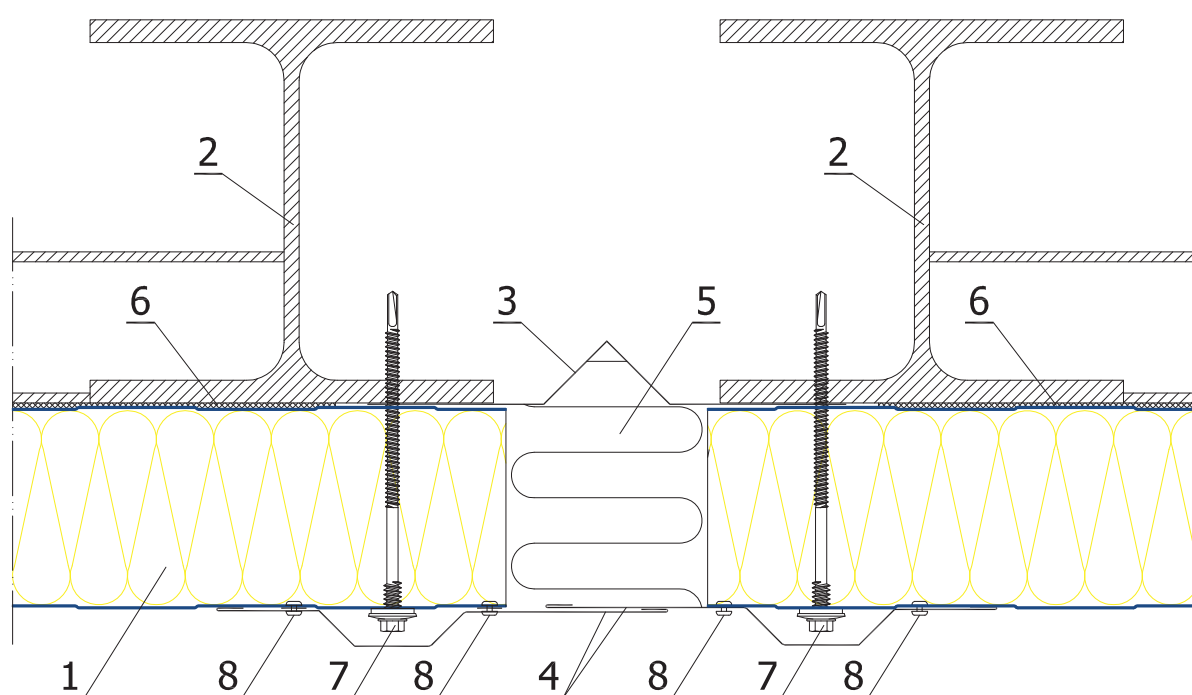
1. **GORLICKA U / GORLICKA U GS-PIR** wall panel
2. Steel post and transom acc. to structure design
3. Corner flashing **OB-03**
4. Polyethylene, self-adhesive sealing tape (**PES**)
5. Impregnated polyurethane seal (**PURS**) or caulking foam
6. Self-drilling connector for sandwich panels
7. **PM1** spacer
8. Tight blind rivet **4.8 x 9.5**


LEGEND:

1. **GORLICKA U / GORLICKA U GS-PIR** wall panel
2. Transom acc. to structure design
3. Corner flashing **OB-03**
4. Corner flashing **OB-02**
5. Polyethylene, self-adhesive sealing tape (**PES**)
6. Polyurethane caulking foam
7. Self-drilling connector for sandwich panels
8. Tight blind rivet **4.8 x 9.5**

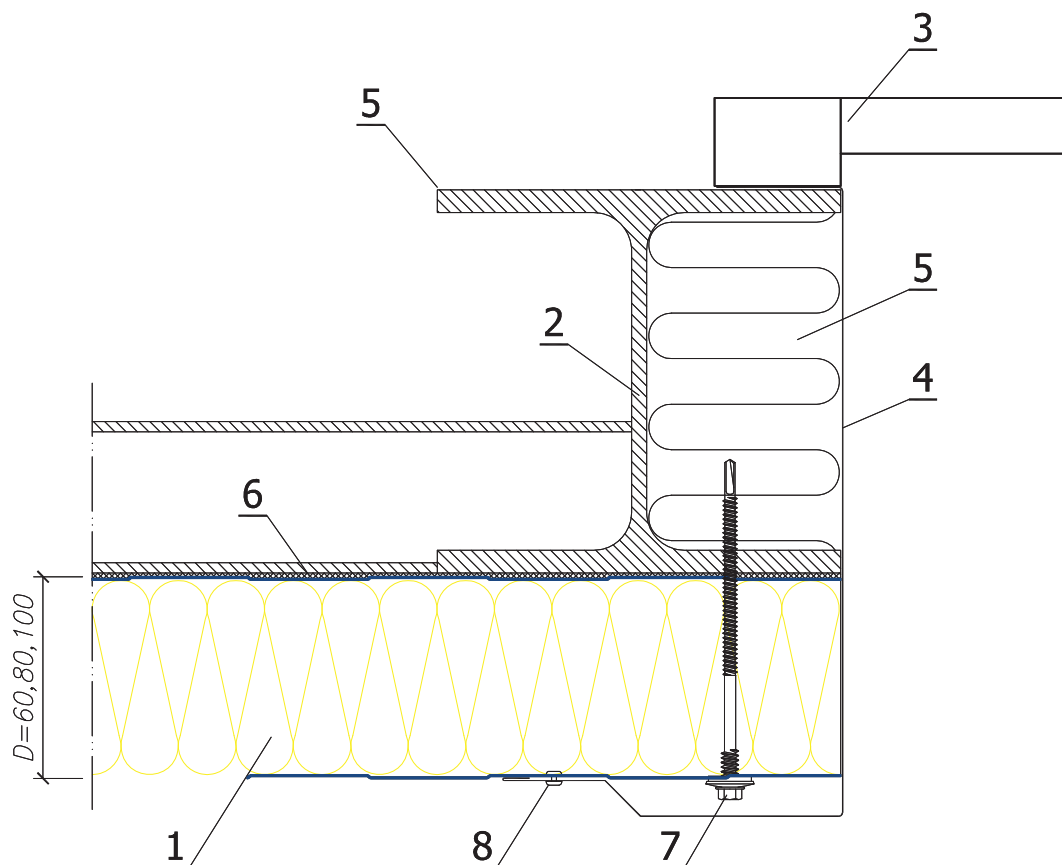
VERTICAL ARRANGEMENT of panels
Detail of building expansion joint

Scale
1:3



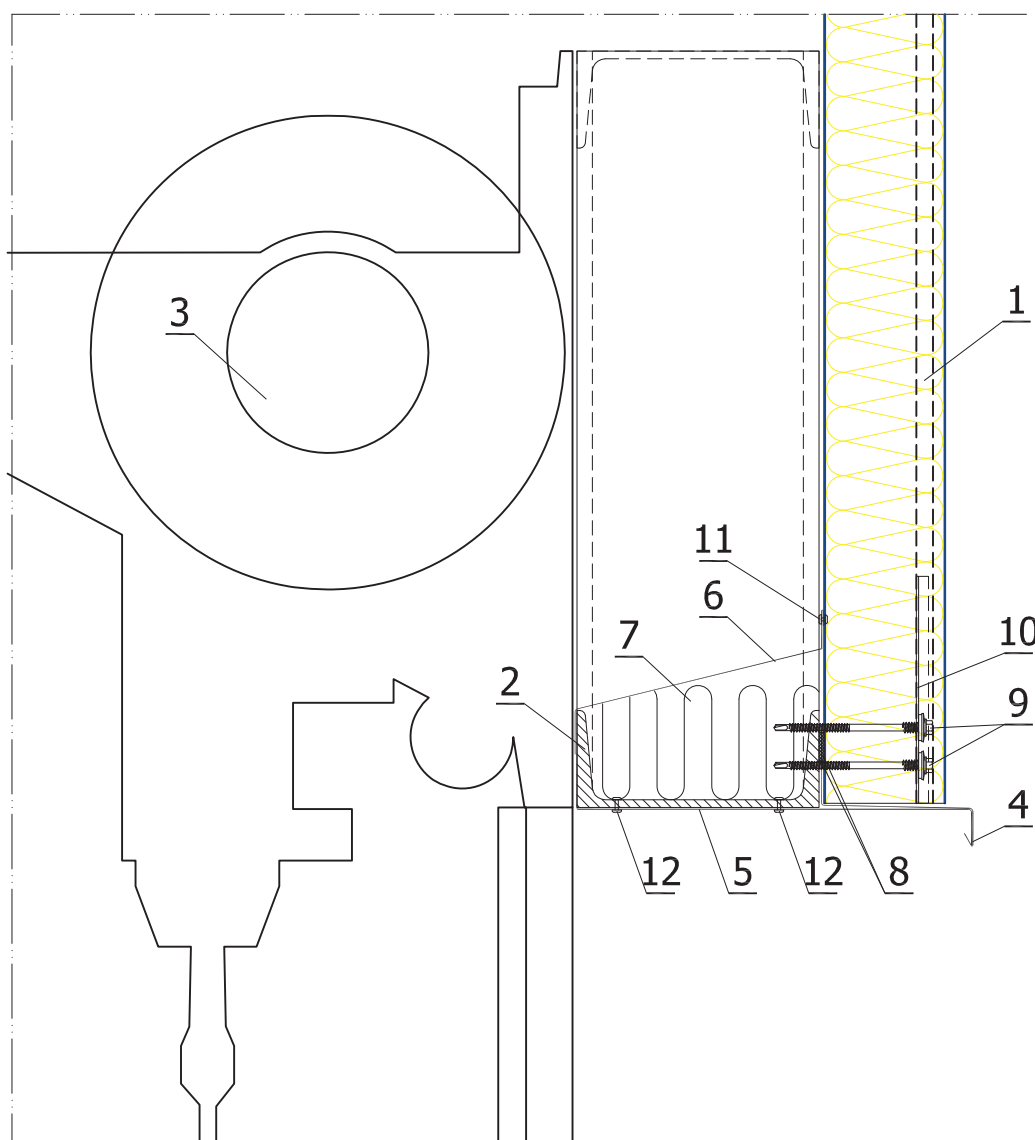
LEGEND:

1. **GORLICKA U / GORLICKA U GS-PIR** wall panel
2. Steel posts and transom acc. to structure design
3. Individual expansion joint flashing
4. Covering flashing **OB-09**
5. Thermal insulation on the fastening
6. Polyethylene, self-adhesive sealing tape (**PES**)
7. Self-drilling connector for sandwich panels
8. Tight blind rivet **4.8 x 9.5**



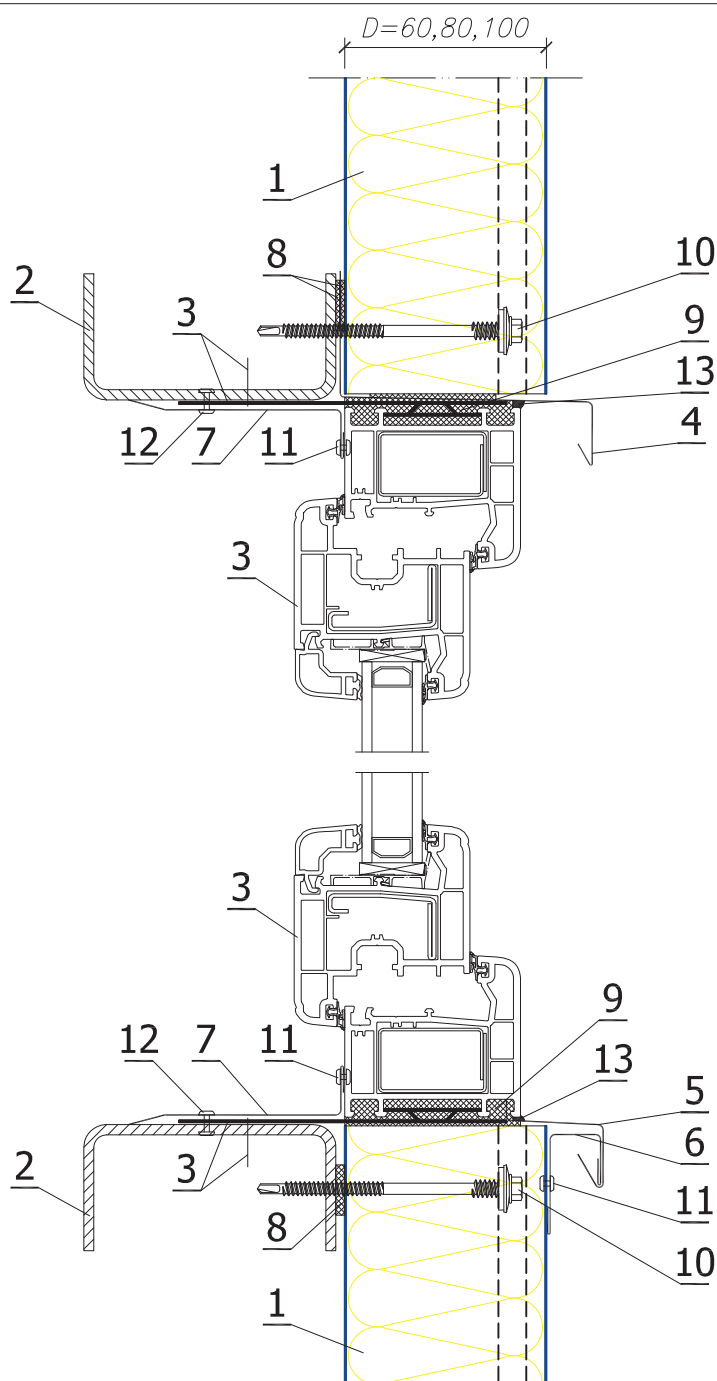
LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Steel post and transom acc. to structure design
3. Industrial door
4. Door flashing **OB-21**
5. Thermal insulation on the fastening
6. Polyethylene, self-adhesive sealing tape (**PES**)
7. Self-drilling connector for sandwich panels
8. Tight blind rivet **4.8 x 9.5**



LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Transom acc. to structure design
3. Industrial door
4. Drip edge **OB-13**
5. Covering flashing **OB-20**
6. Individual covering flashing
7. Thermal insulation on the fastening
8. Polyethylene, self-adhesive sealing tape (**PES**)
9. Self-drilling connector for sandwich panels
10. PM1 spacer
11. Tight blind rivet **4.8 x 9.5**
12. Blind rivet **4.8 x 15.1** (for the structure)

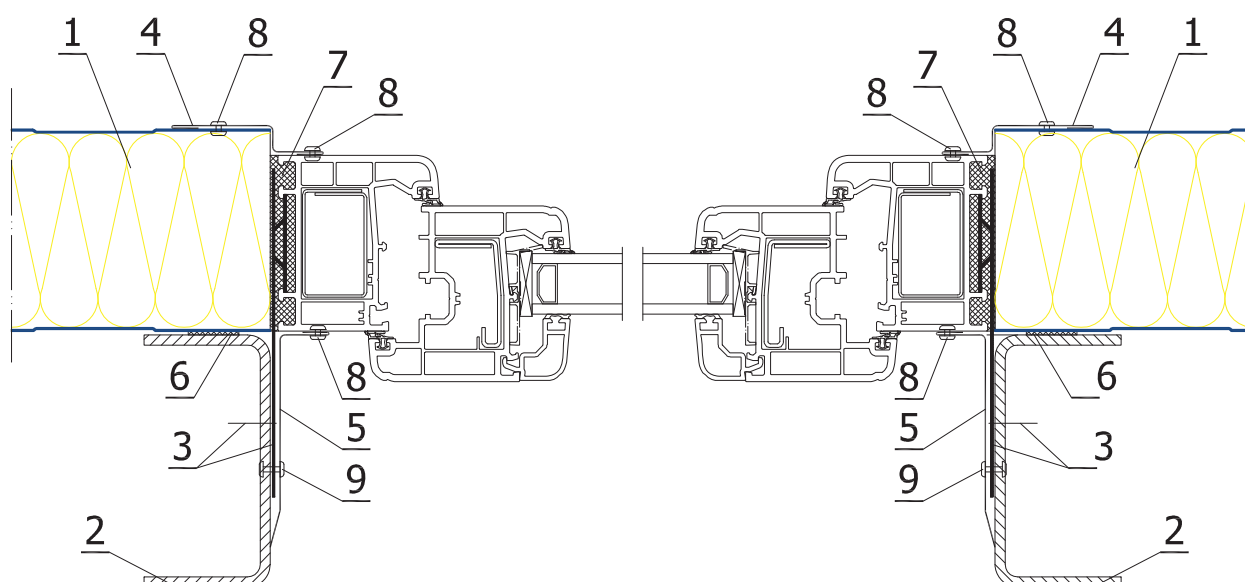


LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Transom acc. to structure design
3. PVC or aluminium window with a holder and connector
4. Drip edge **OB-13**
5. Cill **OB-37**
6. Rigid flashing **OB-16**
7. Individual inner corner
8. Polyethylene, self-adhesive sealing tape (**PES**)
9. Polyethylene caulking foam
10. Self-drilling connector for sandwich panels
11. Tight blind rivet **4.8 x 9.5**
12. Blind rivet **4.8 x 15.1** (for the structure)
13. Neutral silicone sealant

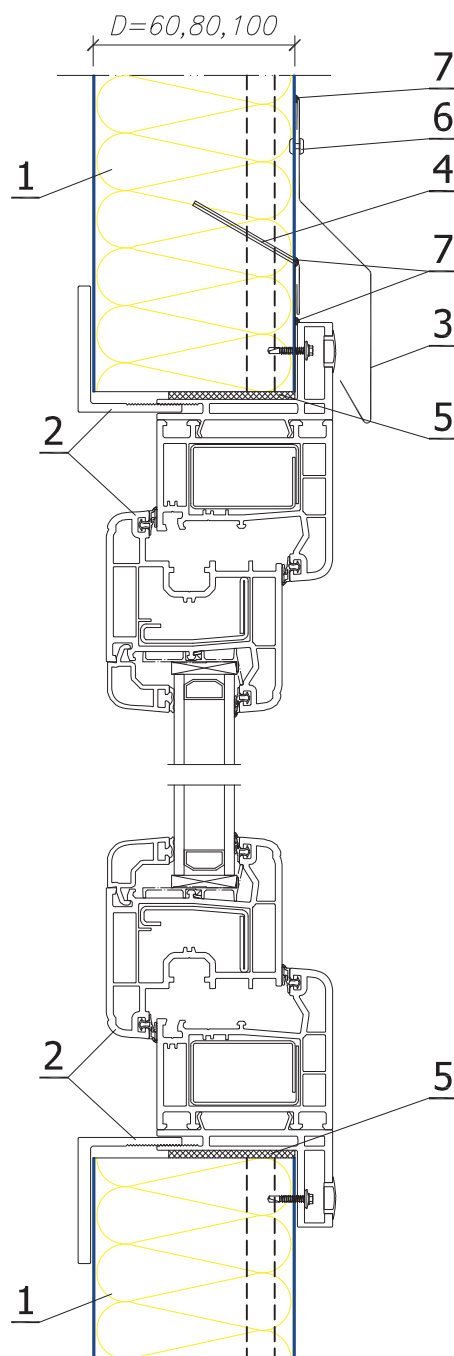
VERTICAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant I – cross-section

Scale
1:3



LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Transom acc. to structure design
3. PVC or aluminium window with a holder and connector
4. Individual covering flashing
5. Individual inner corner
6. Polyethylene, self-adhesive sealing tape (**PES**)
7. Polyethylene caulking foam
8. Tight blind rivet **4.8 x 9.5**
9. Blind rivet **4.8 x 15.1** (for the structure)

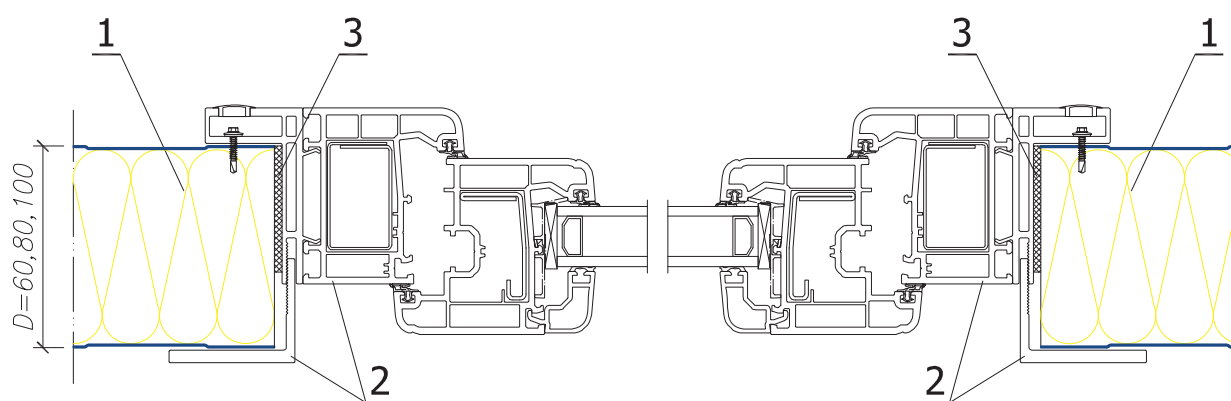


LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. PVC or aluminium window with a fastening profile
3. Drip edge **OB-11** (option)
4. Additional flashing on panels' junction
5. Impregnated polyurethane seal (**PURS**) or caulking foam
6. Tight blind rivet **4.8 x 9.5**
7. Neutral silicone sealant

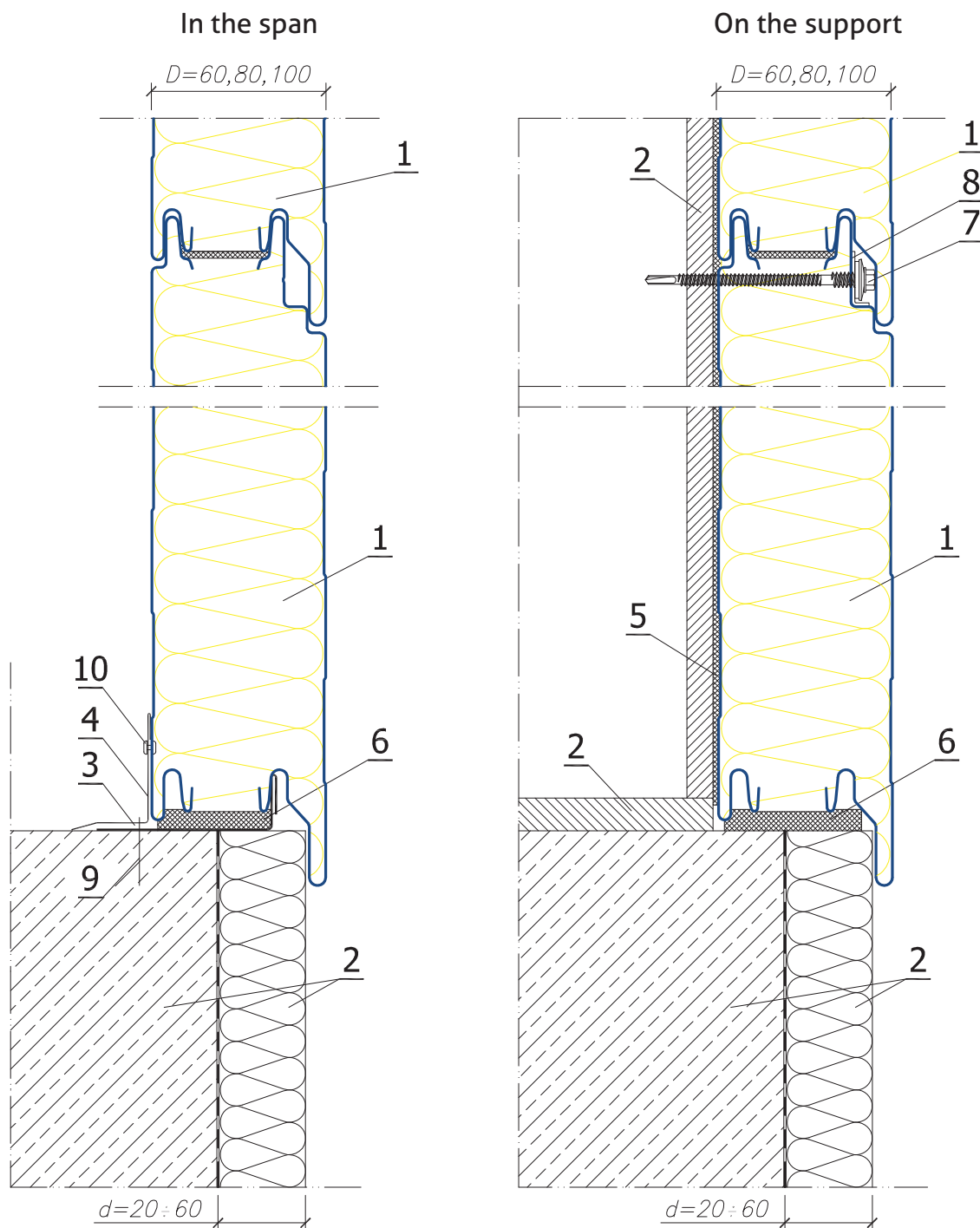
VERTICAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant II – cross-section

