GÓR-STAL
PŁYTY WARSTWOWE

TECHNICAL CATALOGUE

GORLICKA S 1000
GORLICKA U 1000
GORLICKA D 1000

GÓR-STAL

I. General information:

II. Technical specifications of products:

1. Wall sandwich panel GORLICKA S1000 (Standard cam-lock)

2. Wall sandwich panel GORLICKA U1000 (hidden cam-lock)

3. Wall sandwich panel GORLICKA D1000

4. Additional elements

5. Documents:

INTRODUCTION

This publication introduces the company and its products manufactured for entities involved in the erection of buildings, including investors, designers and developers. It also provides detailed technical information and typical mounting solutions for systems of light lining with GORLICKA sandwich panels.

ABOUT THE COMPANY

GÓR-STAL Sp. z o.o. is a new manufacturer of sandwich panels in Poland. It has been established to meet the rising demand for light housing materials in the country and abroad. The company was established in 2003 by Polish shareholders with own equity. The complete technological line for the production of sandwich panel with polyurethane foam, mineral wool and expanded polystyrene cores has been supplied by the renowned German company Hennecke GmbH together with W+K Industrie Technik GmbH. It is the most advanced technological line for the production of sandwich panels.
The company's plant is located in Gorlice in Małopolskie region on the affiliate premises of the Euro-Park Mielec Special Economic Zone.
In 2006 the company launched the production of sandwich panels with the trade name GORLICKA.

ABOUT THE PRODUCT

GORLICKA sandwich panels are the new generation of construction materials. They are made up of two profiled steel linings joined together in the production process with a thermal insulation layer of rigid polyurethane foam. GORLICKA sandwich panels provide aesthetic shell walls and roofs with very good tightness and thermal insulation and reduced thickness and weight. Quick and easy mounting, the possibility to carry out works in difficult weather conditions, low investment costs, easy maintenance of the walls and the system's modernity and versatility make the GORLICKA sandwich panels the best material for lining multi-purpose structures: industrial and production facilities, warehouses, commercial buildings, offices, service rooms, stores, cold stores and freezers, garages, workshops etc. The wide range of colours and the variety of panel profiles allow carrying out ambitious architectural projects.

STRUCTURE OF PANELS

The linings of GORLICKA sandwich panels is made of galvanized steel sheet S280GD+Z275 according to PN-EN 10326:2006 standard with organic polyester lacquer coating 25 microns thick. Due to higher anti-corrosion requirements, the panels may be made of sheets type: HPS, Estetic Clean, Granite Farm or can be coated with PVDF or plastisol. The linings are secured against mechanical damage during transportation and mounting by means of protecting foil.
The panel core is made of rigid polyurethane foam with density of 40±3 kg/m^3, resistant to biological corrosion. The heat conductivity calculation value of the foam is $\lambda = 0.022$ W/m·K.

CERTIFICATES AND TECHNICAL APPROVALS

GORLICKA sandwich panels have the following certificates and technical approvals:

According to norm **PN EN 15 509** – GORLICKA sandwich panels with rigid polyurethane foam core in steel sheet lining.

PZH Hygienic Certificate no. HK/B/0250/01/2012 – approving the products for applications in service, commercial, food, cooling, housing and public utility facilities, including health-care facilities.

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PRODUCTION PROGRAMME

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

Wall sandwich panels	GORLICKA S 1000 (standard cam-lock) – 40, 60, 80 and 100 mm
	GORLICKA U 1000 (hidden cam-lock) – 60, 80 and 100 mm
Roof sandwich panel	GORLICKA D 1000 (roof cam-lock) – 40, 60, 80, 100 and 120 mm
Coldstore panels	GORLICKA CH 1000 (cold storage cam-lock) – 100, 120, 160 and 200 mm

Flashings: typical and custom-made according to the client's design with maximum length of 6 m.
This publication provides detailed characteristics of coldstore panels. Other products are characterised in a separate technical catalogue.