Scale
1:3



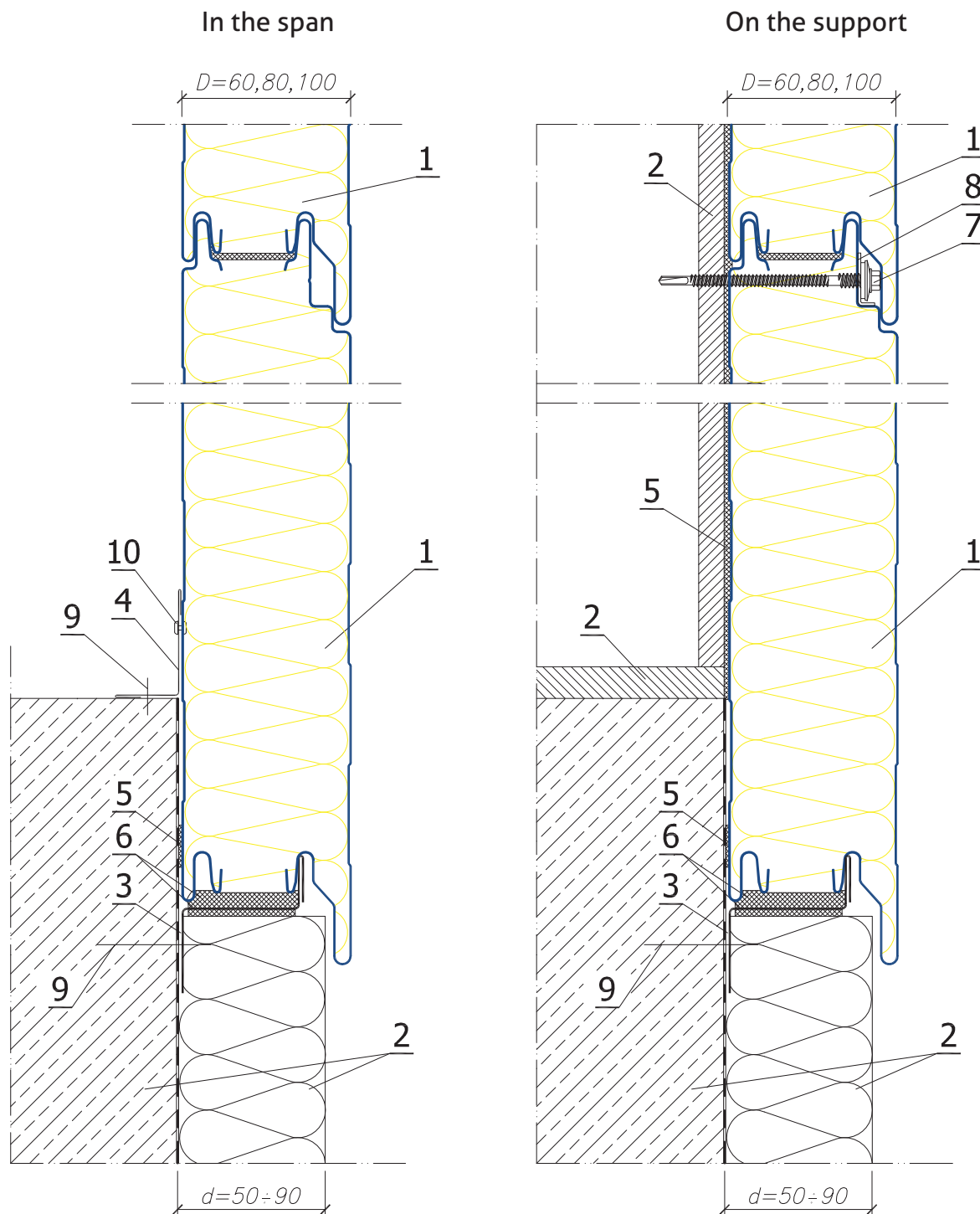
LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. PVC or aluminium window with a fastening profile
3. Impregnated polyurethane seal (**PURS**) or caulking foam



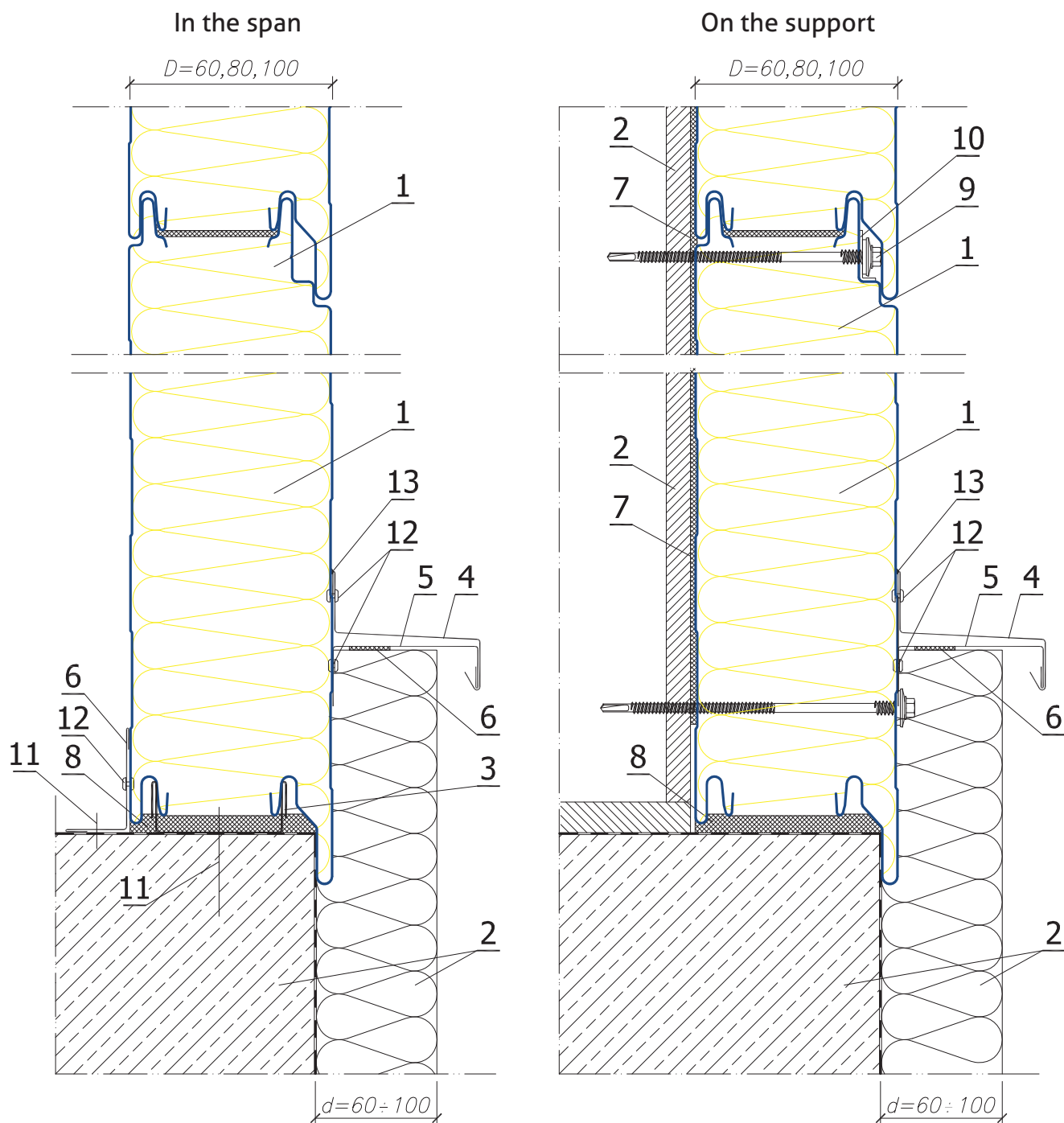
LEGEND:

1. **GORLICKA U / GORLICKA U GS-PIR** wall panel
2. Structural elements acc. to detailed design and thermal insulation carried out after assembly of panel
3. Angle bar **OB-41**
4. Inner corner flashing **OB-07**
5. Polyethylene, self-adhesive sealing tape (**PES**)
6. Impregnated polyurethane seal (**PURS**) or polyurethane caulking foam
7. Self-drilling connector for sandwich panels
8. **PM1** spacer
9. Steel expansion joint for quick assembly
10. Tight blind rivet **4.8 x 9.5**



LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Structural elements acc. to detailed design and thermal insulation carried out after assembly of panel
3. Edge Z-bar **OB-39**
4. Inner corner flashing **OB-06**
5. Polyethylene, self-adhesive sealing tape (**PES**)
6. Impregnated polyurethane seal (**PURS**) or polyurethane caulking foam
7. Self-drilling connector for sandwich panels
8. **PM1** spacer
9. Steel expansion joint for quick assembly
10. Tight blind rivet **4.8 x 9.5**

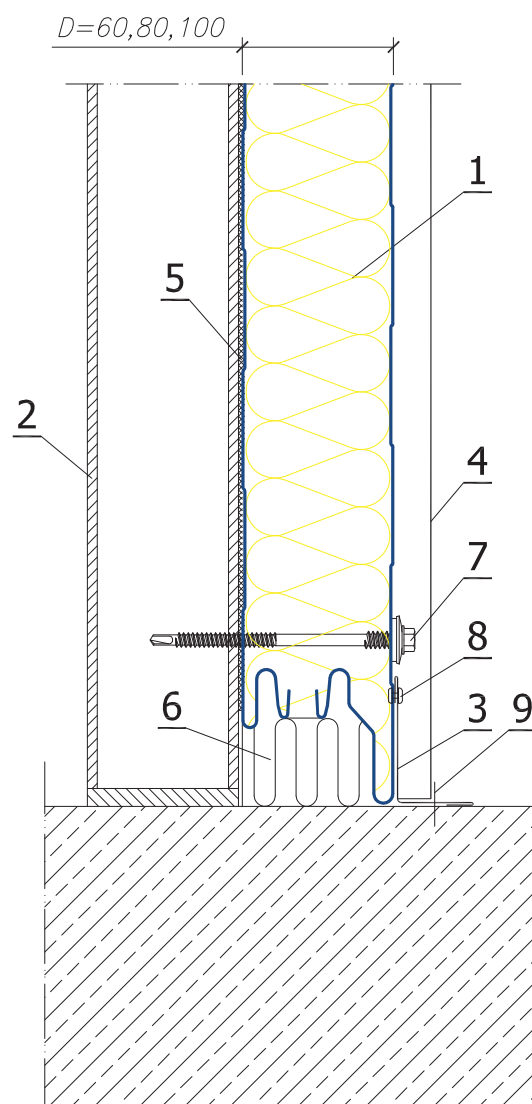
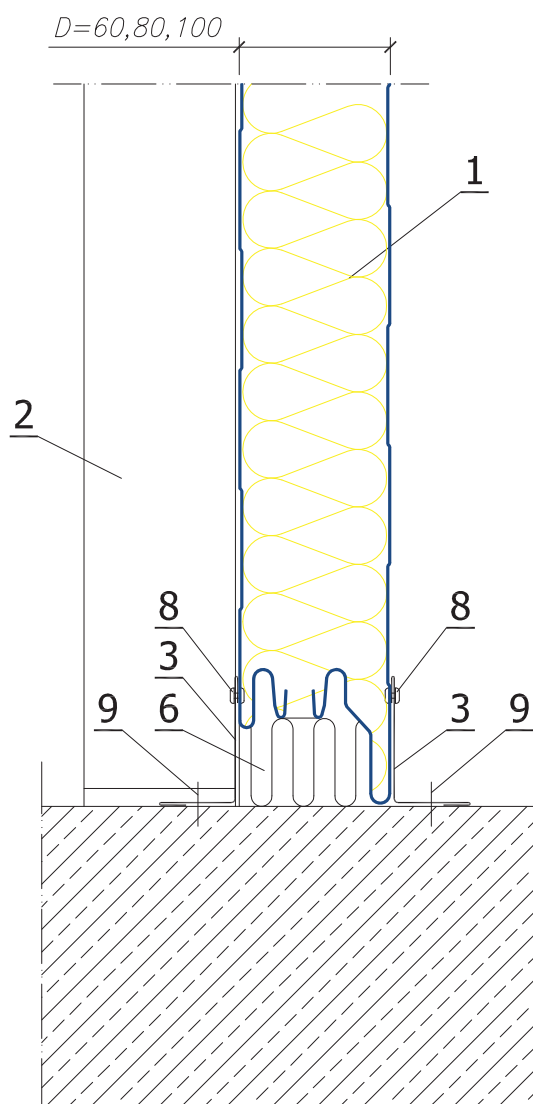


LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Structural elements acc. to detailed design and thermal insulation carried out after assembly of panel
3. Edge channel section OB-40
4. Drip edge OB-15
5. Rigid flashing OB-15a
6. Inner corner flashing OB-06
7. Polyethylene, self-adhesive sealing tape (PES)
8. Polyurethane caulking foam
9. Self-drilling connector for sandwich panels
10. PM1 spacer
11. Steel expansion joint for quick assembly
12. Tight blind rivet 4.8 x 9.5
13. Neutral silicone sealant

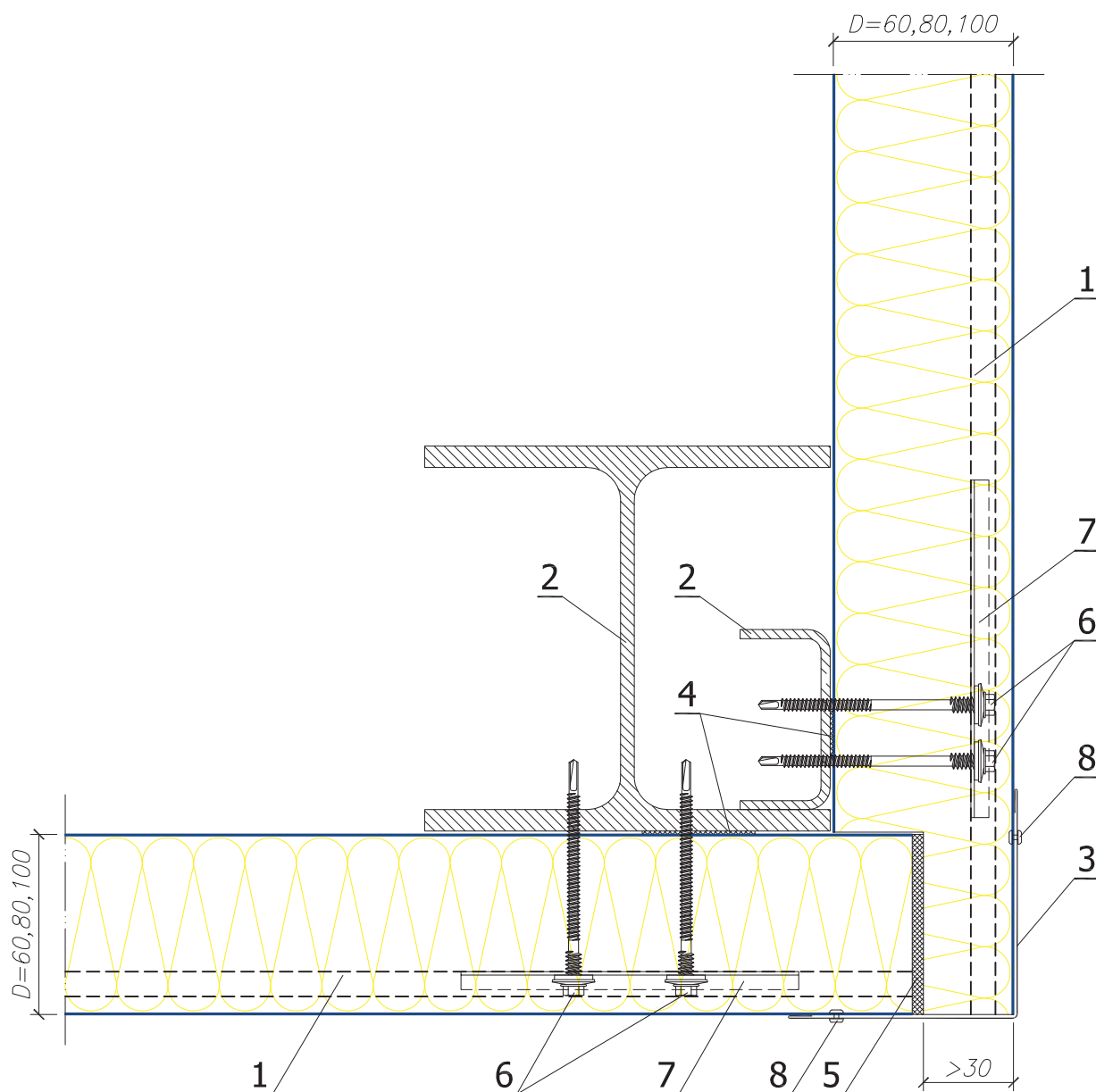
In the span

On the support



LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Steel post acc. to structure design
3. Inner corner flashing **OB-06**
4. Covering flashing for panel junction
5. Polyethylene, self-adhesive sealing tape (**PES**)
6. Thermal insulation carried out on the fastening
7. Self-drilling connector for sandwich panels
8. Tight blind rivet **4.8 x 9.5**
9. Steel expansion joint for quick assembly



LEGEND:

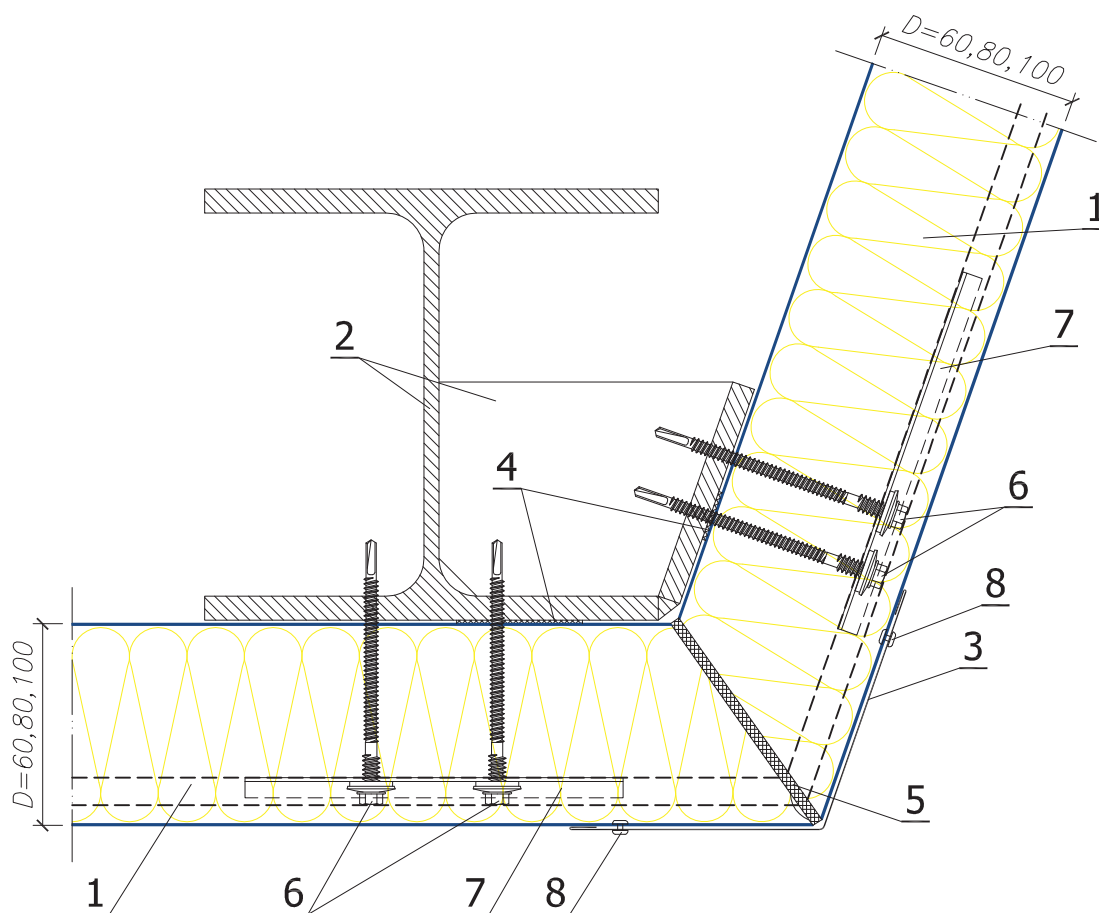
1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Steel post acc. to structure design
3. Outer corner flashing **OB-01**
4. Polyethylene, self-adhesive sealing tape (**PES**)
5. Impregnated polyurethane seal (**PURS**) or caulking foam
6. Self-drilling connector for sandwich panels
7. **PM1** spacer
8. Tight blind rivet **4.8 x 9.5**

HORIZONTAL ARRANGEMENT of panels

Detail of panels' connection in an optional angle corner

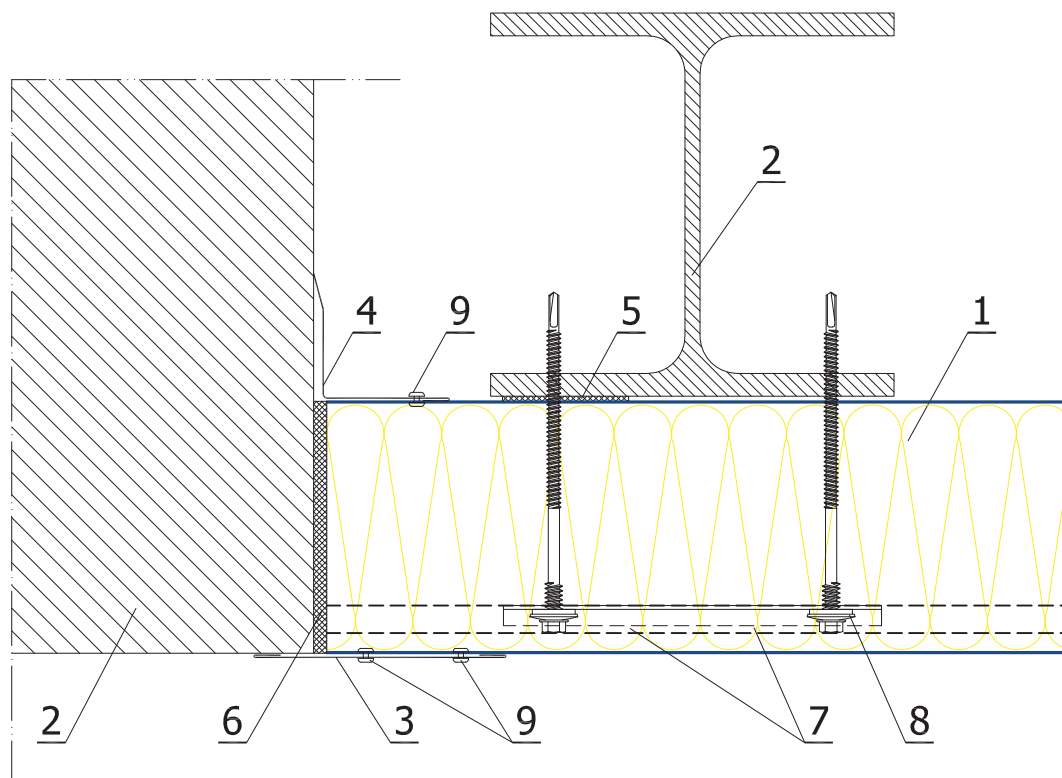
Scale

1:3

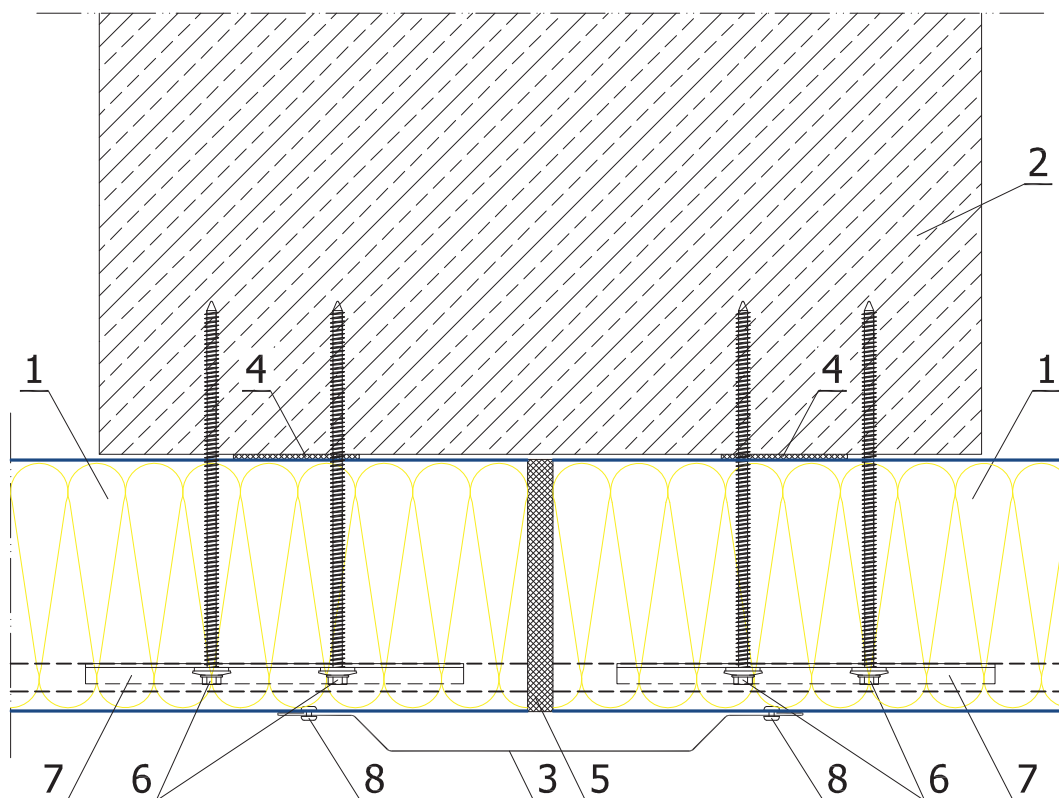


LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Steel post acc. to structure design
3. Outer corner flashing **OB-01**
4. Polyethylene, self-adhesive sealing tape (**PES**)
5. Impregnated polyurethane seal (**PURS**) or caulking foam
6. Self-drilling connector for sandwich panels
7. **PM1** spacer
8. Tight blind rivet **4.8 x 9.5**

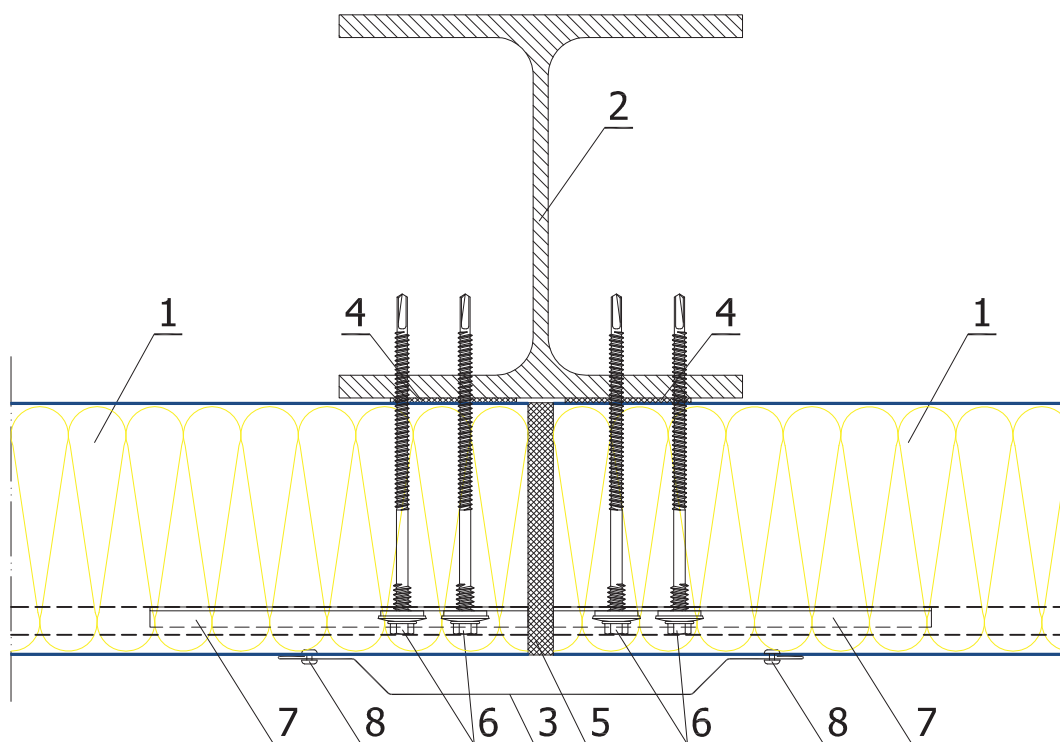

LEGEND:

1. **GORLICKA U / GORLICKA U GS-PIR** wall panel
2. Wall and post acc. to structure design
3. Covering flashing **OB-18**
4. Inner corner flashing **OB-07**
5. Polyethylene, self-adhesive sealing tape (**PES**)
6. Impregnated polyurethane seal (**PURS**) or polyurethane caulking foam
7. Self-drilling connector for sandwich panels
8. PM1 spacer
9. Tight blind rivet **4.8 x 9.5**



LEGEND:

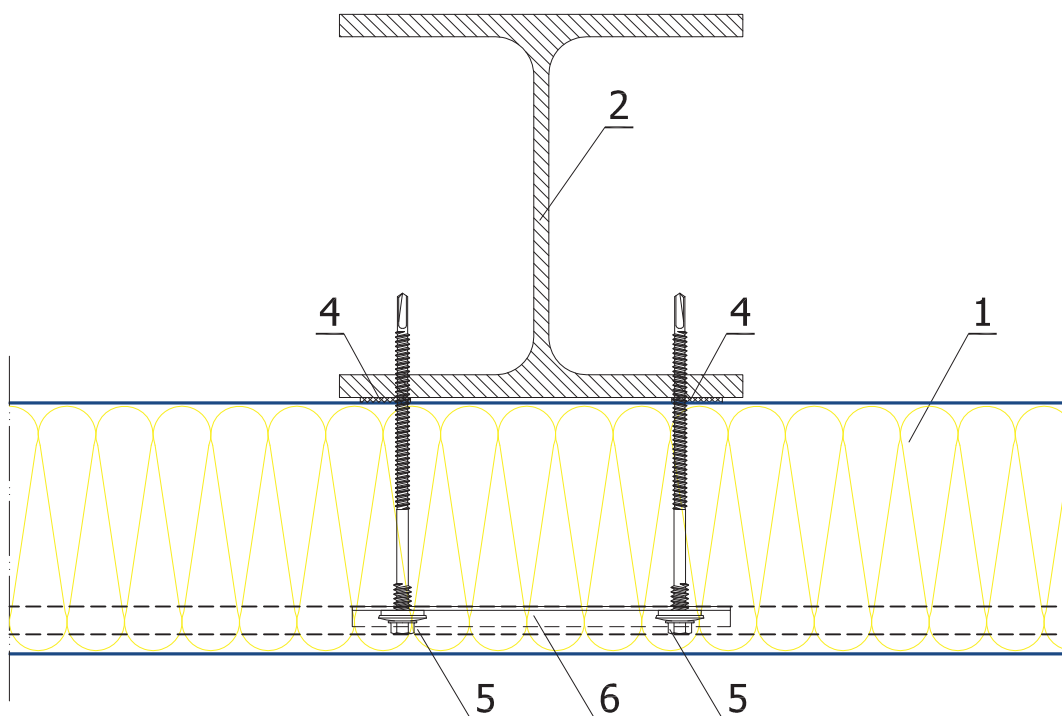
1. **GORLICKA U / GORLICKA U GS-PIR** wall panel
2. Reinforced concrete post acc. to structure design
3. Covering flashing **OB-17**
4. Polyethylene, self-adhesive sealing tape (**PES**)
5. Impregnated polyurethane seal (**PURS**) or polyurethane caulking foam
6. Connector for fastening of sandwich panels to concrete
7. **PM1** spacer
8. Tight blind rivet **4.8 x 9.5**


LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Post acc. to structure design
3. Covering flashing **OB-17**
4. Polyethylene, self-adhesive sealing tape (**PES**)
5. Impregnated polyurethane seal (**PURS**) or polyurethane caulking foam
6. Self-drilling connector for sandwich panels
7. **PM1** spacer
8. Tight blind rivet **4.8 x 9.5**

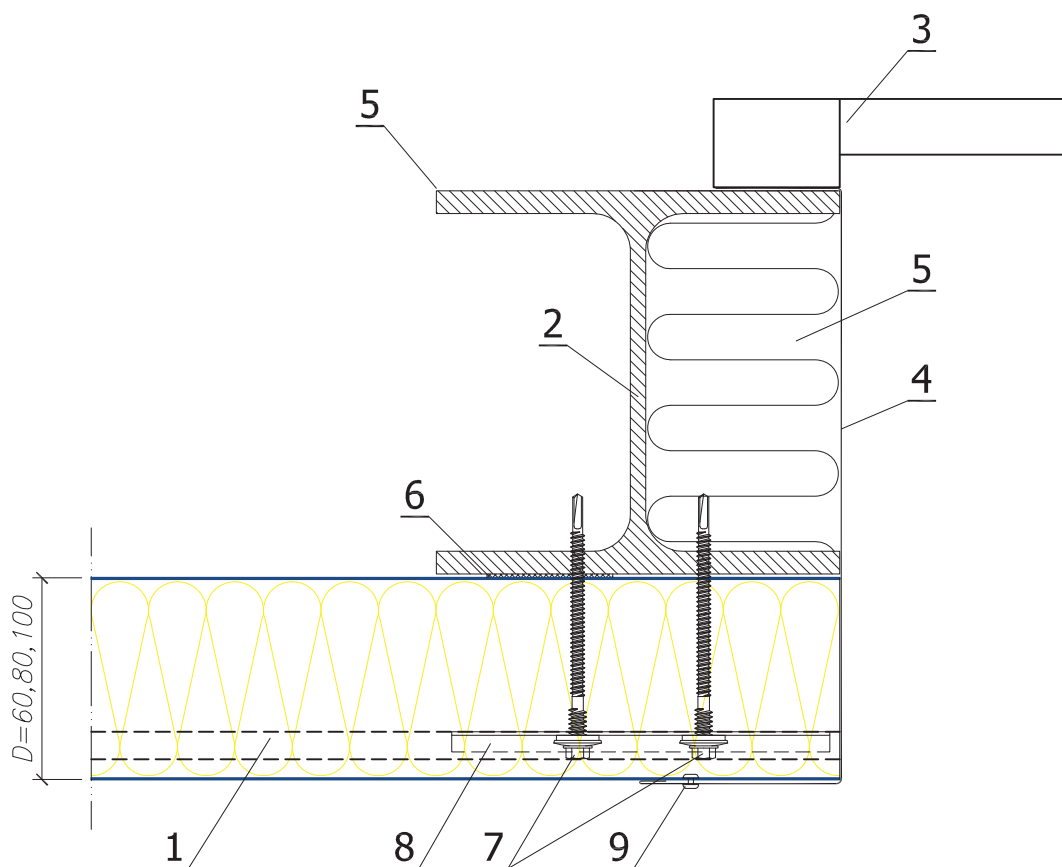
HORIZONTAL ARRANGEMENT of panels
Detail of panel connection to intermediate support

Scale
1:3



LEGEND:

1. **GORLICKA U / GORLICKA U GS-PIR wall panel**
2. **Post acc. to structure design**
3. **Covering flashing**
4. **Polyethylene, self-adhesive sealing tape (PES)**
5. **Self-drilling connector for sandwich panels**
6. **Tight blind rivet 4.8 x 9.5**

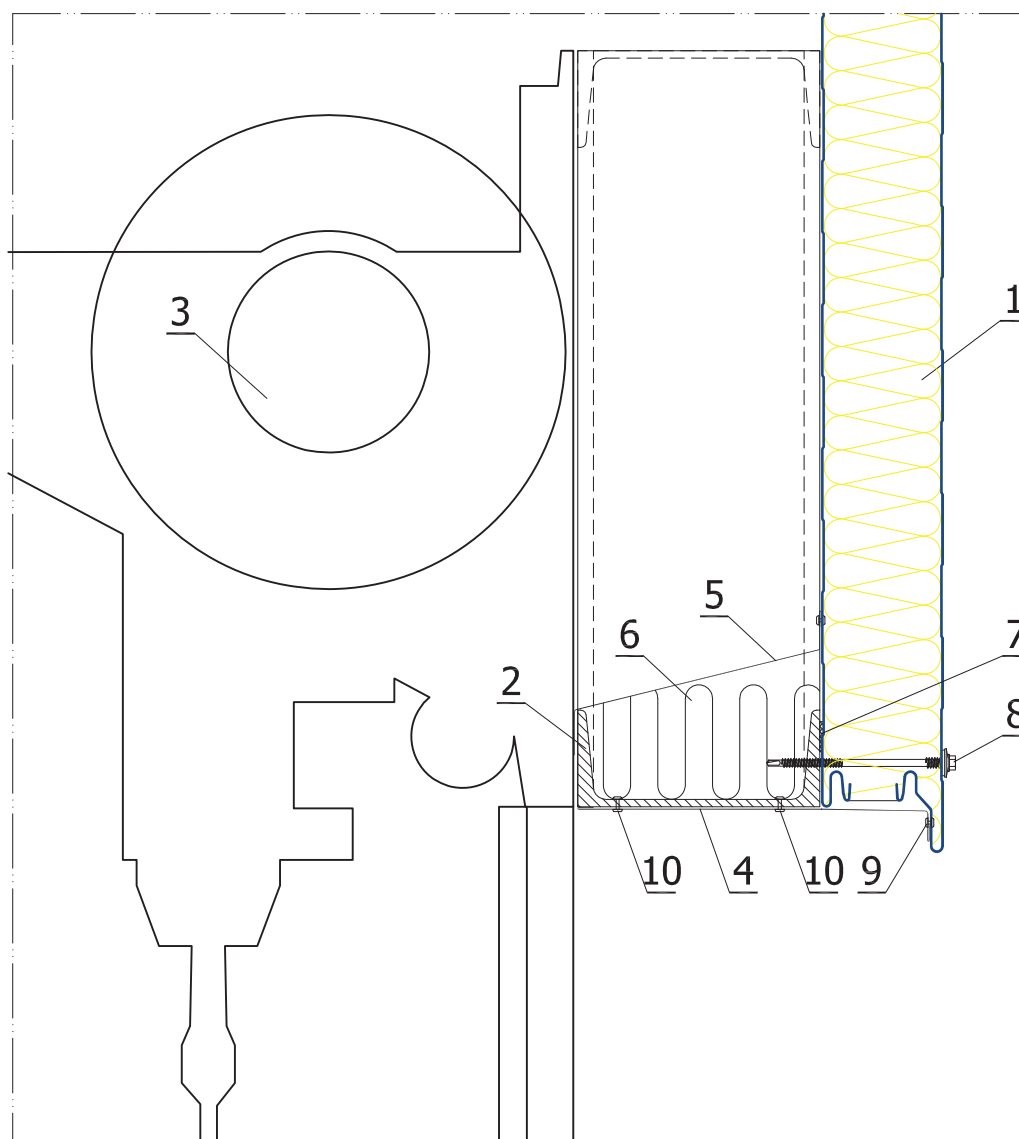


LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Steel post acc. to structure design
3. Industrial door
4. Individual door flashing
5. Thermal insulation on the fastening
6. Polyethylene, self-adhesive sealing tape (PE)
7. Self-drilling connector for sandwich panels
8. PM1 spacer
9. Tight blind rivet 4.8 x 9.5

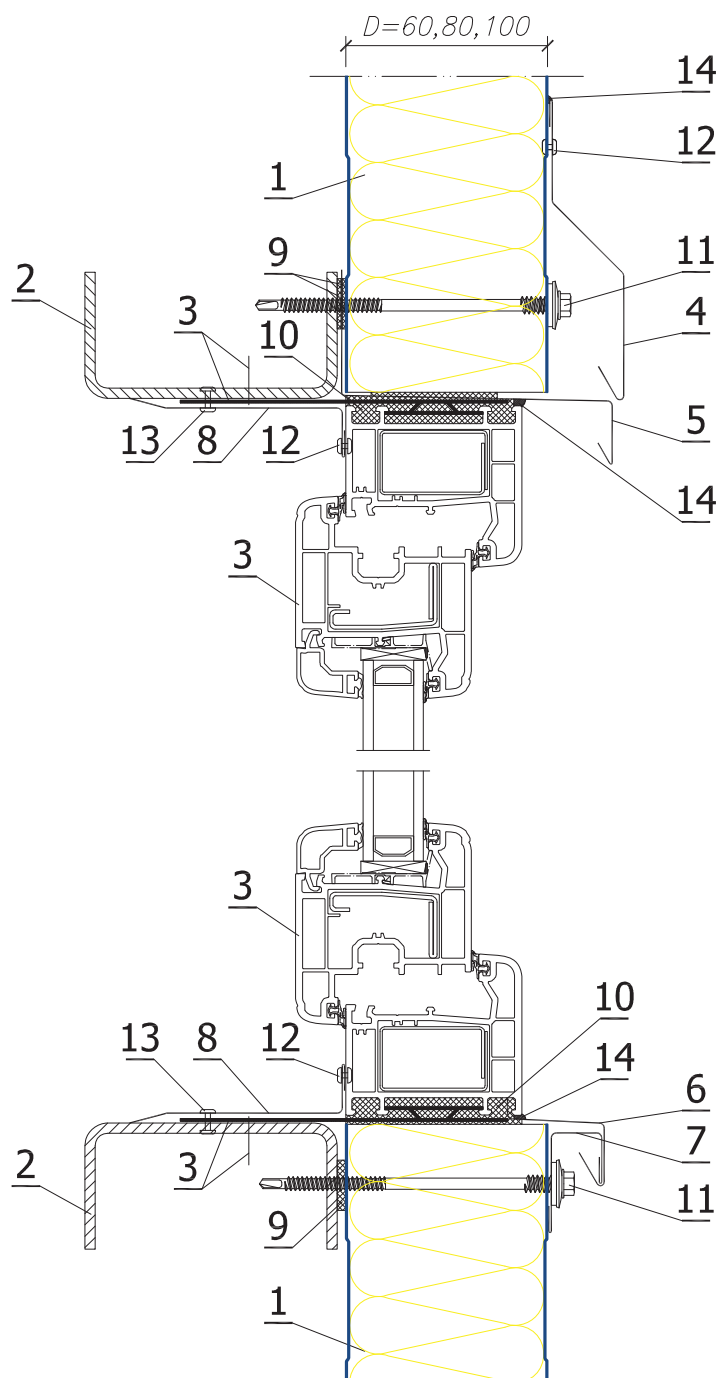
HORIZONTAL ARRANGEMENT of panels
Detail of roll-up door lintel

Scale
1:5



LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. Transom acc. to structure design
3. Industrial door
4. Individual covering flashing
5. Individual covering flashing
6. Thermal insulation on the fastening
7. Polyethylene, self-adhesive sealing tape (PES)
8. Self-drilling connector for sandwich panels
9. Tight blind rivet 4.8 x 9.5
10. Blind rivet 4.8 x 15.1 (for the structure)

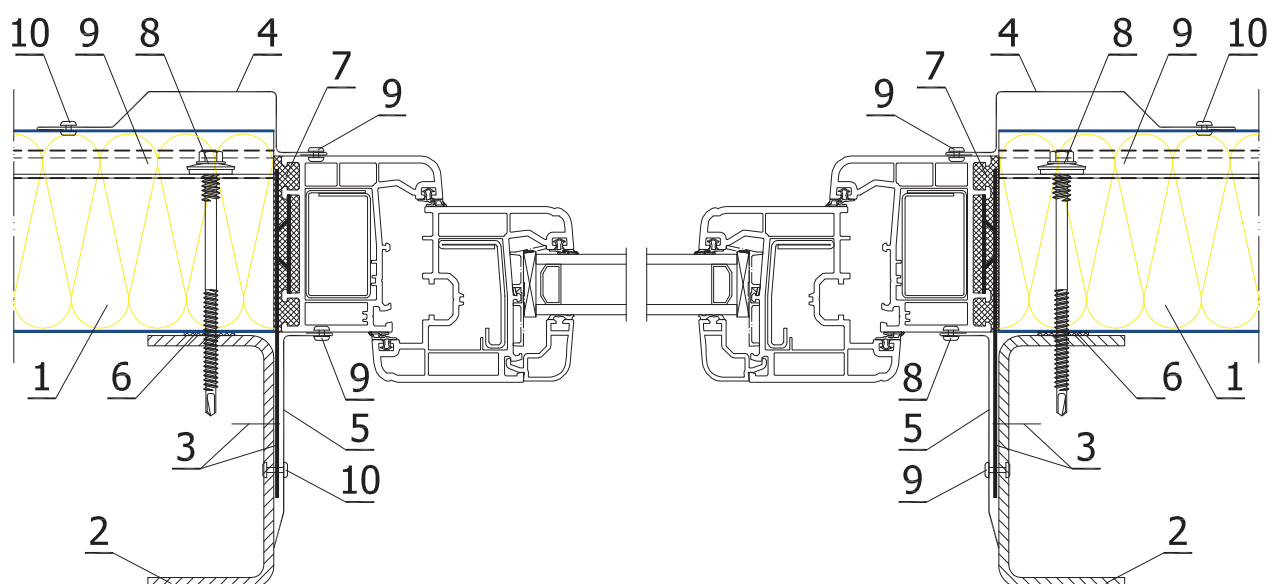


LEGEND:

1. **GORLICKA U / GORLICKA U GS-PIR** wall panel
2. Transom acc. to structure design
3. PVC or aluminium window with a holder and connector
4. Drip edge **OB-11** (option)
5. Drip edge **OB-13**
6. Cill **OB-37**
7. Rigid flashing **OB-16**
8. Individual inner corner
9. Polyethylene, self-adhesive sealing tape (**PES**)
10. Polyethylene caulking foam
11. Self-drilling connector for sandwich panels
12. Tight blind rivet **4.8 x 9.5**
13. Blind rivet **4.8 x 15.1** (for the structure)
14. Neutral silicone sealant

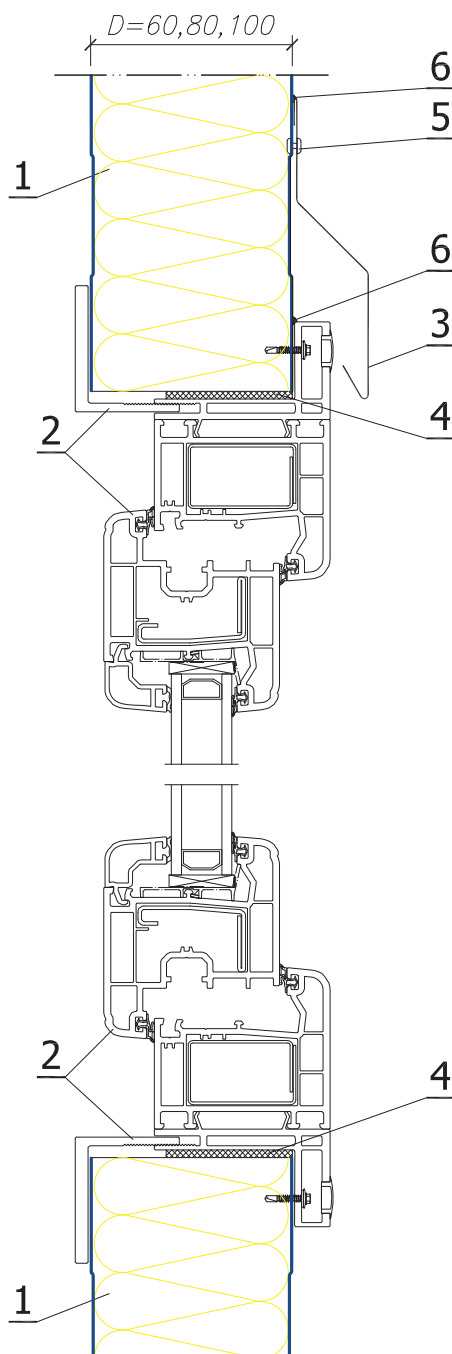
HORIZONTAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant I – cross-section

Scale
1:3



LEGEND:

1. **GORLICKA U / GORLICKA U GS-PIR** wall panel
2. Transom acc. to structure design
3. PVC or aluminium window with a holder and connector
4. Individual covering flashing
5. Individual inner corner
6. Polyethylene, self-adhesive sealing tape (**PES**)
7. Polyethylene caulking foam
8. Self-drilling connector for sandwich panels
9. **PM1** spacer
10. Tight blind rivet **4.8 x 9.5**
11. Blind rivet **4.8 x 15.1** (for the structure)

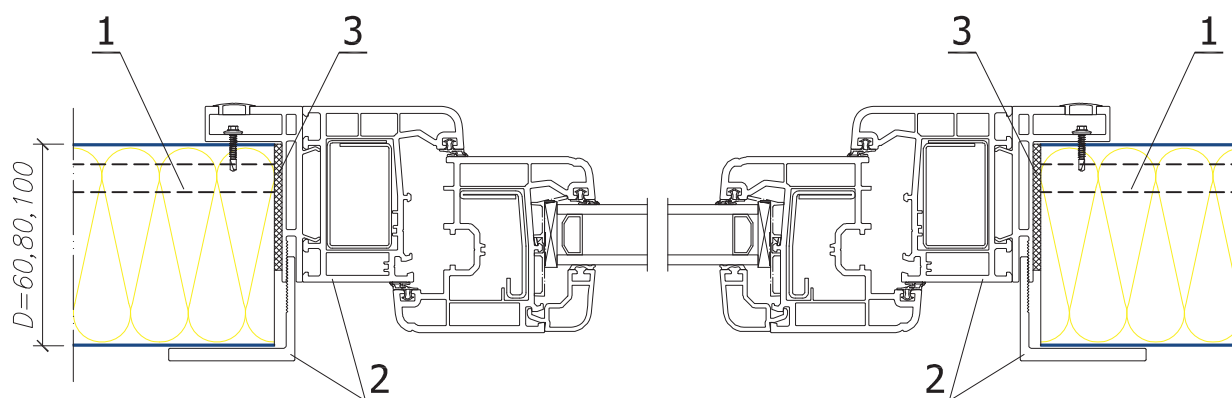


LEGEND:

1. GORLICKA U / GORLICKA U GS-PIR wall panel
2. PVC or aluminium window with a fastening profile
3. Drip edge **OB-11** (option)
4. Impregnated polyurethane seal (**PURS**) or caulking foam
5. Tight blind rivet **4.8 x 9.5**
6. Neutral silicone sealant

HORIZONTAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant II – cross-section

Scale
1:3



LEGEND:

1. **GORLICKA U / GORLICKA U GS-PIR** wall panel
2. PVC or aluminium window with a fastening profile
3. Impregnated polyurethane seal (**PURS**) or caulking foam

APPLICATION

GORLICKA D / GORLICKA D GS-PIR roof panel is designed for roof covers. Panels can be fastened to wooden, steel or reinforced concrete structures with use of connectors.

Recommended minimum gradient of roof slope is 3° (5,2%), for one panel cover (< 16 m), without skylights and 5° (8,7%) for cover made of panels connected along their length. Panels can also be used as the external cladding of walls.

PHYSICAL PROPERTIES

GORLICKA U / GORLICKA U GS-PIR wall panel is produced in the five thicknesses of the core: **40, 60, 80, 100, 120 and 160 mm**. Panels facing is made of double-sided galvanized steel sheets, 0.50 mm thick as per **PN-EN 10326:2006**, with organic polyester coating **25µm** thick. Thermal insulation core of the panels is a rigid polyurethane (**PUR**) or polyisocyanurate (**PIR**) foam with a thickness of **40 kg/m³**. The heat conductivity calculation value of the foam is: $\lambda = 0.022 \text{ W/m}^2\cdot\text{K}$. Modular width of plates is **1000 mm**. The standard panel length is between **2.0 to 12 m**. On special request we deliver panels shorter than **2 m** and longer than **12 m**, with a maximum length of **16.5 meters**. Tightness of panel joints is provided by impregnated polyurethane seals applied in the manufacturing process.

Thickness [mm]	Weight [kg/m²]	Modular width [mm]	Length: typical/available [m]	Lining standard RAL colours								
40	9,84	1000	2,0 - 12,0 / 16,5	9002, 9010, 9006 9007, 5010, 1015 3000, 6029, 7016 7035, 8017								
60	10,64		The minimum length of the roof panel with undercut <table><tr><th>Thickness [mm]</th><th>Length [m]</th></tr><tr><td>≥ 80</td><td>2,0</td></tr><tr><td>60</td><td>2,5</td></tr><tr><td>40</td><td>3,0</td></tr></table>		Thickness [mm]	Length [m]	≥ 80	2,0	60	2,5	40	3,0
Thickness [mm]	Length [m]											
≥ 80	2,0											
60	2,5											
40	3,0											
80	11,44											
100	12,24											
120	13,04											
160	14,64											

Thermal insulation of panels depends on the thickness of the core characterized by **U** thermal coefficient, taking into account the impact of linear thermal bridge appearing on panel joint and point thermal bridge appearing because of connectors. **Acoustic parameters** were determined on the basis of **EN ISO 10140-3**. Coldstore plates can be used as partitions of the requirements of sound insulation no greater than those specified below. **Resistance to chemical corrosion** - **GORLICKA** sandwich panels can be used in environments with atmosphere corrosiveness category **C1, C2, C3** according to **EN ISO 12944-2**.