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

Gór-Stal provides assistance and technical support on each stage of the investment.
Our sales representatives and the technical support team provide advice to investors, designers and developers in designing, ordering and mounting of light housing panels.
We also design and verify light housing projects.
Please visit our website at **www.gor-stal.pl**

APPLICATIONS

GORLICKA S1000 wall panel is designed for outer screening walls and inner partition walls in structural frame buildings. GR 1000S panels can be mounted in both vertical and horizontal position, as single-span or multi-span wall elements.

PHYSICAL FEATURES

GORLICKA S1000 wall panel is manufactured in four core thickness options: 40, 60, 80 and 100 mm.
Panels' **facing** is made of double-sided galvanized steel sheets, 0.50 mm thick S280GD+Z275 as per PN-EN 10326:2006, with organic polyester coating 25 µm thick.
Panels' **core** of thermal insulation properties is made of rigid polyurethane foam (PUR) of 40±3 kg/m^3 density.
Modular **width** of a panel equals 1000 mm or 1140 mm. Standard **lengths** of panels equal from 2.0 m to 12 m. Panels shorter than 2 m or longer than 12 m are also available at customer's special order, and the maximum length can equal even 16,5 m.
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	9,8	1000 1140 - for thickness 60 mm or higher and profilation L or M	2,0-12,0 / 16,5	9002 9010 9006
60	10,85			
80	11,60			
100	12,45			

TECHNICAL PARAMETERS

Thermal performance of panels depends on the core thickness and is characterized by the heat transfer coefficient U of a division – specified in the table below.
Acoustic parameters of panels are specified based on PN-EN ISO 717-1:1999 standard. Wall panels can be used for divisions, of noise reduction performance requirements below the values specified below.
As regards the **fire resistance** GORLICKA S1000 wall sandwich panels are classified as not spreading fire (**NRO**) material as per PN-90/B-02867.
Based on PN-EN 13501-2+A1:2013 the panel is certified with: basic fire reaction – class **B**, production of smoke - class **s2**, production of flaming droplets and particles - class **d0**.
Based on PN-EN-13501-2+A1:2010 panel S1000 100 mm thick is certified with: fire integrity – class (R)**E60** and fire insulation – class (R)**EI15**.
Chemical corrosion resistance – GORLICKA sandwich panels can be applied in environments of corrosivity category C1, C2, C3 as per PN-EN ISO 12944-2.

Thickness [mm]	Heat-transfer coefficient U [W/m^{2}K]	Acoustic insulation indicators: R_W, R_{A1}, R_{A2}	Fire classification
40	0,57	R_W = 25 dB R_{A1} = 22 dB R_{a2} = 21 dB	**NRO** acc. PN-90/B-02867 **B-s2,d0** acc. PN-EN 13501-1+A1:2013
60	0,37		
80	0,27		
100	0,22		(R)**E 60,** (R)**EI15**

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

Phone/Fax (018) 353 98 00
info@gor-stal.pl
www.gor-stal.pl

Panel thicknesses
Profiles of outer and inner facing

Scale
1:10
1:1

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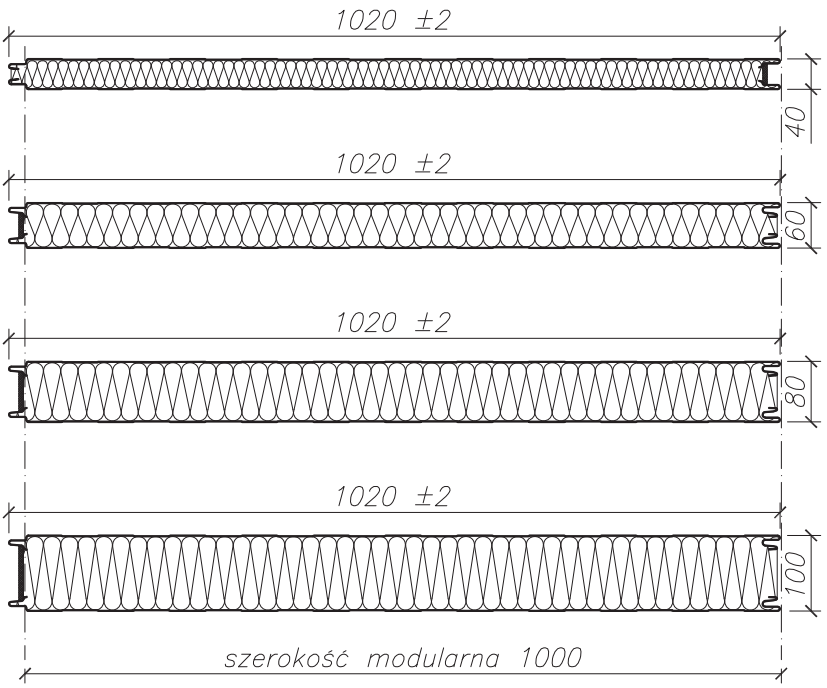
Panel thicknesses