TECHNICAL PARAMETERS OF PUR CORE

Thickness [mm]	Heat-transfer coefficient U [W/m²·K]	Acoustic insulation	Reaction to fire	Fire resistance	External fire performance
	PN-EN 14509				
40	0,50	$R_w = 24 \text{ dB}$ $R_{a1} = 22 \text{ dB}$ $R_{a2} = 20 \text{ dB}$	B-s2, dO	NPD REI15/RE30/R30 Conditions by classification	$B_{ROOF}(t1,t2,t3)$
60	0,35				
80	0,27				
100	0,22				
120	0,18				
160	0,14				

TECHNICAL PARAMETERS OF PIR CORE

Thickness [mm]	Heat-transfer coefficient U [W/m²·K]	Acoustic insulation	Reaction to fire	Fire resistance	External fire performance
	PN-EN 14509				
40	0,50	$R_w = 24 \text{ dB}$ $R_{a1} = 22 \text{ dB}$ $R_{a2} = 20 \text{ dB}$	B-s1, dO	NPD REI30/RE30/R30 Conditions by classification	$B_{ROOF}(t1,t2,t3)$
60	0,35				
80	0,27				
100	0,22				
120	0,18				
160	0,14				

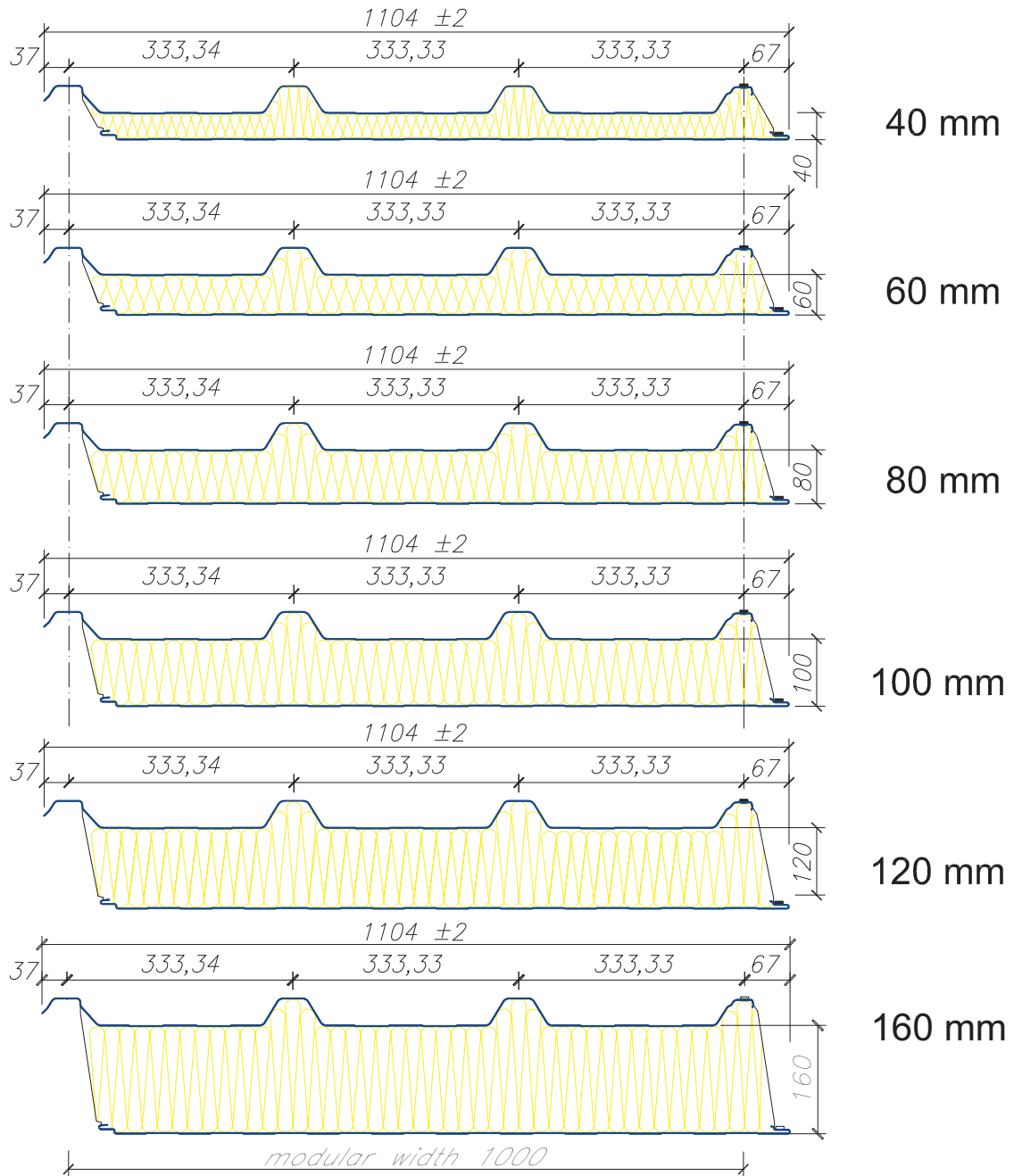
GORLICKA D / GORLICKA D GS-PIR roof sandwich panel

Manufacturing programme for Gorlicka D/Gorlicka D GS-PIR panel:
Panel thicknesses
Profiles of outer and inner facing

Scale
1:10
1:1

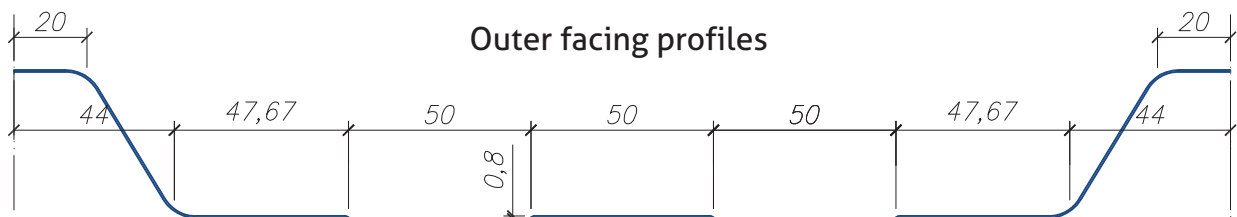


Panel thickness



Trapezoidal

Outer facing profiles



Inner facing profiles



LOAD SPAN TABLES

Table of allowed loads for GORLICKA D wall sandwich panel with 0.5 mm facing in bright colours, mounted as a multi-span element, in direction to support (pressure).

Panel thickness	The load due to:	The maximum load [kN/m ²] on the span length [m]:										
		1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5
40	SGN (q _d)	3,344	2,395	1,865	1,331	0,843	0,562	0,378	0,253	-	-	-
	SGU (q _k)	1,663	1,143	0,828	0,617	0,467	0,356	0,272	0,206	-	-	-
60	SGN (q _d)	4,944	3,533	2,744	2,129	1,348	0,908	0,636	0,452	0,318	-	-
	SGU (q _k)	2,620	1,830	1,356	1,040	0,814	0,645	0,514	0,411	0,329	-	-
80	SGN (q _d)	5,553	4,018	3,130	2,553	1,918	1,292	0,910	0,660	0,486	0,352	-
	SGU (q _k)	3,583	2,530	1,899	1,478	1,117	0,950	0,775	0,636	0,523	0,432	-
100	SGN (q _d)	5,868	4,242	3,301	2,690	2,263	1,713	1,207	0,879	0,656	0,494	0,366
	SGU (q _k)	4,552	3,237	2,451	1,926	1,550	1,267	1,047	0,872	0,729	0,612	0,515
120	SGN (q _d)	5,860	4,231	3,286	2,674	2,246	1,930	1,527	1,114	0,833	0,634	0,485
	SGU (q _k)	5,525	3,950	3,008	2,380	1,929	1,591	1,327	1,116	0,944	0,802	0,683

Table of allowed loads for GORLICKA D wall sandwich panel with 0.5 mm facing in bright colours, mounted as a multi-span element, in direction from support (suction).

Panel thickness	The load due to:	The maximum load [kN/m ²] on the span length [m]:										
		1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5
40	SGN (q _d)	1,835	1,365	1,092	0,913	0,785	0,655	0,494	0,385	-	-	-
	SGU (q _k)	1,511	1,122	0,896	0,747	0,641	0,562	0,501	0,438	-	-	-
60	SGN (q _d)	1,792	1,330	1,065	0,891	0,768	0,675	0,603	0,545	0,455	-	-
	SGU (q _k)	1,484	1,099	0,878	0,733	0,630	0,553	0,493	0,445	0,406	-	-
80	SGN (q _d)	1,758	1,300	1,040	0,871	0,752	0,662	0,592	0,535	0,474	0,382	-
	SGU (q _k)	1,463	1,080	0,862	0,720	0,620	0,545	0,486	0,439	0,401	0,368	-
100	SGN (q _d)	1,730	1,274	1,018	0,853	0,736	0,649	0,581	0,526	0,481	0,443	0,400
	SGU (q _k)	1,445	1,064	0,848	0,708	0,610	0,536	0,479	0,433	0,396	0,364	0,337
120	SGN (q _d)	1,706	1,251	0,997	0,835	0,722	0,637	0,571	0,518	0,474	0,437	0,406
	SGU (q _k)	1,431	1,049	0,835	0,697	0,600	0,528	0,472	0,428	0,391	0,360	0,333

Load tables are prepared according to PN-EN 14 509 for panels with linings in bright colors and for internal temperature T = 20°C, which are fixed with three screws without calotte. Deflection condition was adopted to L/200 (included creep and dead weight of the panel) in the case of different sheet thickness, temperature, or dark colors lining it is necessary to perform separate calculations. The minimum width of the support 40/60 mm. A detailed list of loads is available on the website.

PACKING AND SHIPPING

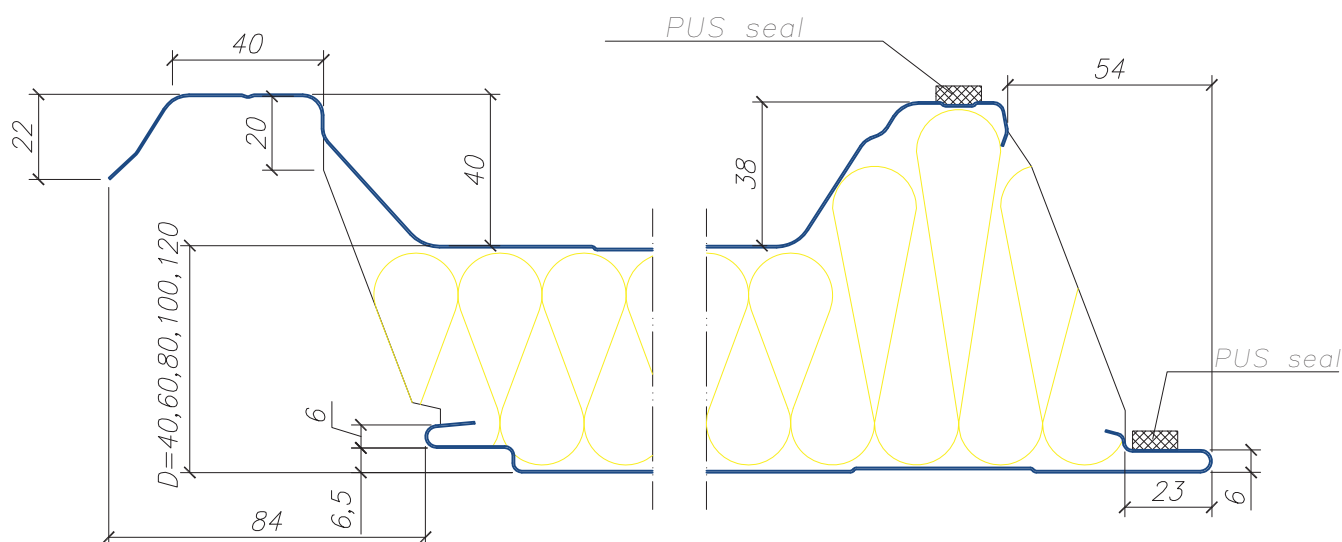
GORLICKA sandwich panels are packed in packages on pallets to allow their transport. The number of panels in each package depends on their thickness. Details in the table below.

Panel thickness [mm]	40	60	80	100	120	160
Maximum number of panels in	14	11	9	8	7	6

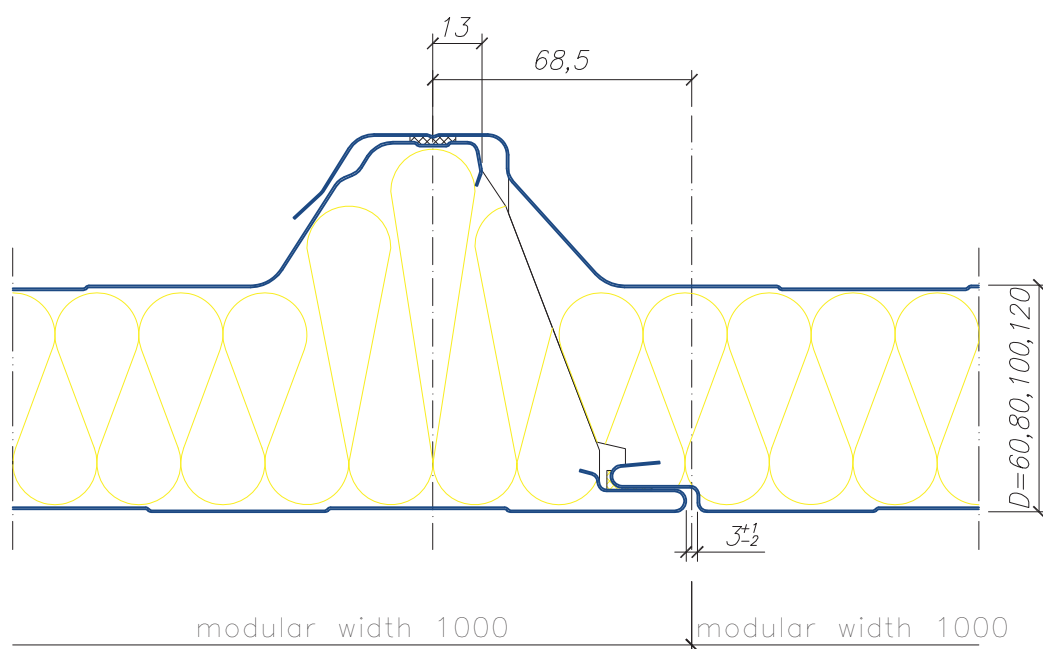
**Selected details of cladding
made of GORLICKA D / GORLICKA D GS-PIR
sandwich panels**

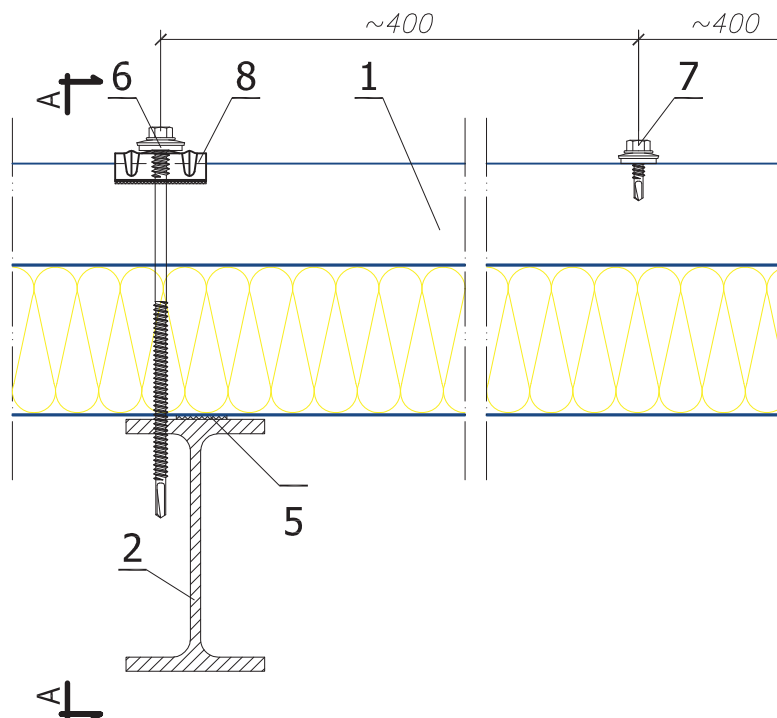
Detail of cam-lock and panels' connection	80
Detail of panels' fastening	81
Detail of panels' connection in roof ridge	82
Detail of water evacuation in a valley	83
Detail of roof at attic. Slope profile	84
Detail of roof attic. Slope cross-section	85
Detail of connection to wall in monopitch roof – variant I	86
Detail of connection to wall in monopitch roof – variant II	87
Detail of eave cross-section – left side	88
Detail of eave cross-section – right side	89
Detail of water evacuation to gutter – variant I	90
Detail of water evacuation to gutter – variant II	91
Detail of panel connection to reinforced concrete or masonry wall	92
Detail of roof panels' connection along the length – panelcut options	93
Detail of skylight in roof ridge	94
Detail of ventilation duct (max. $\varnothing = 250$) penetration through roof	95

Shape of cam-lock for panels

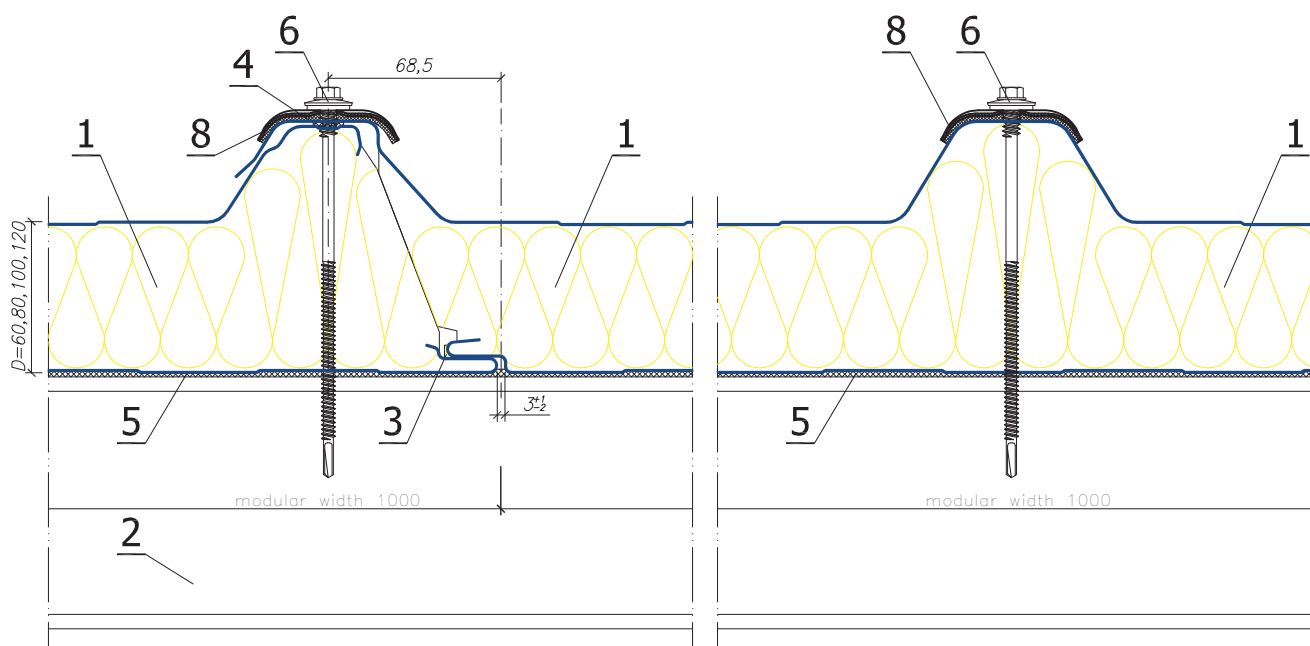


Detail of panels' connection





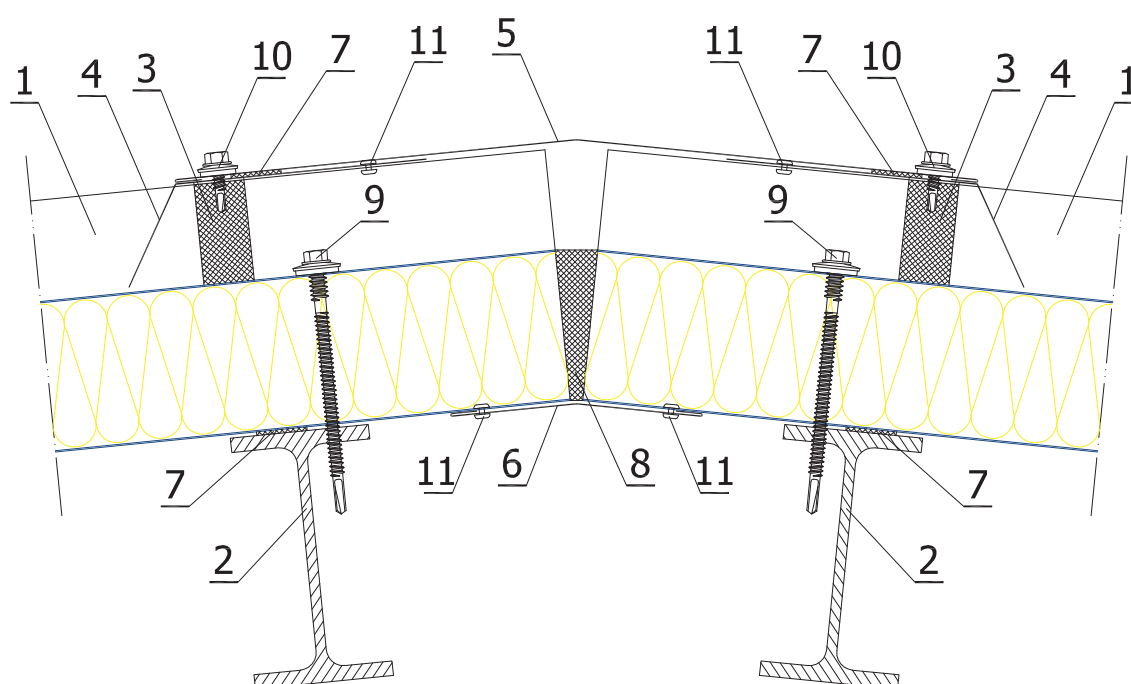
A-A cross-section



LEGEND:

1. **GORLICKA D/GORLICKA D GS-PIR** roof panel
2. Purlin acc. to structure design
3. Factory-installed **PUS** seal
4. **PUS** seal applied on the fastening
5. Polyethylene, self-adhesive sealing tape (**PES**)
6. Self-drilling connector for sandwich panels
7. Self-drilling connector for steel sheet
8. Calotte - spacer

NOTE: Every panel should be fastened to the structure with two connectors, and with three connectors on edges

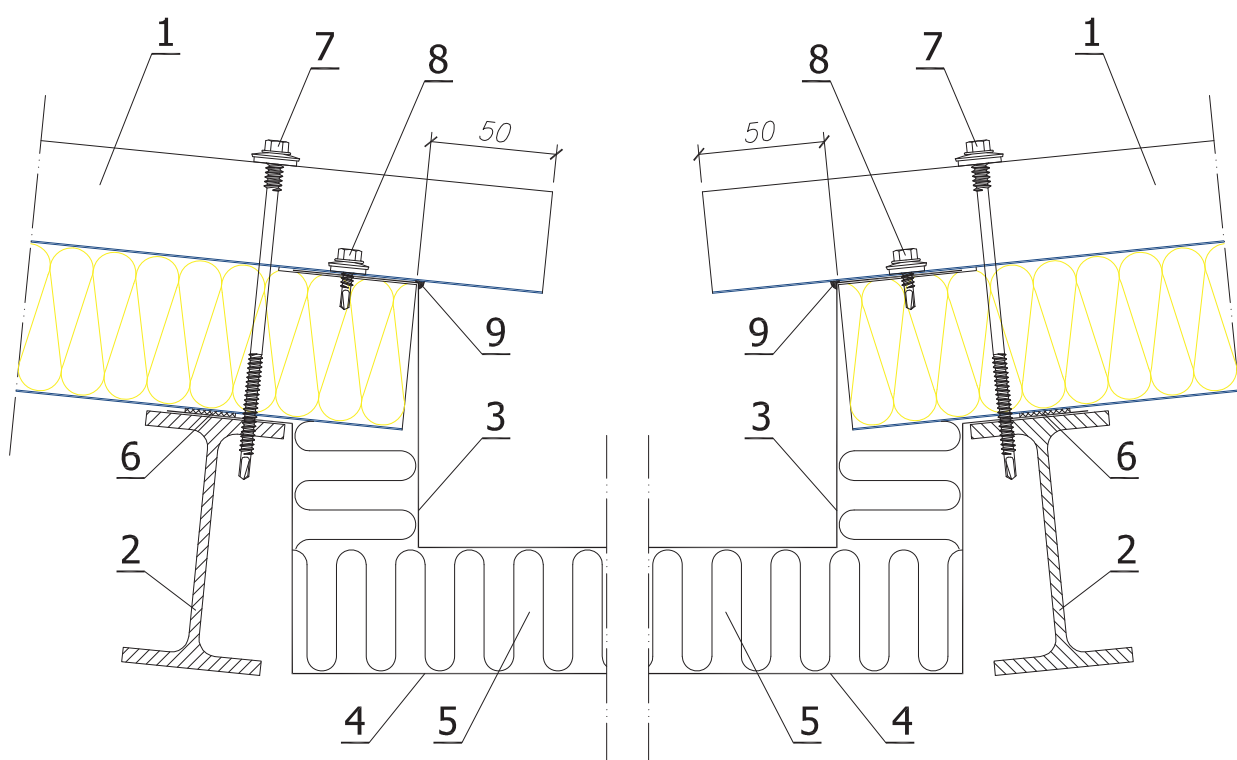


LEGEND:

1. GORLICKA D/GORLICKA D GS-PIR roof panel
2. Purlin acc. to structure design
3. Profiled seal (PE)
4. Profiled flashing OB-28
5. Top roof ridge flashing OB-22
6. Bottom roof ridge flashing OB-23
7. Polyethylene, self-adhesive sealing tape (PES)
8. Polyurethane caulking foam
9. Self-drilling connector for sandwich panels
10. Self-drilling connector for steel sheet
11. Tight blind rivet 4.8 x 9.5

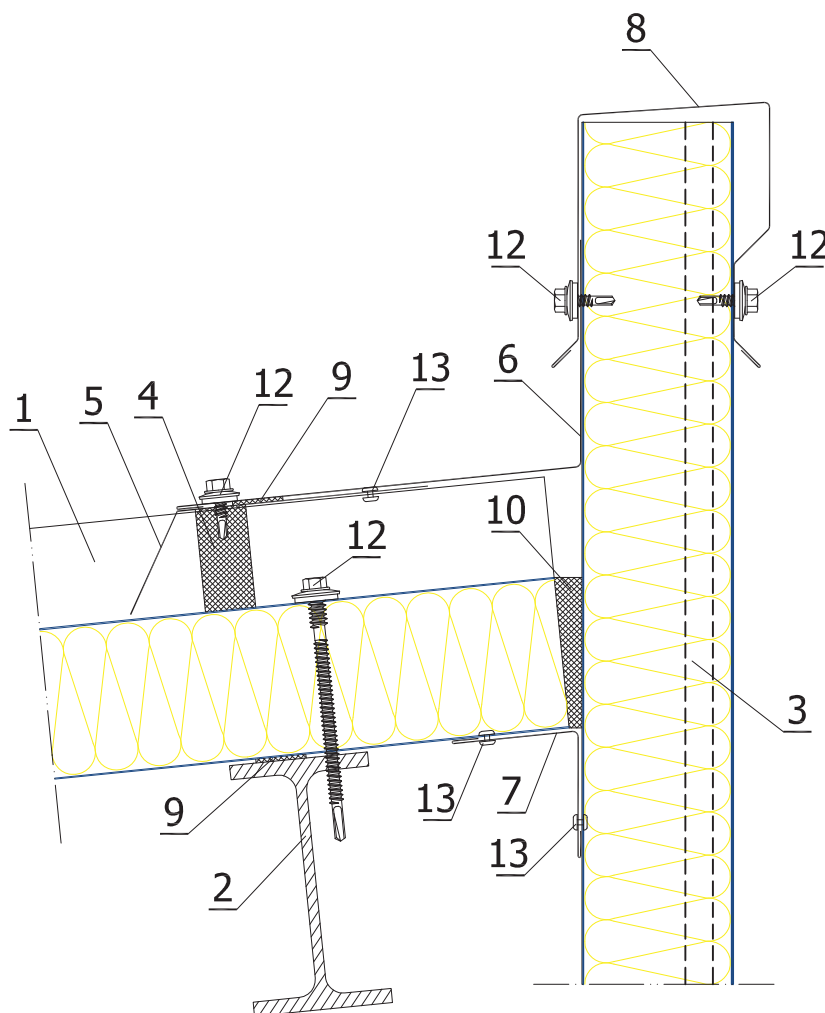
Detail of water evacuation in a valley

Scale
1:3



LEGEND:

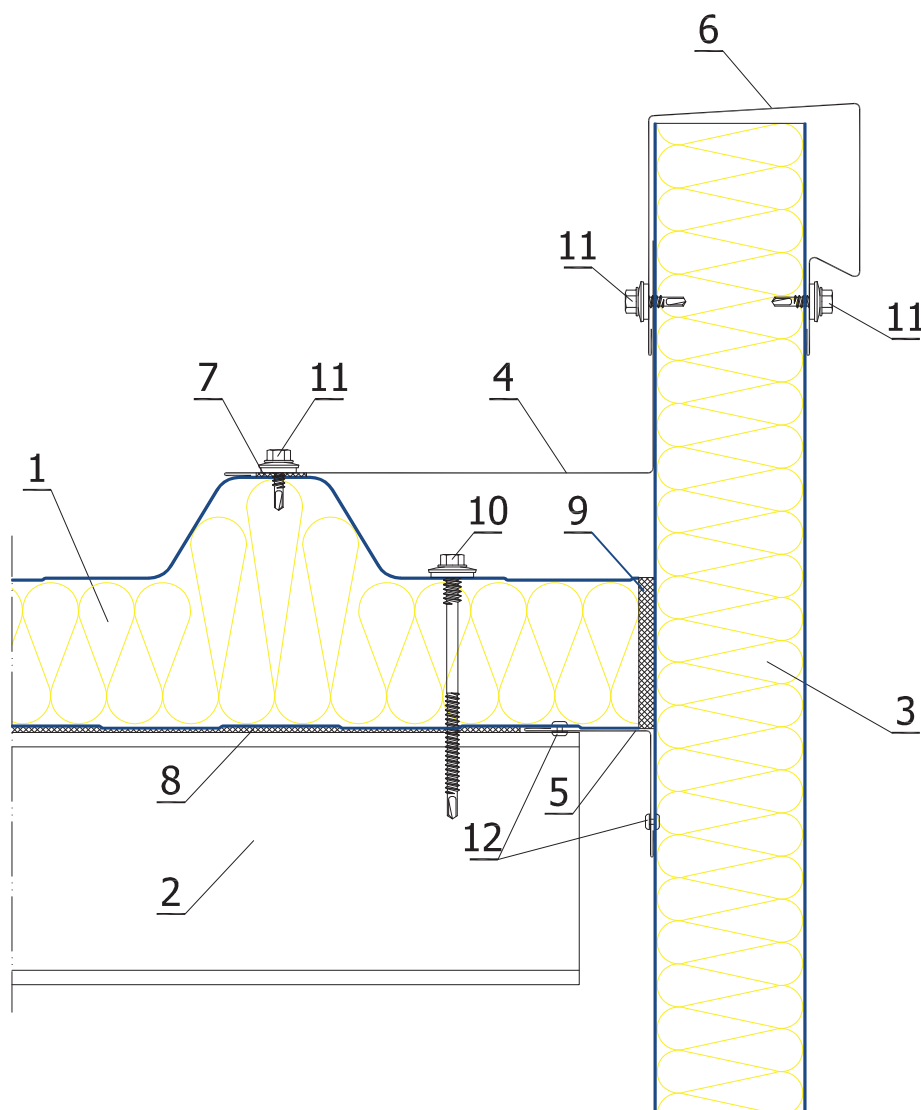
1. GORLICKA D/GORLICKA D GS-PIR roof panel
2. Purlin acc. to structure design
3. Individual inner gutter profile
4. Individual outer gutter profile
5. Thermal insulation carried out on the fastening
6. Polyethylene, self-adhesive sealing tape (**PES**)
7. Self-drilling connector for sandwich panels
8. Self-drilling connector for steel sheet
9. Butyl sealing compound


LEGEND:

1. **GORLICKA D/GORLICKA D GS-PIR** roof panel
2. Purlin acc. to structure design
3. **GORLICKA U/GORLICKA U GS-PIR** wall panel
4. Profiled seal (**PE**)
5. Profiled flashing **OB-28**
6. Roof covering flashing **OB-29**
7. Inner corner flashing **OB-02**
8. Attic flashing **OB-34**
9. Polyethylene, self-adhesive sealing tape (**PES**)
10. Polyurethane caulking foam
11. Self-drilling connector for sandwich panels
12. Self-drilling connector for steel sheet
13. Tight blind rivet **4.8 x 9.5**

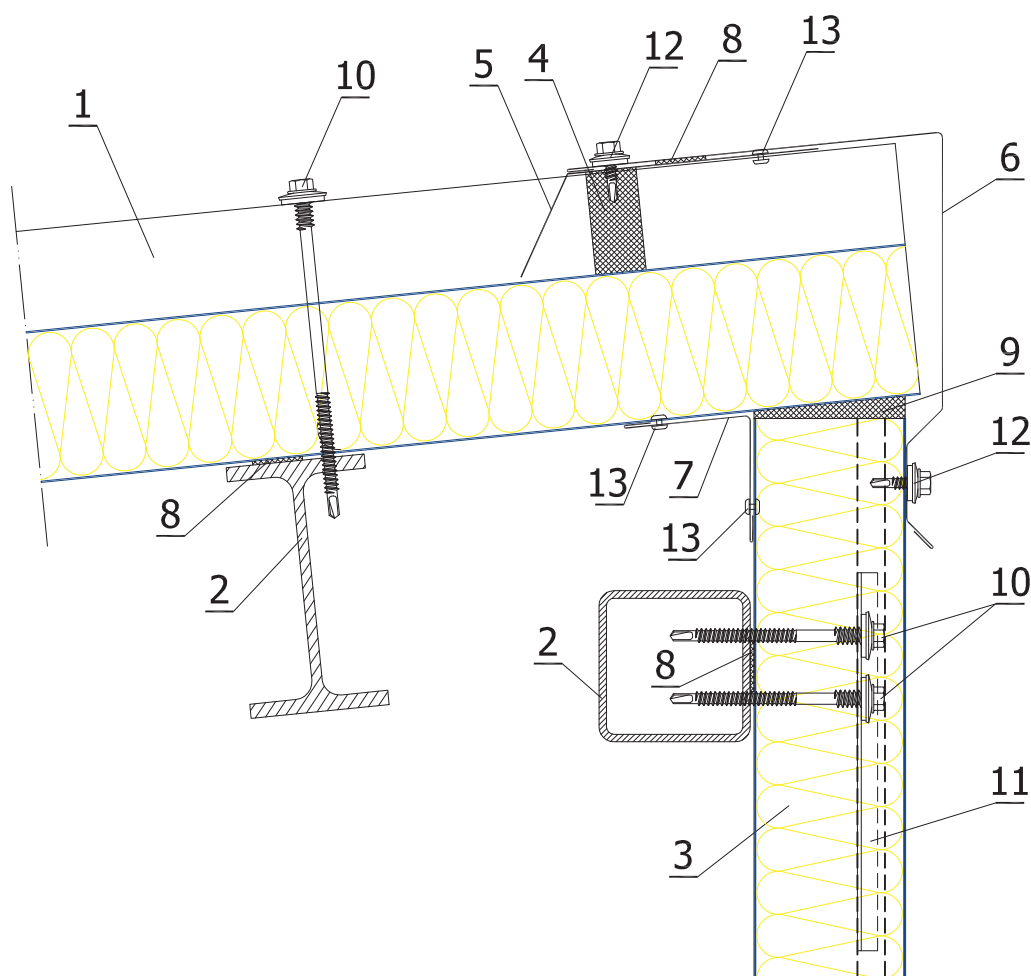
Detail of roof at attic
Slope cross-section

Scale
1:3



LEGEND:

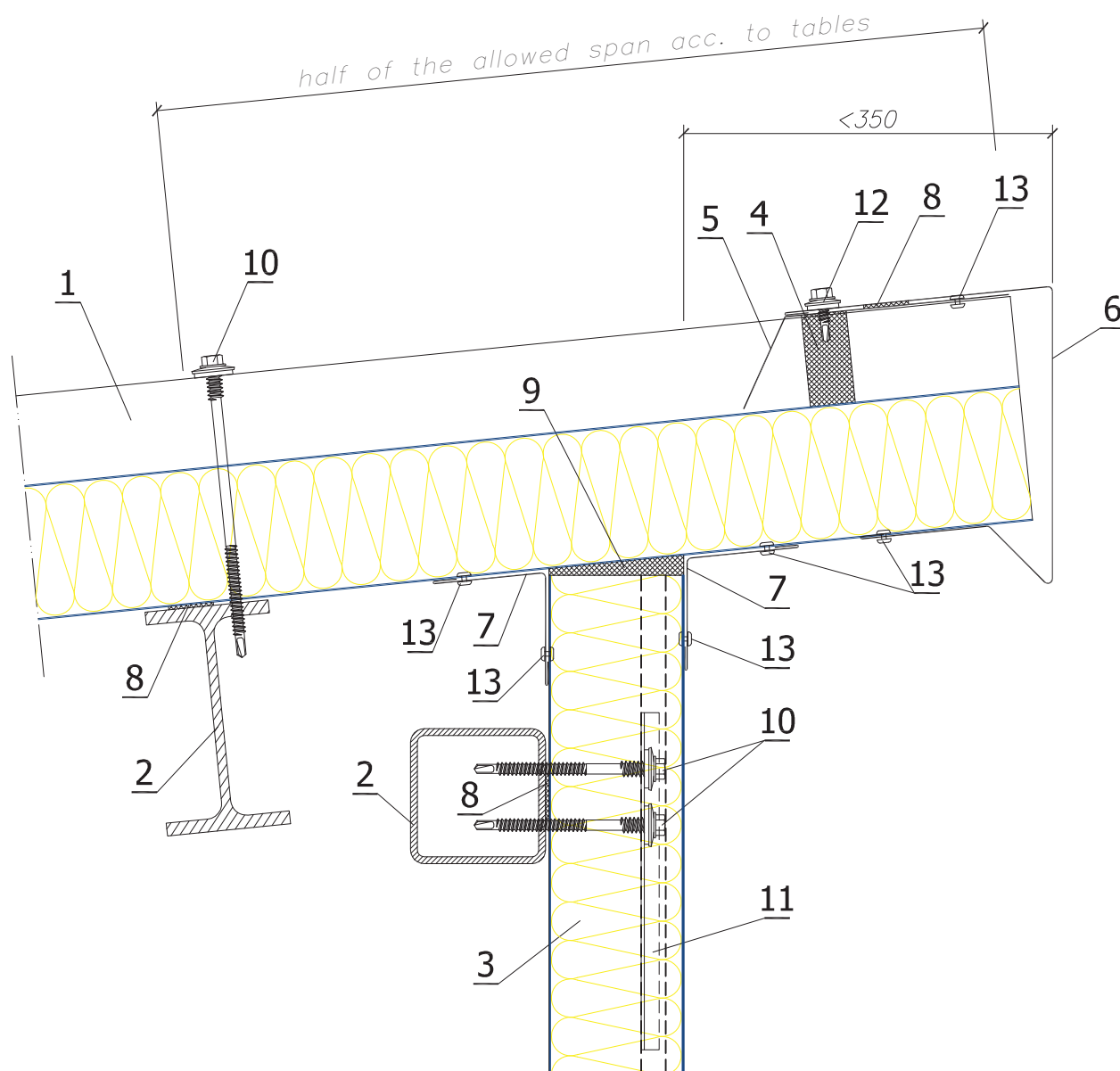
1. **GORLICKA D/GORLICKA D GS-PIR** roof panel
2. Purlin acc. to structure design
3. **GORLICKA S/GORLICKA S GS-PIR** wall panel
4. Roof covering flashing **OB-29**
5. Inner corner flashing **OB-02**
6. Attic flashing **OB-35**
7. Butyl sealing tape
8. Polyethylene, self-adhesive sealing tape (**PES**)
9. Polyurethane caulking foam
10. Self-drilling connector for sandwich panels
11. Self-drilling connector for steel sheet
12. Tight blind rivet **4.8 x 9.5**


LEGEND:

1. **GORLICKA D/GORLICKA D GS-PIR** roof panel
2. Structure acc. to structure design
3. **GORLICKA U/GORLICKA U GS-PIR** wall panel
4. Profiled seal (PE)
5. Profiled flashing **OB-28**
6. Top flashing **OB-32**
7. Inner corner flashing **OB-02**
8. Polyethylene, self-adhesive sealing tape (**PES**)
9. Polyurethane caulking foam
10. Self-drilling connector for sandwich panels
11. **PM1** spacer
12. Self-drilling connector for steel sheet
13. Tight blind rivet **4.8 x 9.5**

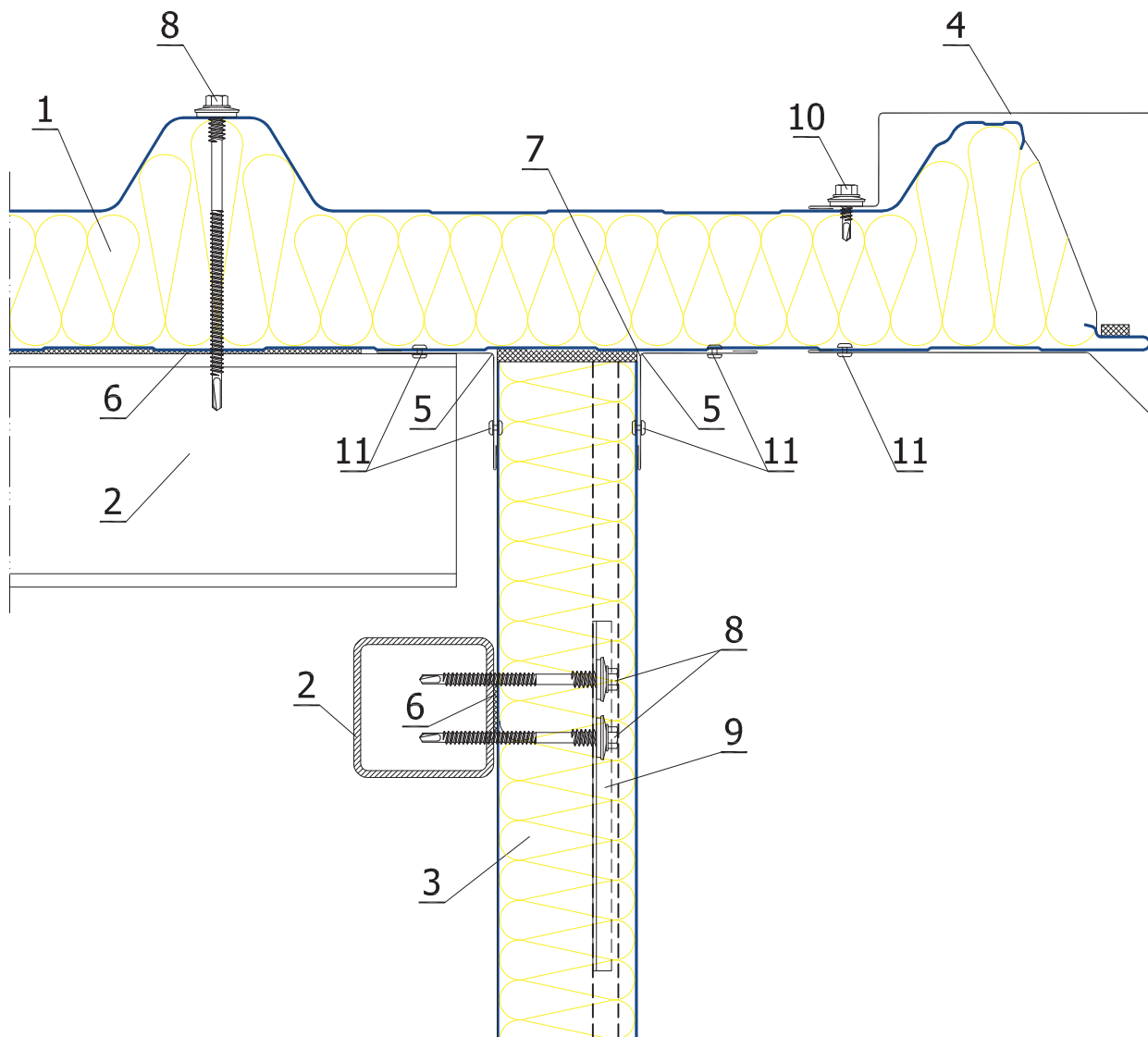
Detail of connection to wall in monopitch roof
Variant II

Scale
1:3



LEGEND:

1. GORLICKA D/GORLICKA D GS-PIR roof panel
2. Structure acc. to structure design
3. GORLICKA U/GORLICKA U GS-PIR wall panel
4. Profiled seal (PE)
5. Profiled flashing OB-28
6. Top flashing OB-31
7. Inner corner flashing OB-02
8. Polyethylene, self-adhesive sealing tape (PES)
9. Polyurethane caulking foam
10. Self-drilling connector for sandwich panels
11. PM1 spacer
12. Self-drilling connector for steel sheet
13. Tight blind rivet 4.8 x 9.5

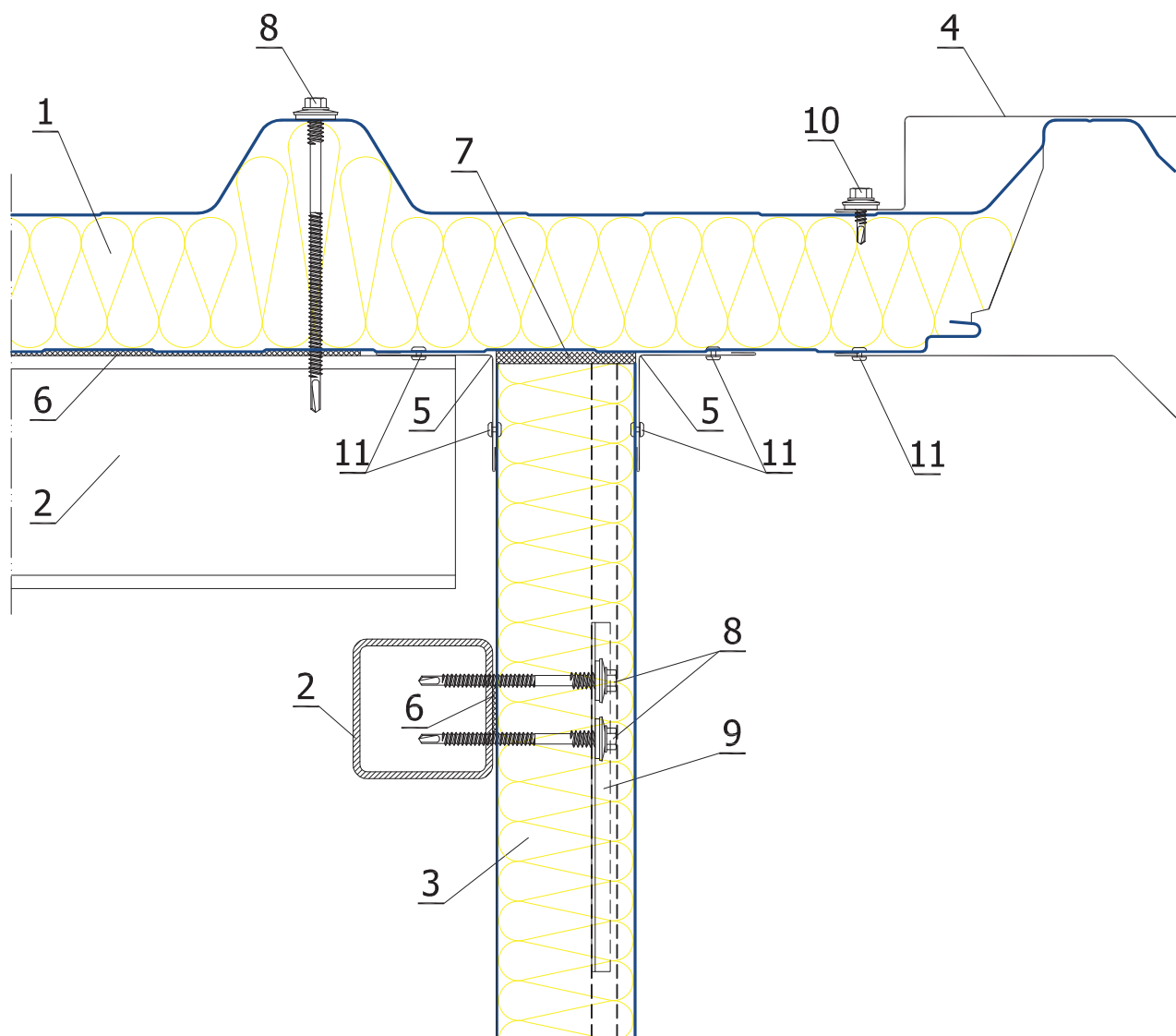


LEGEND:

1. **GORLICKA D/GORLICKA D GS-PIR** roof panel
2. Structure acc. to structure design
3. **GORLICKA U/GORLICKA D GS-PIR** wall panel
4. Covering flashing **OB-24**
5. Corner flashing **OB-02**
6. Polyethylene, self-adhesive sealing tape (**PES**)
7. Polyurethane caulking foam
8. Self-drilling connector for sandwich panels
9. **PM1** spacer
10. Self-drilling connector for steel sheet
11. Tight blind rivet **4.8 x 9.5**

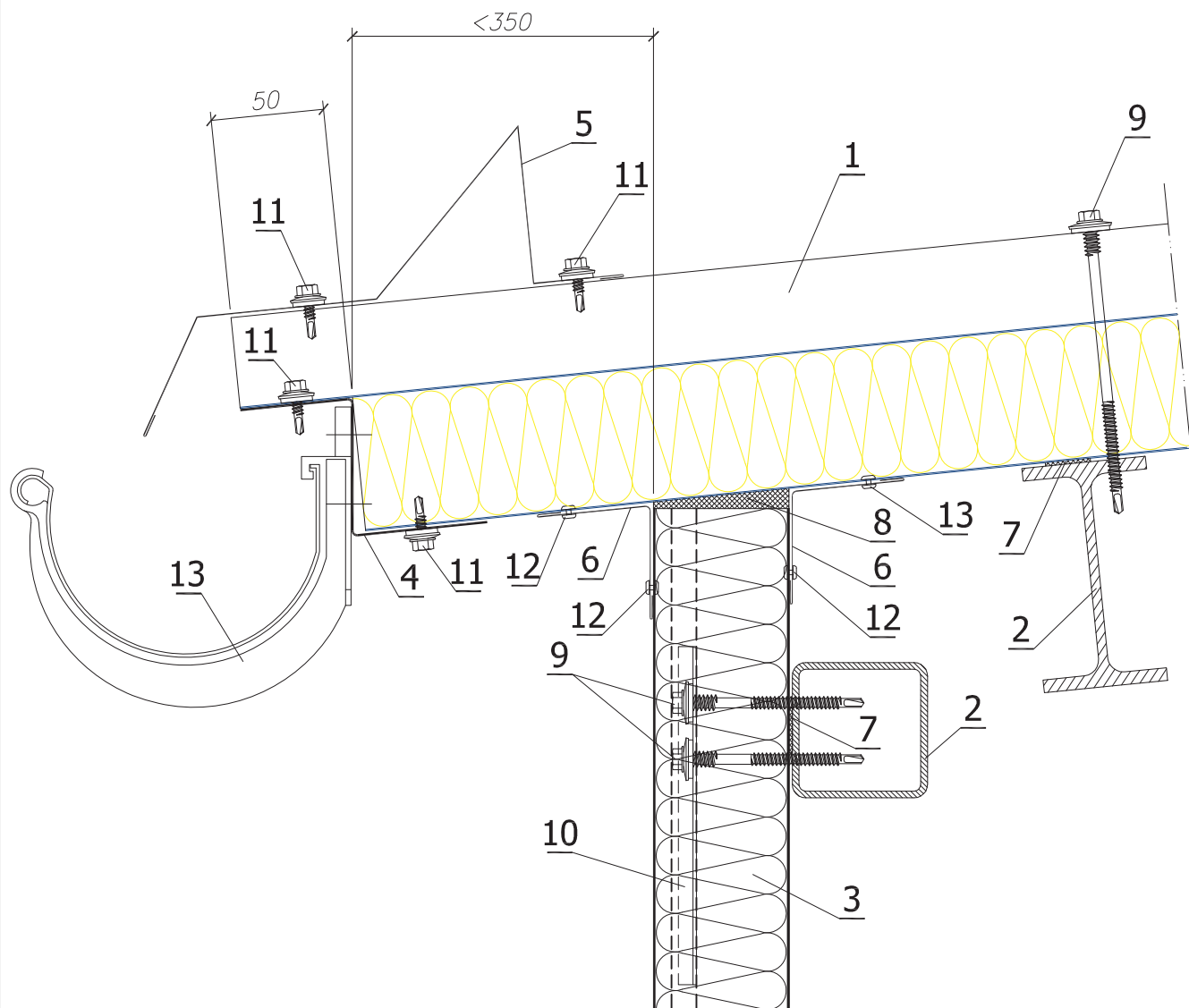
Detail of eave cross-section
Right side

Scale
1:3



LEGEND:

1. **GORLICKA D/GORLICKA D GS-PIR** roof panel
2. Structure acc. to structure design
3. **GORLICKA U/GORLICKA U GS-PIR** wall panel
4. Covering flashing **OB-24**
5. Corner flashing **OB-02**
6. Polyethylene, self-adhesive sealing tape (**PES**)
7. Polyurethane caulking foam
8. Self-drilling connector for sandwich panels
9. **PM1** spacer
10. Self-drilling connector for steel sheet
11. Tight blind rivet **4.8 x 9.5**

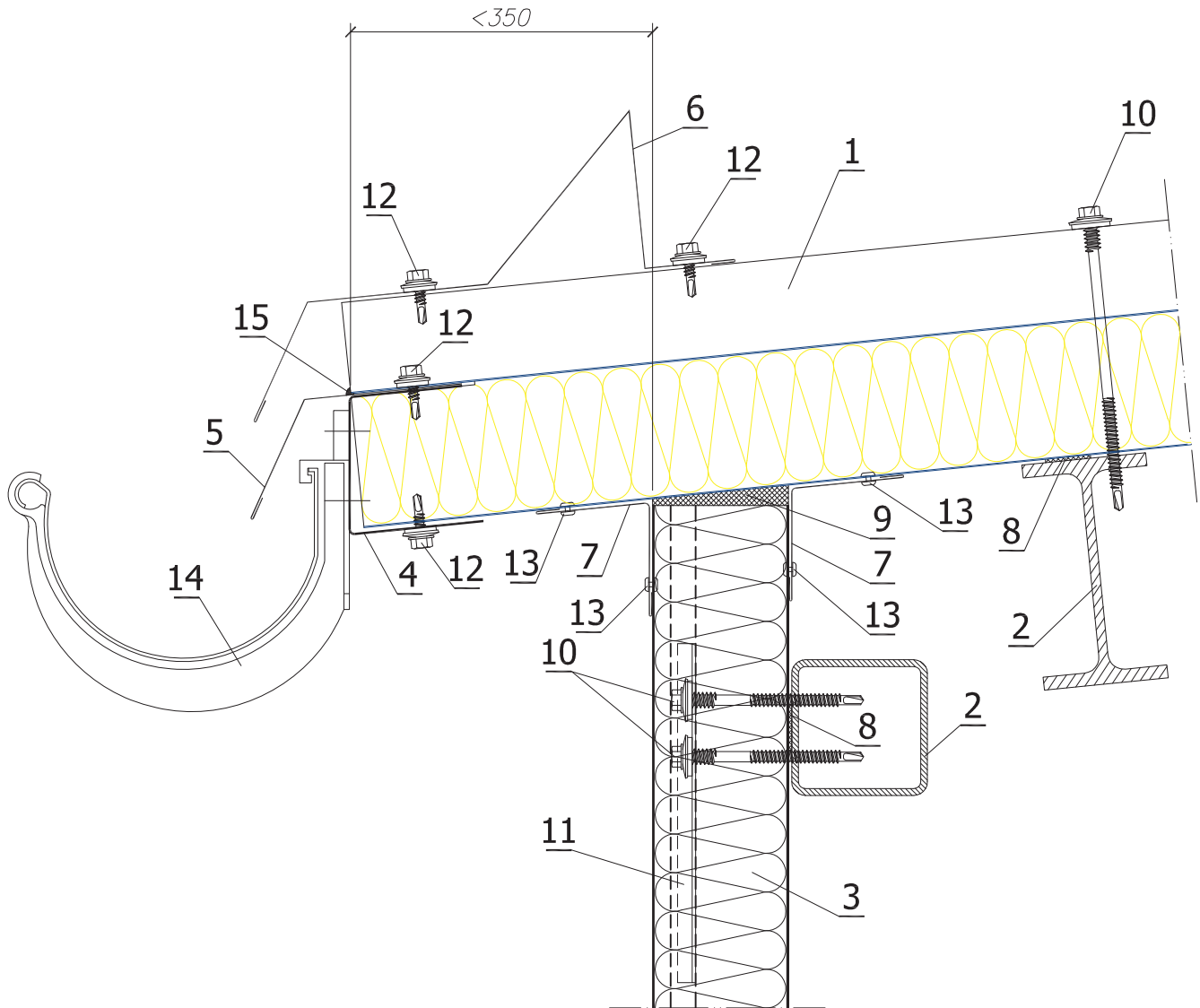


LEGEND:

1. **GORLICKA D/GORLICKA D GS-PIR** roof panel
2. Structure acc. to structure design
3. **GORLICKA U/GORLICKA U GS-PIR** wall panel
4. Under-gutter Z-bar **OB-26**
5. Snow guard **OB-27**
6. Corner flashing **OB-02**
7. Polyethylene, self-adhesive sealing tape **(PES)**
8. Polyurethane caulking foam
9. Self-drilling connector for sandwich panels
10. **PM1** spacer
11. Self-drilling connector for steel sheet
12. Tight blind rivet **4.8 x 9.5**
13. Gutter

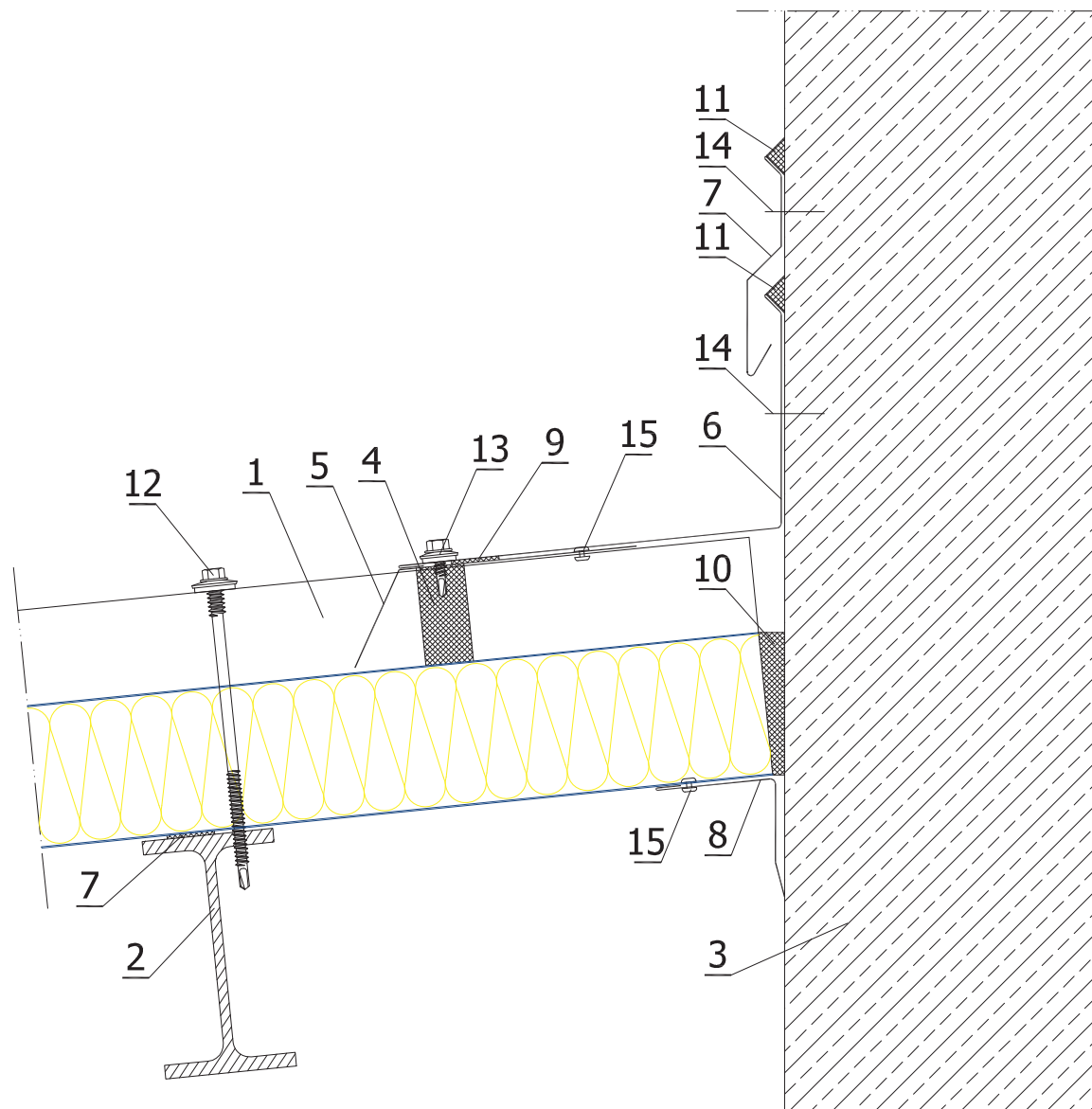
Detail of water evacuation to gutter
Variant II

Scale
1:3



LEGEND:

1. **GORLICKA D/GORLICKA D GS-PIR** roof panel
2. Structure acc. to structure design
3. **GORLICKA U/GORLICKA U GS-PIR** wall panel
4. Under-gutter channel-section **OB-25**
5. Drip edge **OB-33**
6. Snow guard **OB-27**
7. Corner flashing **OB-02**
8. Polyethylene, self-adhesive sealing tape (**PES**)
9. Polyurethane caulking foam
10. Self-drilling connector for sandwich panels
11. **PM1** spacer
12. Self-drilling connector for steel sheet
13. Tight blind rivet **4.8 x 9.5**
14. Gutter
15. Butyl sealing compound



LEGEND:

1. **GORLICKA D/GORLICKA D GS-PIR** roof panel
2. Purlin acc. to structure design
3. Reinforced concrete or masonry fire-wall
4. Profiled seal **(PE)**
5. Profiled flashing **OB-28**
6. Roof flashing **OB-30**
7. Drip edge **OB-12**
8. Corner flashing **OB-07**
9. Polyethylene, self-adhesive sealing tape **(PES)**
10. Polyurethane caulking foam
11. Butyl sealing compound
12. Self-drilling connector for sandwich panels
13. Self-drilling connector for steel sheet
14. Steel expansion joint for quick assembly
15. Tight blind rivet **4.8 x 9.5**

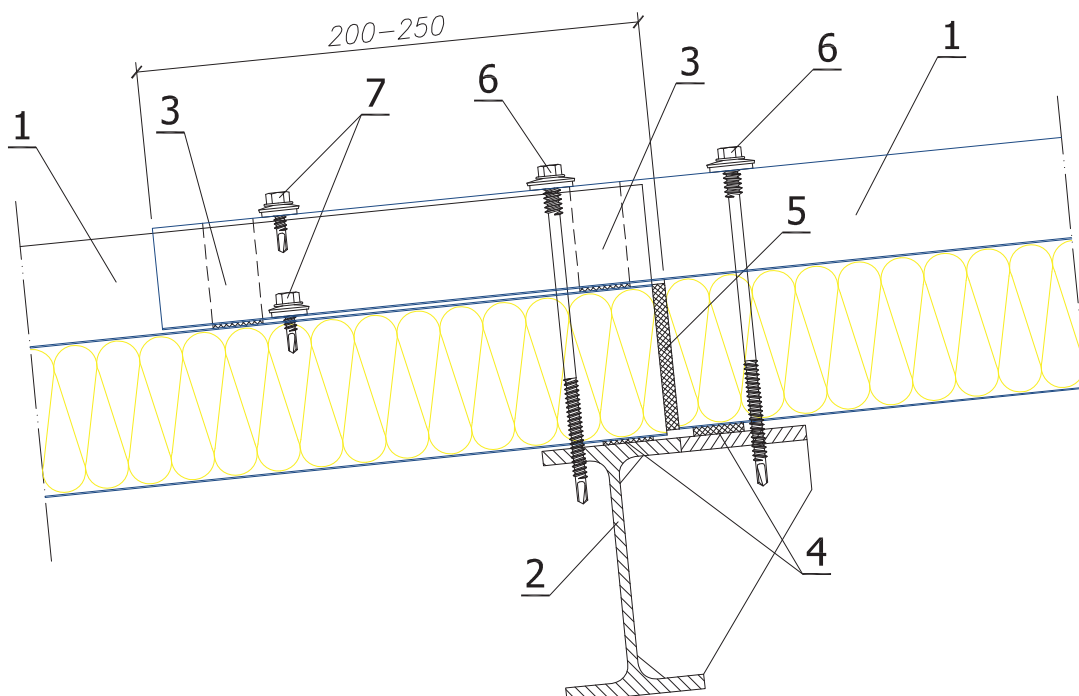
Detail of roof panels' connection along the length

Panelcut options

Scale

1:3

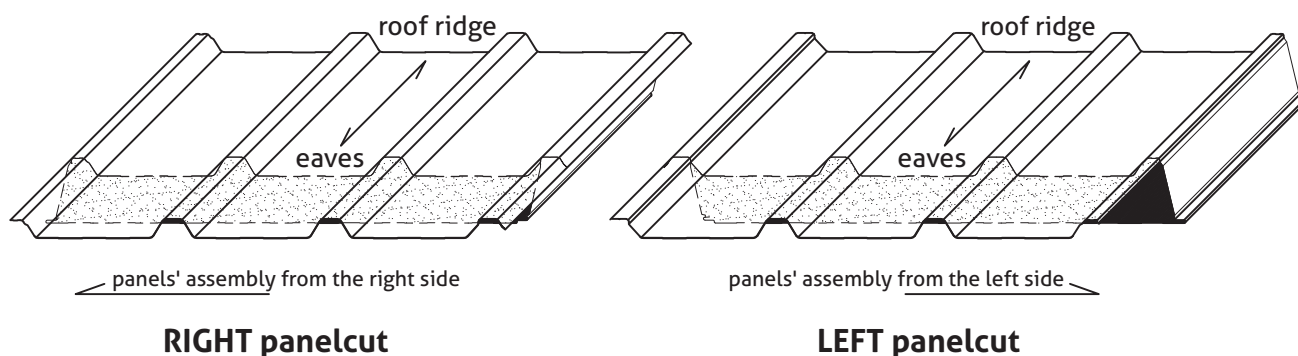
1:16

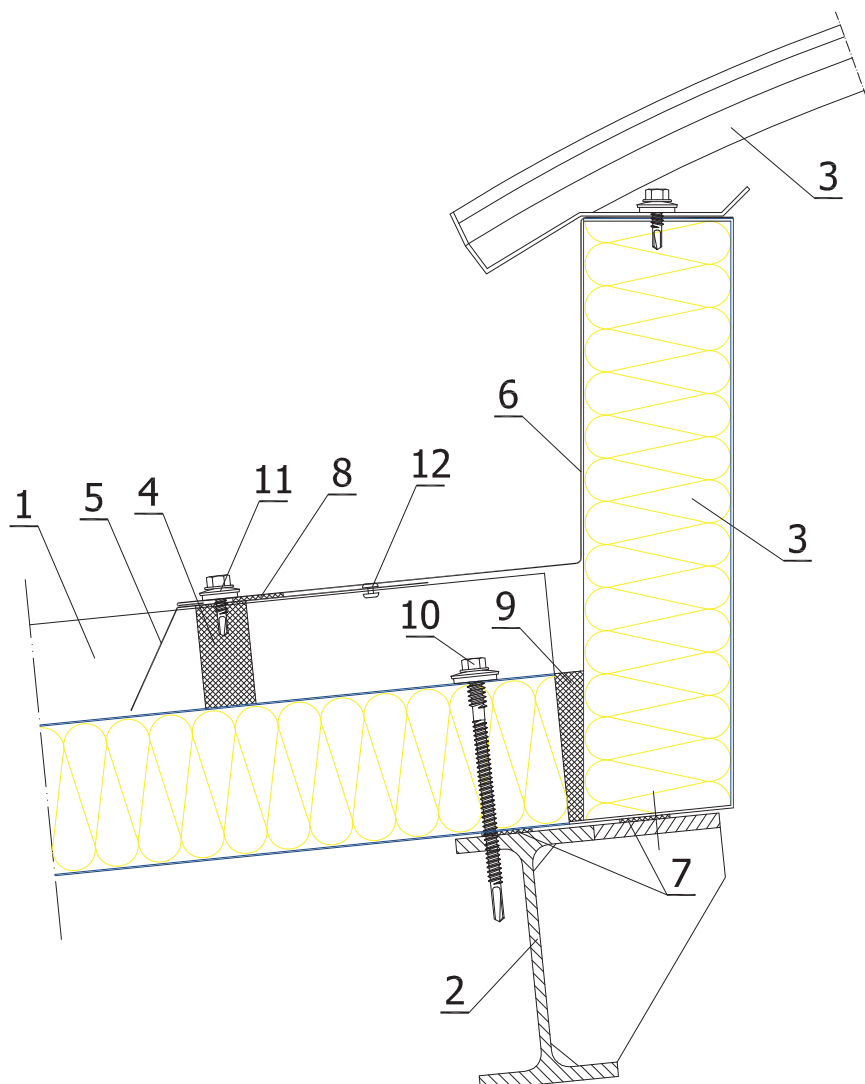


LEGEND:

1. **GORLICKA D/GORLICKA D GS-PIR** roof panels
2. Purlin acc. to structure design
3. Butyl sealing compound
4. Polyethylene, self-adhesive sealing tape (**PES**)
5. Polyurethane caulking foam
6. Self-drilling connector for sandwich panels
7. Self-drilling connector for steel sheet

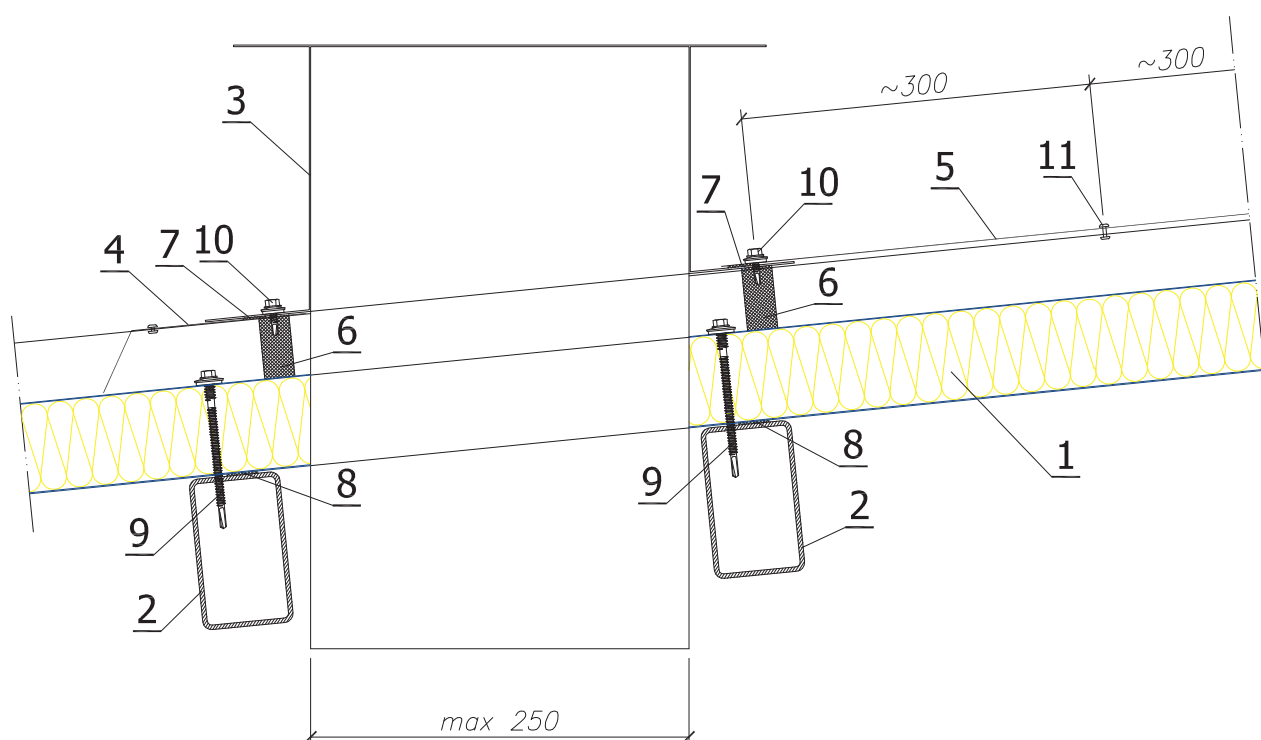
Panelcut options





LEGEND:

1. GORLICKA D/GORLICKA D GS-PIR roof panel
2. Purlin acc. to structure design
3. Skylight with base
4. Profiled seal (PE)
5. Profiled flashing OB-28
6. Individual skylight flashing
7. Polyethylene, self-adhesive sealing tape (PES)
8. Butyl sealing compound
9. Polyurethane caulking foam
10. Self-drilling connector for sandwich panels
11. Self-drilling connector for steel sheet
12. Tight blind rivet 4.8 x 9.5



LEGEND:

1. **GORLICKA D / GORLICKA D GS-PIR** roof panel
2. Supporting structure (if necessary for strength reasons)
3. Wind-driven roof vent base (mounted in the centre of a panel)
4. Profiled flashing **OB-28**
5. Individual flashing at roof ridge flashing
6. Profiled seal (**PE**)
7. Butyl sealing compound
8. Polyethylene, self-adhesive sealing tape (**PES**)
9. Self-drilling connector for sandwich panels
10. Self-drilling connector for steel sheet
11. Tight blind rivet **4.8 x 9.5**

ACCESSORIES

The coldstore panel housing system is supplemented with flashings, fasteners, sealing tapes, suspension systems and finishing strips.

FLASHINGS

Gór-Stal is equipped with a profiler able to produce steel sheet flashings up to **1.25 mm** thick and **6 m long**, in catalogue-typical or custom-made shapes. Available thicknesses and standard colours of the sheets are provided in the table below. The flashings are secured for transportation by means of foiling the external layer.

Sheet thickness [mm]	Sheet weight [kg/m ²]	Length of standard flashings [m]	Available length of flashings [m]	Sheet standard RAL colours
0,50	4,00	6,0	1,0 - 6,0	9002, 9010, 9006, 9007, 5010, 1015, 3000, 6029, 7016
0,70	6,00			
1,00	8,00			zinc coating

SEALS

We supply sealing tapes presented in the technical solutions of this catalogue, as well as in other dimensions on the client's request: self-adhesive polyurethane (**PUS, PURS**), polyethylene (**PES**) and butyl. Because freezer chambers are constructed as sealed rooms, it is important to avoid negative pressure when freezing and de-frosting by means of pressure equalizing valves.

FASTENERS

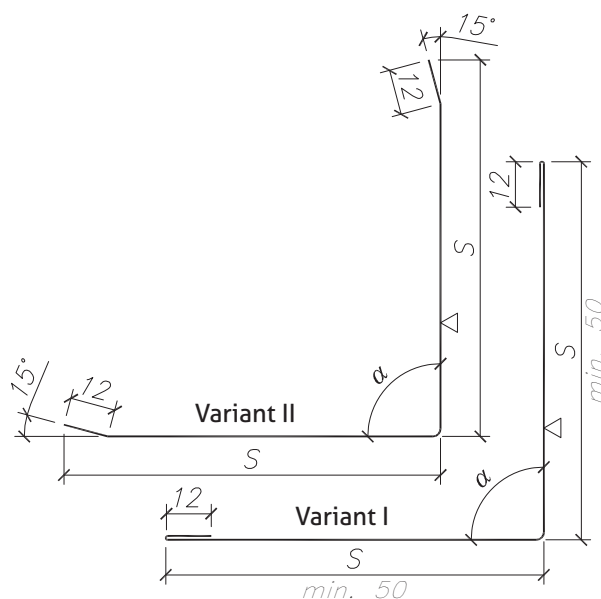
Sandwich panels can be fastened to reinforced concrete, wooden and steel structures with use of appropriate connectors. System connectors are presented in tables below.

Connection	Connector dimensions [mm]		Sandwich panel type and thickness [mm]		Connector dimensions [mm]
assembly of sandwich panels to steel and wooden structures	self-drilling screw with spacers – minimum length as per table below		wall panel S	40	screw 6,3/5,5 x 65-100
				60	screw 6,3/5,5 x 90-130
				80	screw 6,3/5,5 x 110-150
100	screw 6,3/5,5 x 125-180				
assembly of sandwich panels to reinforced concrete structures	screws for concrete base with seals 6.3/6.0 x 80-210		wall panel U	60	screw 6,3/5,5 x 65-90
assembly of flashings to sandwich panel	screw 4.2 x 16-25 tight rivet 4.8 x 9.5			80	screw 6,3/5,5 x 90-130
				100	screw 6,3/5,5 x 125-150
				120	screw 6,3/5,5 x 150-173
assembly of flashings to thin-wall structures in a building	screw 4.8 x 19-25 tight rivet 4.8 x 15.1		roof panel D	40/80	screw 6,3/5,5 x 120-150
				60/100	screw 6,3/5,5 x 130-180
80/120	screw 6,3/5,5 x 150-210				
100/140	screw 6,3/5,5 x 175-210				
aesthetic finish	caps in panel colour	120/160		screw 6,3/5,5 x 180-215	
		160/200		screw 6,3/5,5 x 230-260	

Flashing OB-01

outer corner

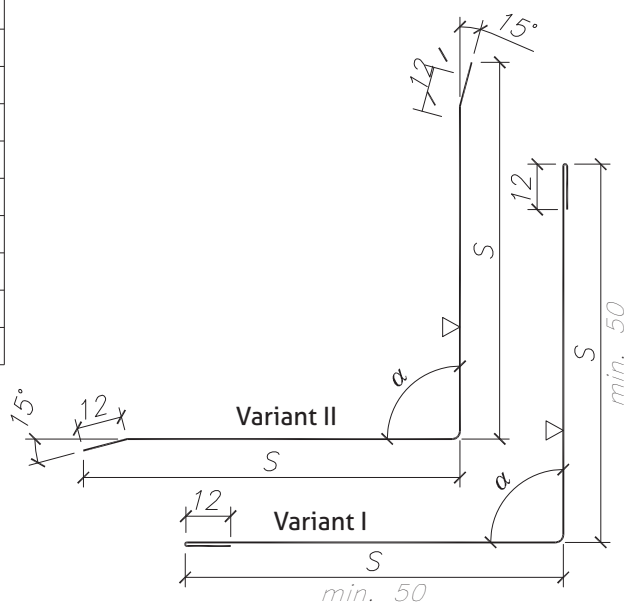
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-01/50	50	90	6000	2,97
2	OB-01/75	75			4,17
3	OB-01/100	100			5,37
4	OB-01/150	150			7,77
5	OB-01/200	200			10,17
6	OB-01/250	250			12,57
Non-standard – steel sheet 0,5 or 0,7 mm thick					
7	OB-01/ S= / α = / L=.....				
8	OB-01/ S1= / S2= α = / L=.....				



Flashing OB-02

inner corner

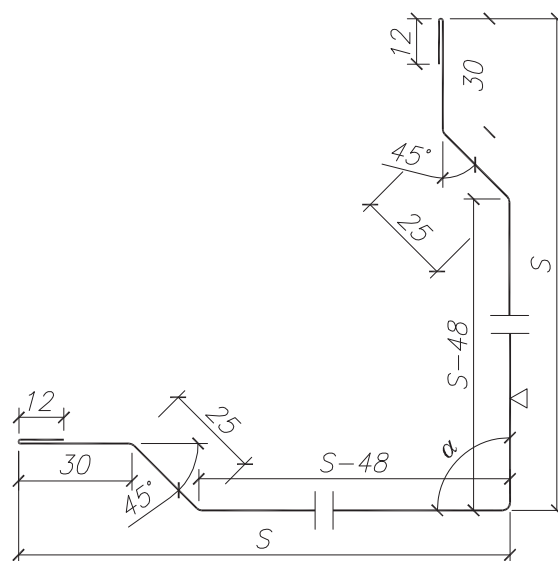
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-02/50	50	90	6000	2,97
2	OB-02/75	75			4,17
3	OB-02/100	100			5,37
4	OB-02/150	150			7,77
5	OB-02/200	200			10,17
6	OB-02/250	250			12,57
Non-standard – steel sheet 0,5 or 0,7 mm thick					
7	OB-02/ S= / α = / L=.....				
8	OB-02/ S1= / S2= α = / L=.....				



Flashing OB-03

outer corner, covering connectors

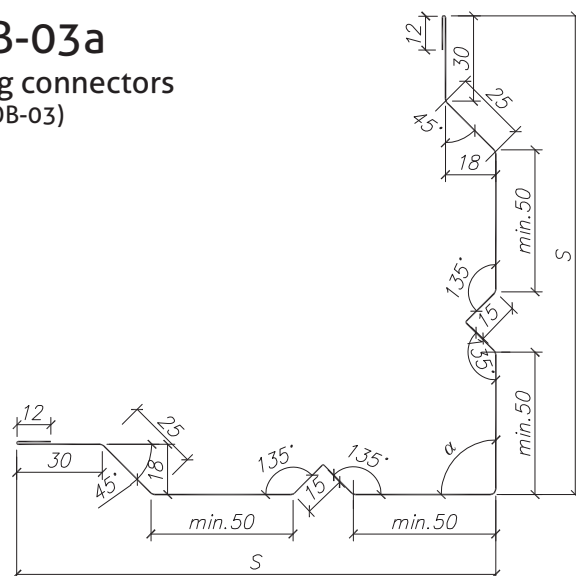
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-03/160	160	90	6000	8,59
2	OB-03/180	180			9,55
3	OB-03/200	200			10,51
4	OB-03/220	220			11,47
5	OB-03/240	240			12,43
6	OB-03/260	260			13,39
Non-standard – steel sheet 0,5 or 0,7 mm thick					
7	OB-03/ S= / α = / L=.....				
8	OB-03/ S1= / S2= α = / L=.....				



Flashing OB-03a

outer corner, covering connectors
(alternative for OB-03)

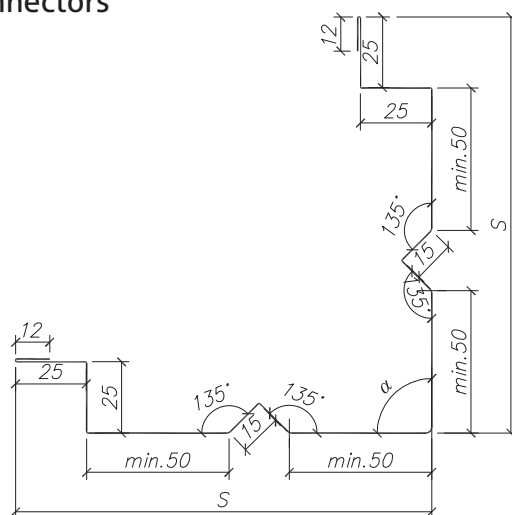
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-03a/180	180	90	6000	9,97
2	OB-03a/200	200			10,93
3	OB-03a/220	220			11,89
4	OB-03a/240	240			12,85
5	OB-03a/260	260			13,81
Non-standard – steel sheet 0,5 or 0,7 mm thick					
6	OB-03a/ S= / α = / L=.....				
7	OB-03a/ S1= / S2= α = / L=.....				



Flashing OB-03b

outer corner, covering connectors
(alternative for OB-03)

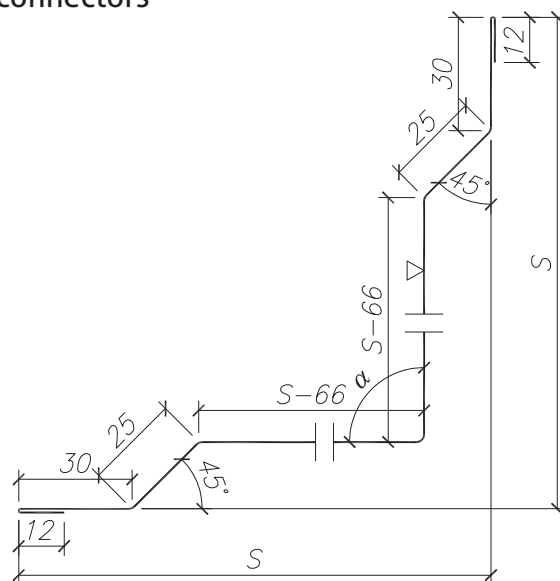
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-03b/160	160	90	6000	9,88
2	OB-03b/180	180			10,86
3	OB-03b/200	200			11,80
4	OB-03b/220	220			12,76
5	OB-03b/240	240			13,72
6	OB-03b/260	260			14,68
Non-standard – steel sheet 0,5 or 0,7 mm thick					
7	OB-03b/ S= / α = / L=.....				
8	OB-03b/ S1= / S2= α = / L=.....				



Flashing OB-04

inner corner, covering connectors

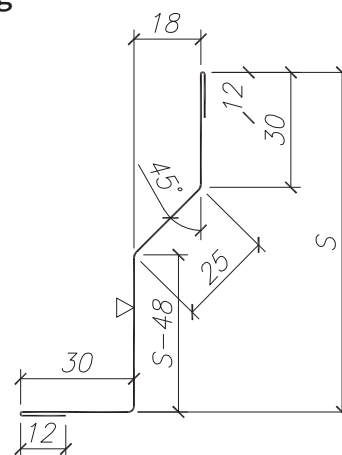
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-04/100	100	90	6000	4,85
2	OB-04/120	120			5,80
3	OB-04/150	150			7,25
Non-standard – steel sheet 0,5 or 0,7 mm thick					
4	OB-04/ S= / α = / L=.....				
5	OB-04/ S1= /S2= / α = / L=.....				



Flashing OB-05

inner corner, covering at flooring

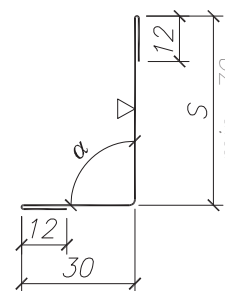
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-05/90	90	-	6000	3,62
2	OB-05/120	120			4,34
Non-standard – steel sheet 0,5 or 0,7 mm thick					
3	OB-05/ S=..... / α =...../ L=.....				



Flashing OB-06

inner corner, covering at flooring

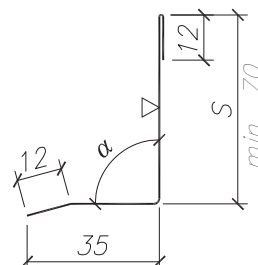
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 1 mm thick					
1	OB-06/70	70	92	6000	2,98
Non-standard – steel sheet 0,5 or 0,7 mm thick					
2	OB-06/ S=..... / α =..... / L=.....				



Flashing OB-07

covering corner

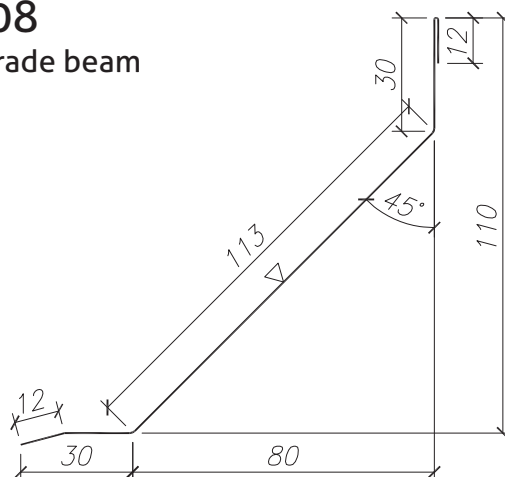
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-07/70	70	90	6000	2,81
Non-standard – steel sheet 0,5 or 0,7 mm thick					
2	OB-07/ S=..... / α =..... / L=.....				



Flashing OB-08

inner corner, covering at grade beam

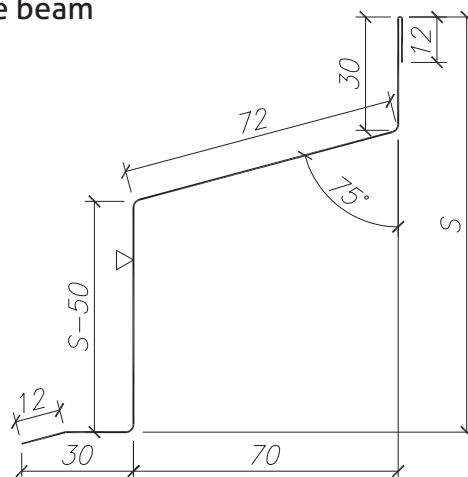
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-08	-	-	6000	3,72



Flashing OB-09

inner corner, covering at grade beam

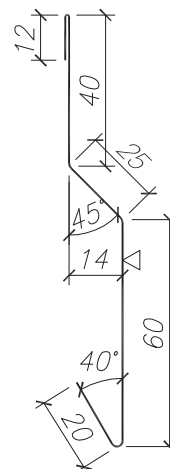
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-09/110	110	-	6000	4,92
2	OB-09/150	150			5,88
Non-standard – steel sheet 0,5 or 0,7 mm thick					
3	OB-09/ S=..... / L=.....				



Flashing OB-10

narrow wall drip edge

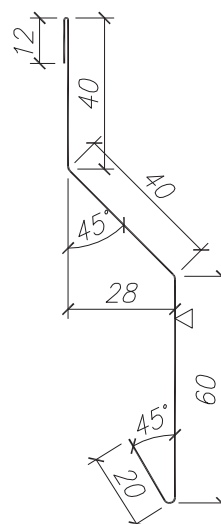
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-10	-	-	6000	3,77



Flashing OB-11

wide wall drip edge

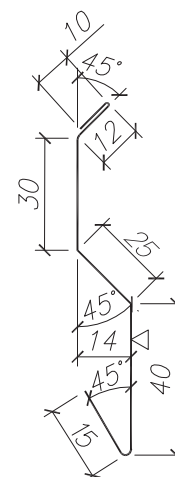
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-11	-	-	6000	4,13



Flashing OB-12

wall drip edge

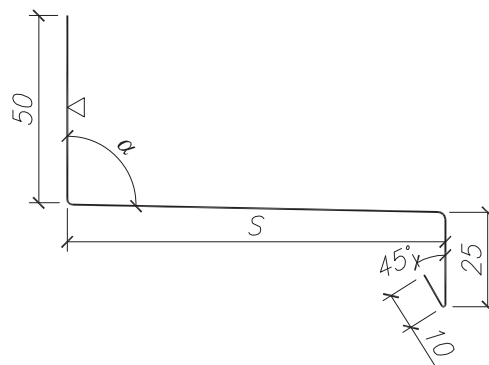
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-12	-	-	6000	3,29



Flashing OB-13

eaves

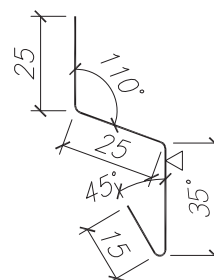
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-13/60	60	92	6000	3,48
2	OB-13/80	80			3,96
3	OB-13/100	100			4,44
4	OB-13/120	120			4,92
Non-standard – steel sheet 0,5 or 0,7 mm thick					
5	OB-13/ S=..... / α =...../ L=.....				



Flashing OB-14

small eaves

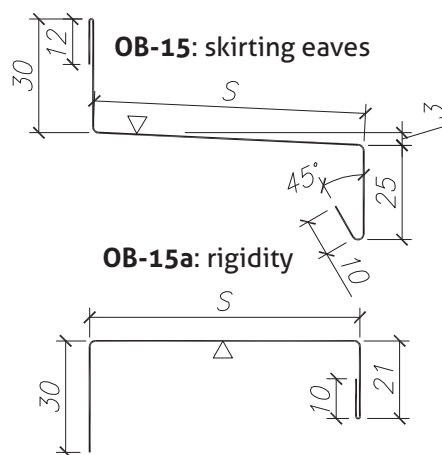
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-14	-	-	6000	2,28



Flashing OB-15 - skirting eaves

OB-15 + Ob15a - skirting eaves with rigidity

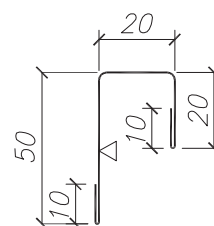
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-15/70	70	-	6000	3,53
2	OB-15/90	90			4,00
3	OB-15/110	110			4,48
Non-standard – steel sheet 0,5 or 0,7 mm thick					
4	OB-15/ S=..... / L=.....				
Standard – steel sheet 0,5 mm thick					
5	OB-15a/70	70	-	6000	3,14
6	OB-15a/90	90			3,62
7	OB-15a/110	110			4,10
Non-standard – steel sheet 0,5 or 0,7 mm thick					
8	OB-15a/ S=..... / L=.....				



Flashing OB-16

under-gutter rigid flashing

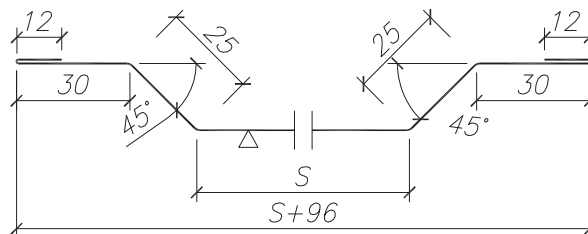
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-16/50	50	-	6000	4,40
Non-standard – steel sheet 0,5 or 0,7 mm thick					
2	OB-07/ S=..... / L=.....				



Flashing OB-17

covering panels' connection

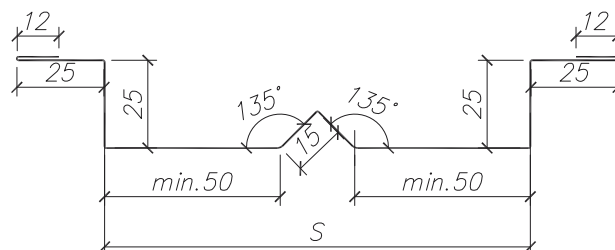
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-17/40	40	-	6000	4,18
2	OB-17/60	60			4,66
3	OB-17/80	80			5,14
4	OB-17/100	100			5,38
5	OB-17/120	120			6,09
6	OB-17/140	140			6,57
7	OB-17/160	160			7,05
8	OB-17/180	180			7,53
Non-standard – steel sheet 0,5 or 0,7 mm thick					
9	OB-17/ S=..... / L=.....				



Flashing OB-17a

covering panels' connection
(alternative for OB-17)

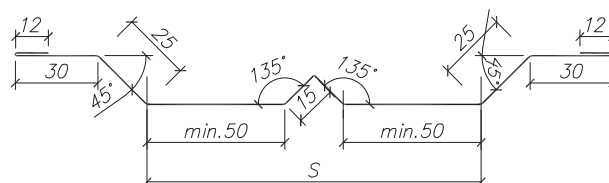
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-17a/120	120	-	6000	6,07
2	OB-17a/140	140			6,55
3	OB-17a/160	160			7,03
4	OB-17a/180	180			7,51
Non-standard – steel sheet 0,5 or 0,7 mm thick					
5	OB-17A/ S=..... / L=.....				



Flashing OB-17b

covering panels' connection
(alternative for OB-17)

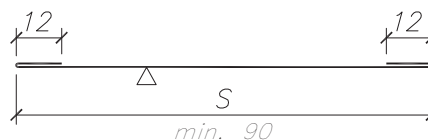
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-17b/120	120	-	6000	6,31
2	OB-17b/140	140			7,79
3	OB-17b/160	160			7,27
4	OB-17b/180	180			7,75
Non-standard – steel sheet 0,5 or 0,7 mm thick					
5	OB-17B/ S=..... / L=.....				



Flashing OB-18

covering

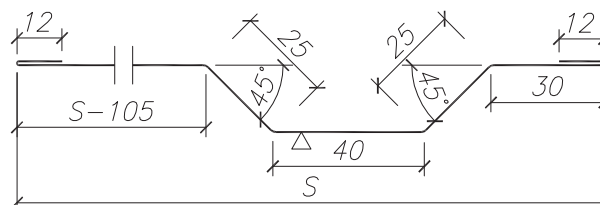
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-18/90	90	-	6000	2,74
2	OB-18/100	100			2,97
3	OB-18/120	120			3,45
Non-standard – steel sheet 0,5 or 0,7 mm thick					
4	OB-18/ S=..... / L=.....				



Flashing OB-19

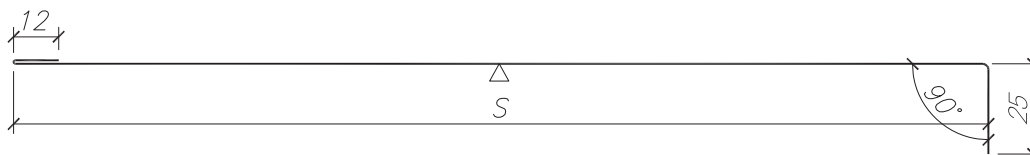
covering

Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-19/175	175	-	6000	5,13
2	OB-19/195	195			5,62
3	OB-19/215	215			6,09
Non-standard – steel sheet 0,5 or 0,7 mm thick					
4	OB-19/ S= / L=.....				



Flashing OB-20

covering door lintel

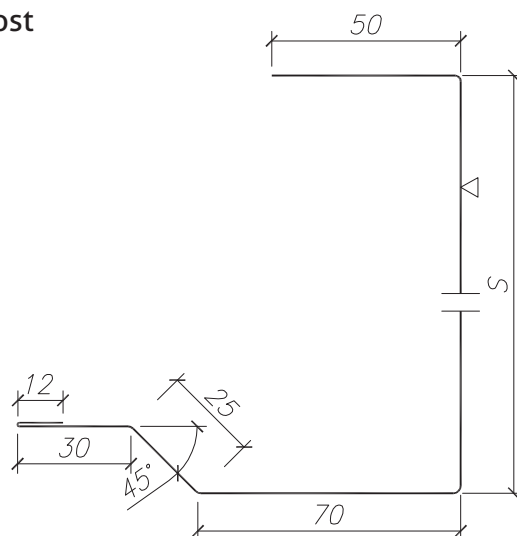


Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Non-standard – steel sheet 0,5 or 0,7 mm thick					
1	OB-20/ S= / L=.....				

Flashing OB-21

covering door post

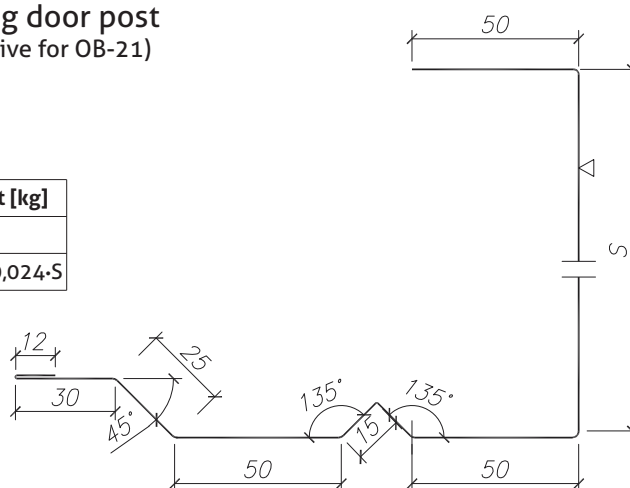
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Non-standard – steel sheet 0,5 or 0,7 mm thick					
1	OB-21/ S= / L=.....				$=4,49+0,024 \cdot S$



Flashing OB-21a

covering door post
(alternative for OB-21)

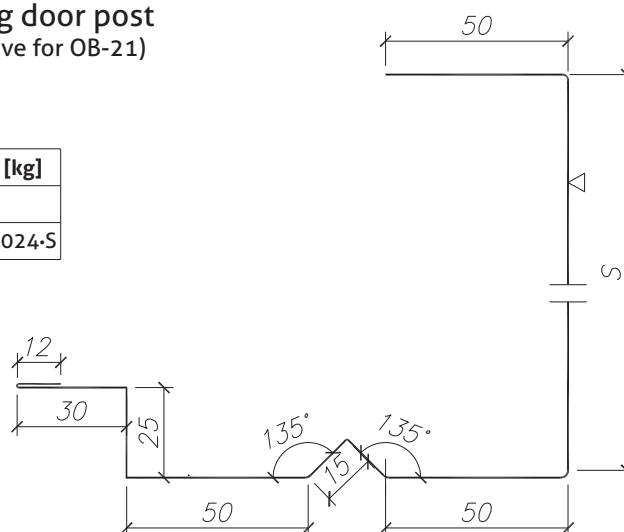
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Non-standard – steel sheet 0,5 or 0,7 mm thick					
1	OB-21a/ S= / L=6000				$=5,93+0,024 \cdot S$



Flashing OB-21b

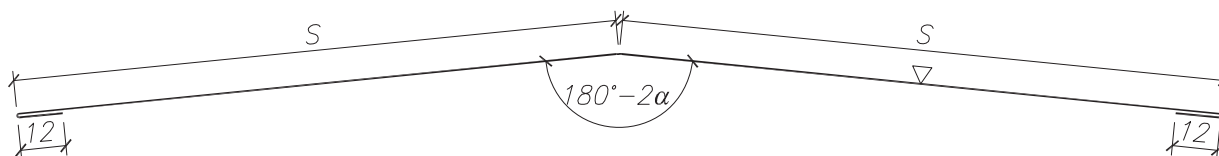
covering door post
(alternative for OB-21)

Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Non-standard – steel sheet 0,5 or 0,7 mm thick					
1	OB-21b/ S= / L= 6000				$=5,93+0,024 \cdot S$



Flashing OB-22

top roof ridge

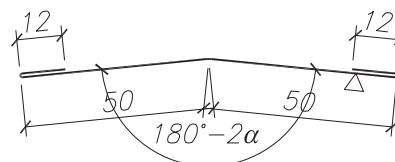


Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-22/160	160	according to the order	6000	8,25
2	OB-22/200	200			10,17
3	OB-22/250	250			12,57
Non-standard – steel sheet 0,5 or 0,7 mm thick					
4	OB-22/ S= / L= 6000				

Flashing OB-23

bottom roof ridge

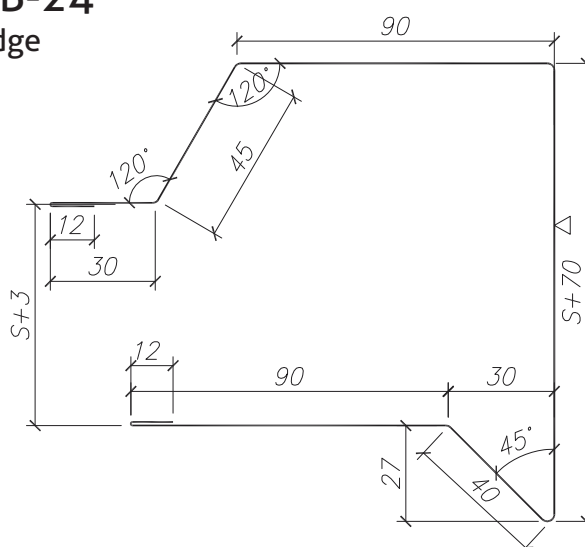
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-23/50	50	5,71	6000	2,97
2	OB-23/50	50	11,30		2,97
Non-standard – steel sheet 0,5 or 0,7 mm thick					
3	OB-23/ S=..... / L= 6000				



Flashing OB-24

side drip edge

Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-24/40	40	-	6000	10,30
2	OB-24/60	60			10,78
3	OB-24/80	80			11,26
4	OB-24/100	100			11,74
5	OB-24/120	120			12,22
6	OB-24/160	160			13,18
Non-standard – steel sheet 0,5 or 0,7 mm thick					
8	OB-24/ S=..... / L=....				



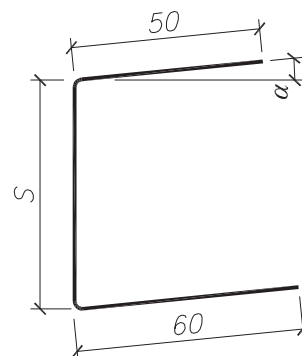
Flashing OB-25

under-gutter channel section

Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 1 mm thick					
1	OB-25/40	40	α	6000	7,20
2	OB-25/60	60			8,16
3	OB-25/80	80			9,12
4	OB-25/100	100			10,08
5	OB-25/120	120			11,04
6	OB-25/160	160			12,96

NOTE!

The steep roofs ($\alpha > 7^\circ$) need individual project



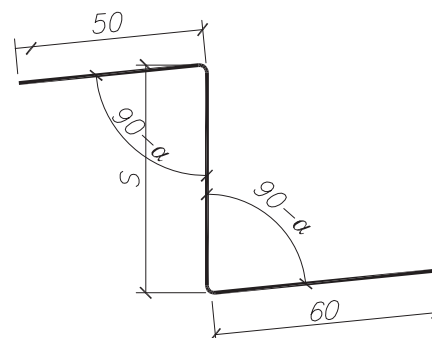
Flashing OB-26

under-gutter Z-bar

Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 1 mm thick					
1	OB-26/40	40	α	6000	7,20
2	OB-26/60	60			8,16
3	OB-26/80	80			9,12
4	OB-26/100	100			10,08
5	OB-26/120	120			11,04
6	OB-26/160	160			12,91

NOTE!

The steep roofs ($\alpha > 7^\circ$) need individual project



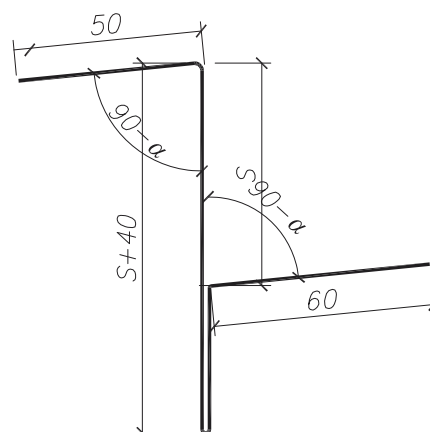
Flashing OB-26a

under-gutter Z-bar
(alternative for OB-26)

Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 1 mm thick					
1	OB-26a/40	40	α	6000	11,04
2	OB-26a/60	60			12,00

NOTE!

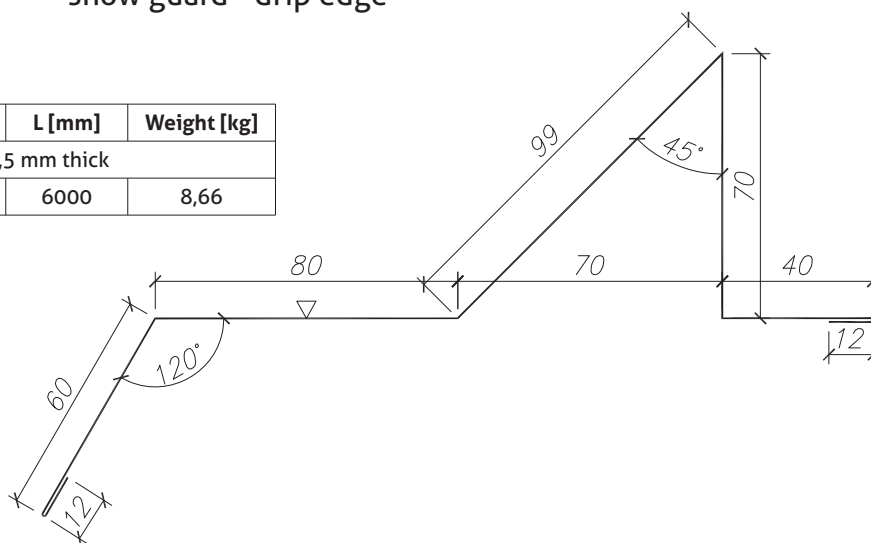
The steep roofs ($\alpha > 7^\circ$) need individual project



Flashing OB-27

snow guard - drip edge

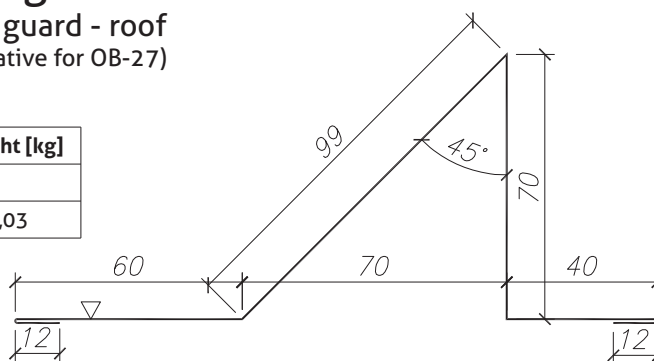
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-27	-	-	6000	8,66



Flashing OB-27a

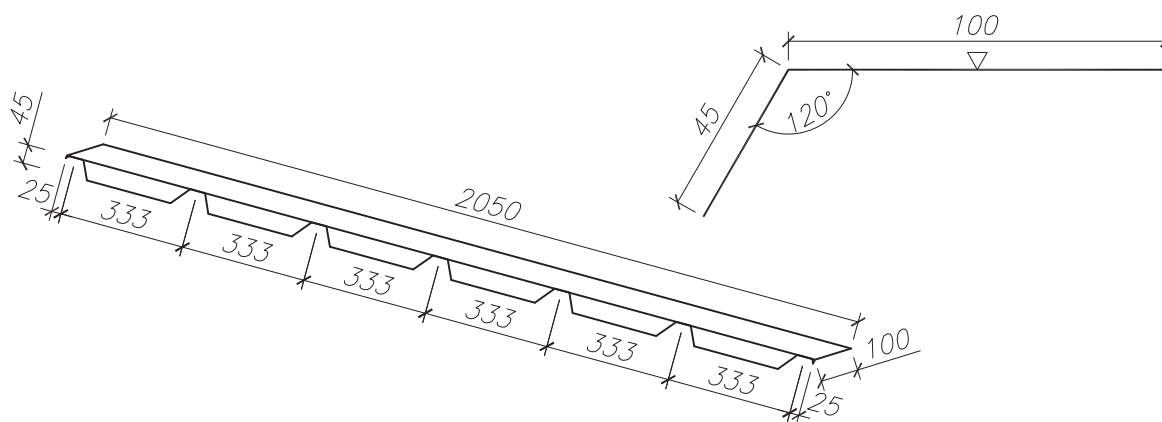
snow guard - roof
(alternative for OB-27)

Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-27A	-	-	6000	7,03



Flashing OB-28

roof ridge bird spike

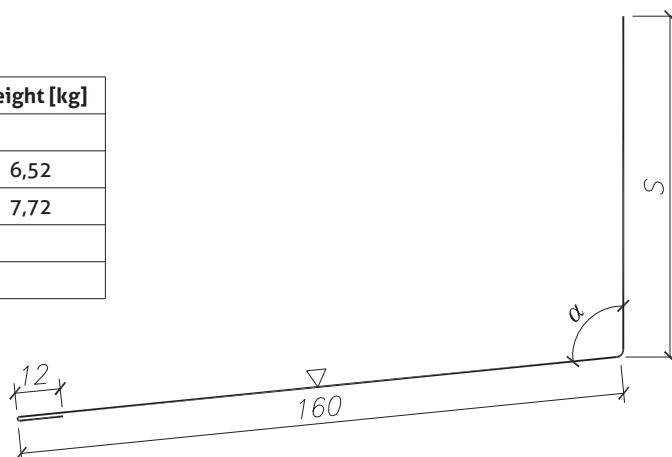


Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-28	-	-	2050	1,19

Flashing OB-29

roof covering flashing

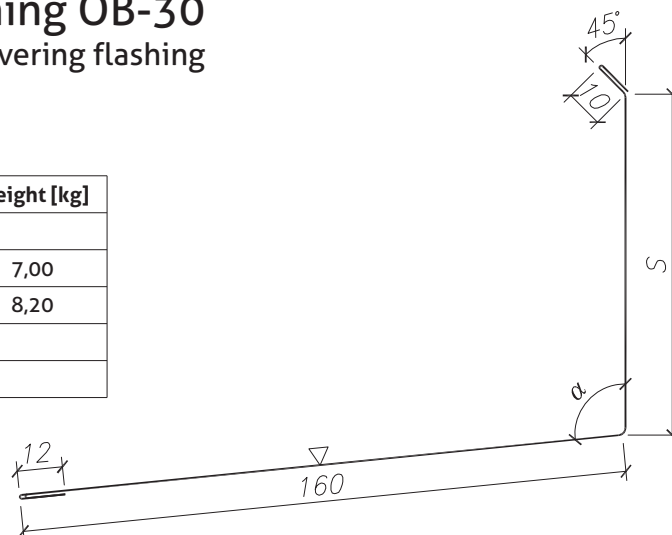
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-29/100	100	α	6000	6,52
2	OB-29/150	150			7,72
Non-standard – steel sheet 0,5 or 0,7 mm thick					
3	OB-29/ S=...../ α = / L= 6000				



Flashing OB-30

roof covering flashing

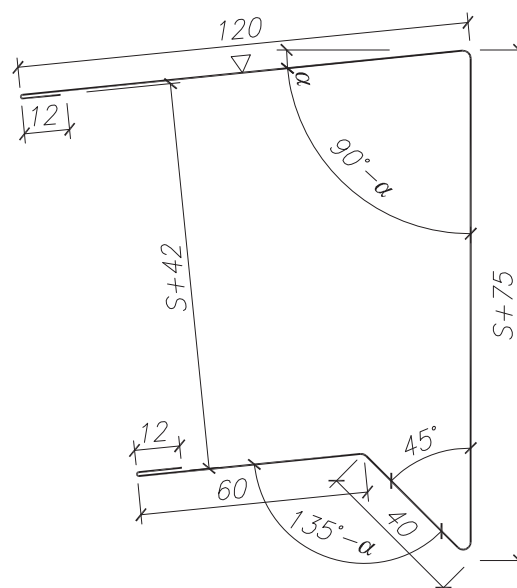
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-30/100	100	α	6000	7,00
2	OB-30/150	150			8,20
Non-standard – steel sheet 0,5 or 0,7 mm thick					
3	OB-30/S=...../ α = / L=				



Flashing OB-31

roof top

Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-31/40	40	-	6000	8,62
2	OB-31/60	60			9,10
3	OB-31/80	80			9,58
4	OB-31/100	100			10,06
5	OB-31/120	120			10,53
6	OB-31/160	160			11,50
Non-standard – steel sheet 0,5 or 0,7 mm thick					
7	OB-31/ S= / α = / L=.....				



NOTE!

The steep roofs ($\alpha > 7^\circ$) need individual project

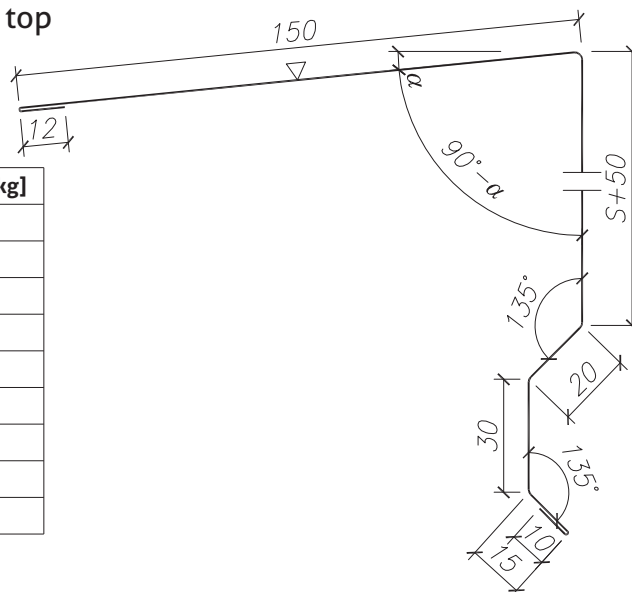
Flashing OB-32

roof top

Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-32/40	40	-	6000	7,84
2	OB-32/60	60			8,32
3	OB-32/80	80			8,80
4	OB-32/100	100			9,29
5	OB-32/120	120			9,77
6	OB-32/160	160			10,73
Non-standard – steel sheet 0,5 or 0,7 mm thick					
7	OB-32/ S= / α = / L=.....				

NOTE!

The steep roofs ($\alpha > 7^\circ$) need individual project



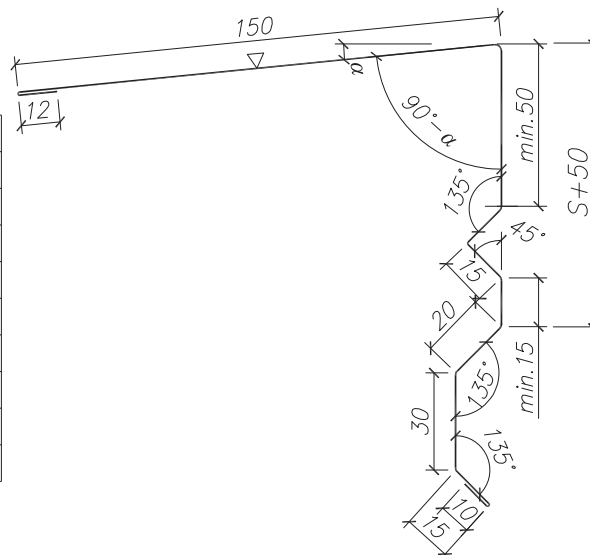
Flashing OB-32a

roof top
(alternative for OB-32)

Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-32a/40	40	-	6000	8,06
2	OB-32a/60	60			8,54
3	OB-32a/80	80			9,02
4	OB-32a/100	100			9,50
5	OB-32a/120	120			9,98
6	OB-32a/160	160			10,94
Non-standard – steel sheet 0,5 or 0,7 mm thick					
7	OB-32a/ S= / α = / L=.....				

NOTE!

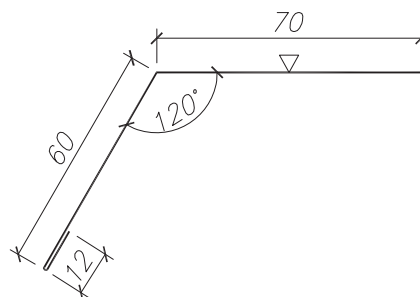
The steep roofs ($\alpha > 7^\circ$) need individual project



Flashing OB-33

drip edge

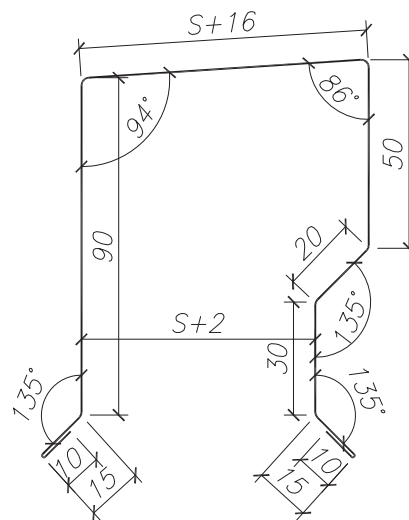
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-33	-	120	6000	3,40
Non-standard – steel sheet 0,5 or 0,7 mm thick					
2	OB-33/ S=..... / L=.....				



Flashing OB-34

attic – variant I

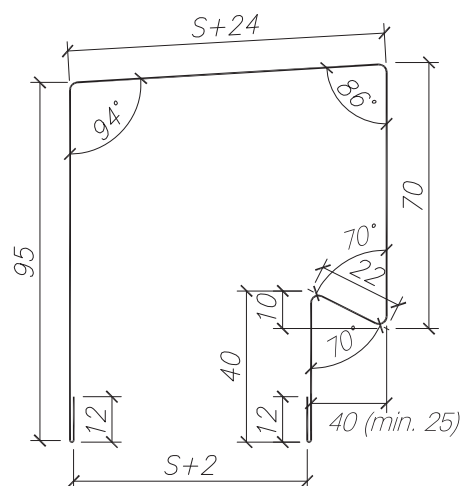
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-34/40	40	-	6000	7,10
2	OB-34/60	60			7,58
3	OB-34/80	80			8,06
4	OB-34/100	100			8,54
5	OB-34/120	120			9,02
Non-standard – steel sheet 0,5 or 0,7 mm thick					
6	OB-34/ S= / α = / L=.....				



Flashing OB-35

attic – variant II

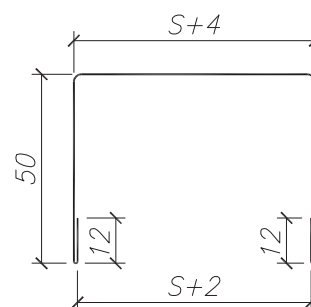
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-35/40	40	-	6000	7,56
2	OB-35/60	60			8,04
3	OB-35/80	80			8,52
4	OB-35/100	100			9,00
5	OB-35/100	120			9,48
Non-standard – steel sheet 0,5 mm thick					
6	OB-35/ S= / α = / L=.....				



Flashing OB-36

edge channel section

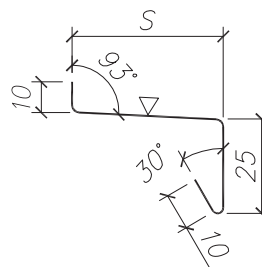
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard - steel sheet 0,5 mm thick					
1	OB-36/40	40	-	6000	4,03
2	OB-36/60	60			4,51
3	OB-36/80	80			4,99
4	OB-36/100	100			5,47
5	OB-36/120	120			5,95
6	OB-36/160	160			6,91
7	OB-36/200	200			7,87
Non-standard – steel sheet 0,5 or 0,7 mm thick					
8	OB-36/ S =..... / L =				



Flashing OB-37

window cill

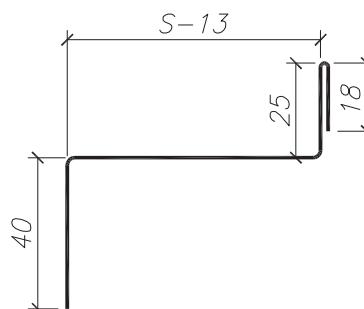
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 0,5 mm thick					
1	OB-37/40	40	93	6000	2,04
2	OB-37/60	60			2,52
3	OB-37/80	80			3,00
4	OB-37/100	100			3,48
Non-standard – steel sheet 0,5 or 0,7 mm thick					
5	OB-37/ S= / L=.....				



Flashing OB-38

edge bar for S panels

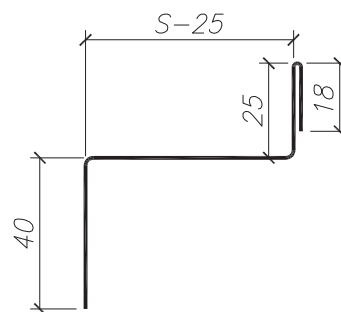
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 1 mm thick					
1	OB-38/60	60	-	6000	6,24
2	OB-38/80	80			7,20
3	OB-38/100	100			8,16



Flashing OB-39

edge bar for U panels

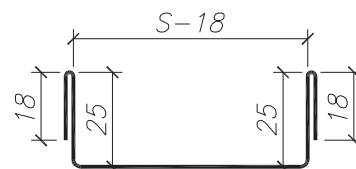
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 1 mm thick					
1	OB-39/60	60	-	6000	5,66
2	OB-39/80	80			6,62
3	OB-39/100	100			7,58
4	OB-39/120	120			8,54



Flashing OB-40

edge bar

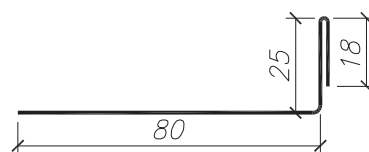
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 1 mm thick					
1	OB-40/60	60	-	6000	6,14
2	OB-40/80	80			7,10
3	OB-40/100	100			8,06



Flashing OB-41

edge bar

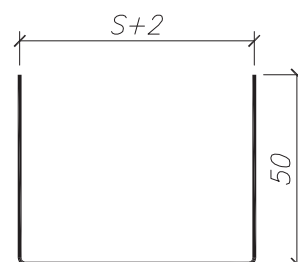
Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard – steel sheet 1 mm thick					
1	OB-41/60	60	-	6000	4,94
2	OB-41/80	80			5,90
3	OB-41/100	100			6,86
4	OB-41/120	120			7,82



Flashing OB-42

edge channel section

Item	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
Standard - steel sheet 1 mm thick					
1	OB-42/40	40	-	6000	6,81
2	OB-42/60	60			7,77
3	OB-42/80	80			8,73
4	OB-42/100	100			9,69
5	OB-42/120	120			10,65
6	OB-42/160	160			12,57
7	OB-42/200	200			14,50
Non-standard – steel sheet 1 mm thick					
8	OB-42/ S =..... / L =				





ORDER FORM of
SANDWICH PANELS

ORDER

No of

SUPPLIER: (name, company address, phone/fax, TIN)

Gór-Stal sp. z o.o.

ul. Przemysłowa 11

38-300 Gorlice

Phone/Fax: + 48 18 353 98 00

Account No: 79 1140 1081 0000 5859 5500 1001

Agent:

Commercial Terms

Payment method:

Advance (%): payable until:

Maturity:

Credit limit:

Remarks:

ORDERING PARY (name, company address, phone/fax, TIN)

DELIVERY PLACE (recipient, address, city, post code, phone/fax)

Agent:

REMARKS:

	Plate type:	Plate thickness[mm]:	Plate profile:		Plate width [mm]:	Colour RAL		Quantity		Net price: Unit/value	
			ext.	int.		ext.	int.	L [m]	pcs.	EUR/m ²	EUR
1.	GORLICKA S	40 60 80 100									
2.	GORLICKA U	60 80 100 120									
3.	GORLICKA D	40 60 80 100 120 160									
4.	GORLICKA CH	100 120 160 200									
5.	GORLICKA S GS-PIR	40 60 80 100									
6.	GORLICKA U GS-PIR	60 80 100 120									
7.	GORLICKA D GS-PIR	40 60 80 100 120 160									
8.	GORLICKA CH GS-PIR	100 120 160 200									
9.											
10.											
11.											
12.											
13.											
14.											
15.											
IN TOTAL:								[m ²]:		EUR:	

ORDER FORM of TYPICAL FLASHING



ORDER

No of

TO SANDWICH PANELS ORDER

No of

SUPPLIER: (name, company address, phone/fax, TIN)

Gór-Stal sp. z o.o.

ul. Przemysłowa 11

38-300 Gorlice

Phone/Fax: +48 18 353 98 00

Account No: 79 1140 1081 0000 5859 5500 1001

Agent:

Commercial Terms

Payment method:

Advance (%): payable until:

Maturity:

Credit limit:

Remarks:

ORDERING PARY (name, company address, phone/fax, TIN)

DELIVERY PLACE (recipient, address, city, post code, phone/fax)

Flashing length: 6 m.

Default $\alpha = 90^\circ$

Shape of flashing acc. to technological catalogue

Ordering Party's signature

Symbol	S [mm]	α [°]	Thickness [mm]	Length [mm]	Quantity [szt.]	Total weight [kg]	Colour RAL
OB - 01							
OB - 02							
OB - 03							
OB - 03a							
OB - 03b							
OB - 04							
OB - 05		-					
OB - 06							
OB - 07							
OB - 08	-	-					
OB - 09		-					
OB - 10	-	-					
OB - 11	-	-					
OB - 12	-	-					
OB - 13							
OB - 14	-	-					
OB - 15		-					
OB - 15a		-					
OB - 16	-	-					
OB - 17		-					
OB - 17a		-					
OB - 17b		-					
OB - 18		-					
OB - 19		-					
OB - 20		-					
OB - 21		-					
OB - 21a		-					
OB - 21b		-					
OB - 22							
OB - 23							
OB - 24		-					
OB - 25							
OB - 26							
OB - 26a							
OB - 27	-	-					
OB - 28	-	-					
OB - 29							
OB - 30							
OB - 31							
OB - 32							
OB - 32a							
OB - 33	-	-					
OB - 34		-					
OB - 35		-					
OB - 36		-					
OB - 37		-					
OB - 38		-					
OB - 39		-					
OB - 40		-					
OB - 41		-					
OB - 42		-					
Total:							
Net price:							
Net value:							
ACCESSORIES	Type	Size [mm]	Quantity [szt/mb]	Colour RAL			
Bolts fixing the plate to the structure	Stal GT6						
	Stal G12						
	Wood / Concrete						
Flashing bolts							
Rivets							
Rivets	PE						
Rivets	PES						
Rivets	PUS						
Rivets							
Saddle washer	35-35	-					
Washer	Pm1	-					
Covering caps	-----						
Connector	ALF						



ORDER FORM of
INDIVIDUAL FLASHING

ORDER
No of

SUPPLIER: (name, company address, phone/fax, TIN)

Gór-Stal sp. z o.o.

ul. Przemysłowa 11

38-300 Gorlice

Phone/Fax: + 48 18 353 98 00

Account No: 79 1140 1081 0000 5859 5500 1001

Agent:

DELIVERY PLACE (recipient, address, city, post code, phone/fax)

SUPPLIER (name, company address, phone/fax, TIN)

No	Plate thickness [mm]	Colour RAL	Length [m]	Quantity [pcs]

No	Plate thickness [mm]	Colour RAL	Length [m]	Quantity [pcs]

No	Plate thickness [mm]	Colour RAL	Length [m]	Quantity [pcs]

No	Plate thickness [mm]	Colour RAL	Length [m]	Quantity [pcs]

REMARK!

Flashing will be made acc. to the above drawings and their dimensions.

Ordering Party's signature



**NARODOWY INSTYTUT ZDROWIA PUBLICZNEGO
- PAŃSTWOWY ZAKŁAD HIGIENY**

**NATIONAL INSTITUTE OF PUBLIC HEALTH
- NATIONAL INSTITUTE OF HYGIENE**

**ZAKŁAD HIGIENY KOMUNALNEJ
DEPARTMENT OF ENVIRONMENTAL HYGIENE**

24 Chocimska 00-791 Warsaw • Phone (22) 5421354; (22) 5421349 • Fax (22) 5421287 • e-mail: sek-zhk@pzh.gov.pl

ATEST HIGIENICZNY

HK/B/0250/01/2012

HYGIENIC CERTIFICATE

ORYGINAŁ

Wyrób / product: **Płyta warstwowa GORLICKA GR 1000S, GR 1000u, GR 1000CH, GR 1000D**
z rdzeniem ze sztywnej pianki poliuretanowej w okładzinach z blachy
stalowej ocynkowanej powlekanej powłokami organicznymi.

Zawierający / containing: stal ocynkowaną, poliuretan, żywice syntetyczne i inne składniki wg dokumentacji producenta.

Przeznaczony do / destined: stosowania na ściany zewnętrzne i wewnętrzne, pokrycia dachowe w budownictwie obiektów:
usługowych, handlowych, przemysłowych, branży spożywczej, chłodniczych, mieszkaniowych i
użyteczności publicznej, w tym obiektach służby zdrowia.

Wymieniony wyżej produkt odpowiada wymaganiom higienicznym przy spełnieniu następujących warunków
/ is acceptable according to hygienic criteria with the following conditions:

W przypadku stosowania w obiektach służby zdrowia wyrób musi spełniać wymagania rozporządzenia Ministra
Zdrowia z dnia 02 lutego 2011r (Dz. U. z dn. 11 lutego 2011, nr 31, poz. 158) w sprawie wymagań, jakim powinny
odpowiadać pod względem fachowym i sanitarnym pomieszczenia i urządzenia zakładu opieki zdrowotnej.
Wyrób nie może być źródłem emisji lotnych związków organicznych do środowiska i wewnątrz pomieszczeń.
Atest nie dotyczy bezpośredniego kontaktu wyrobu z żywnością.
Atest nie dotyczy cech użytkowych wyrobu.

Wytwórca / producer:

„GÓR-STAL” Spółka z o. o.
38-300 Gorlice
ul. Przemysłowa 11

Niniejszy dokument wydano na wniosek / this certificate issued for:

„GÓR-STAL” Spółka z o. o.
38-300 Gorlice
ul. Przemysłowa 11

Atest może być zmieniony lub unieważniony po przedstawieniu stosownych dowodów
przez którąkolwiek stronę. Niniejszy atest traci ważność po 2017-03-30
lub w przypadku zmian w recepturze albo w technologii wytwarzania wyrobu.

The certificate may be corrected or cancelled after appropriate motivation.
The certificate loses its validity after 2017-03-30
or in the case of changes in composition or in technology of production.

Data wydania atestu higienicznego: 30 marca 2012

The date of issue of the certificate: 30th March 2012

Reprodukcja, kopiowanie, fotografowanie, skanowanie, digitalizacja Atestu Higienicznego
w celach marketingowych bez zgody NIZP-PZH jest zabronione.

Kierownik
Zakładu Higieny Komunalnej

Bożena Krogulska
dr Bożena Krogulska

orig. T. Podkany

www.pzh.gov.pl



CERTYFIKAT

POLSKIE CENTRUM CERTYFIKACJI

potwierdza, że:

Gór-Stal Sp. z o.o.
ul. Przemysłowa 11, 38-300 Gorlice

stosuje System Zarządzania Jakością i spełnia wymagania

PN-EN ISO 9001:2009

w zakresie:

wytwarzania płyt warstwowych z rdzeniem poliuretanowym
oraz paneli termoizolacyjnych z rdzeniem poliuretanowym.

*Niniejszy certyfikat pozostaje w mocy pod warunkiem spełnienia wymagań umowy
nr 51/2013 oraz załącznika nr SWC_PW-03705-13.*

Certyfikacji udzielono:	20.05.2013
Certyfikat ważny do:	19.05.2016
Nr rejestracyjny certyfikatu:	PW-03705-13
Data wydania certyfikatu:	20.05.2013



AC 082
QMS

Dyrektor
Błaut
Miroslaw Błaut

Polskie Centrum Certyfikacji Sp. z o.o. ul. Piłsudskiego 74, 50-020 Wrocław

Autor i firma **Gór-Stal** zastrzega sobie prawo do zmian lub poprawek w treści katalogu, bez uprzedzenia.

Niniejsze opracowanie nie stanowi oferty w rozumieniu prawa.

Opracował: mgr. inż. Szymon Jamro, Wydanie II, Gorlice 03.2008 r.

Aktualizacja: Elżbieta Kuta, Maciej Kluba, maj 2016 r.



GÓR-STAL sp. z o.o.
ul. Przemysłowa 11, 38-300 Gorlice

www.gor-stal.pl

Factory of Sandwich Panels GORLICKA
ul. Przemysłowa 11, 38-300 Gorlice
tel./fax: +48 18 353 98 00
gorlice@gor-stal.pl

Factory of termPIR Insulation Boards
ul. Adolfa Mitera 9, 32-700 Bochnia
tel./fax: +48 14 698 20 60
bochnia@gor-stal.pl