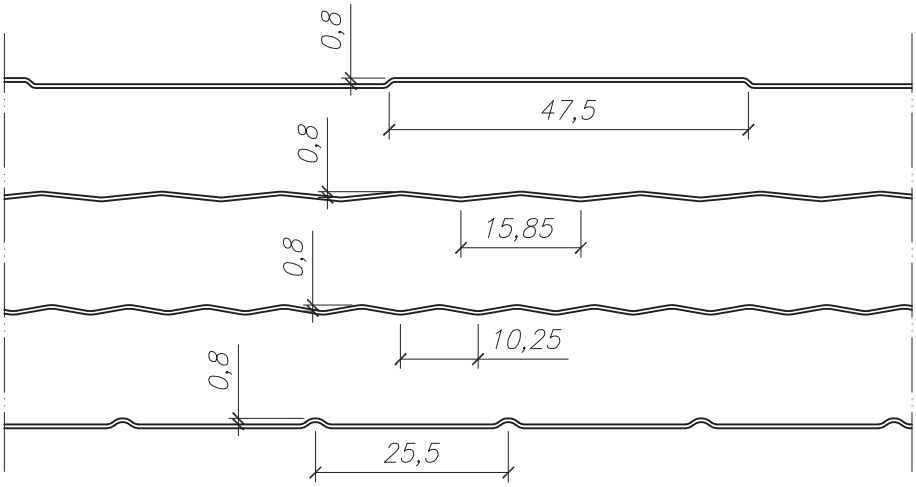
40 mm

60 mm

80 mm

100 mm

Outer facing profiles



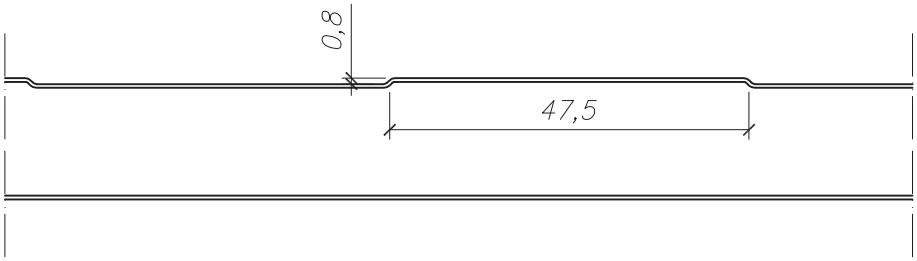
Linear

Micro profiled

Furrowed

Grooving

Inner facing profiles



Linear

Smooth

LOAD SPAN TABLES

Table of allowed loads for GORLICKA S1000 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 S1000 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 DISPATCH

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]	**40**	**60**	**80**	**100**
Maximum number of panels in a pack	25	19	14	11

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

Phone/Fax (018) 353 98 00
info@gor-stal.pl
www.gor-stal.pl

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Selected details of cladding made of GORLICKA S1000 sandwich panels

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

VERTICAL ARRANGEMENT of panels

Details of panel connection to grade beam – variant I
Details of panel connection to grade beam – variant II
Detail of panel connection to flooring
Detail of panels' connection in a corner – variant I
Detail of panels' connection in a corner – variant II
Detail of panels' connection in an optional angle corner
Detail of panel connection to wall
Detail of roll-up door post
Detail of roll-up door lintel
Window assembly in sandwich panel – variant I – profile
Window assembly in sandwich panel – variant I – cross-section
Window assembly in sandwich panel – variant II – profile
Window assembly in sandwich panel – variant II – cross-section

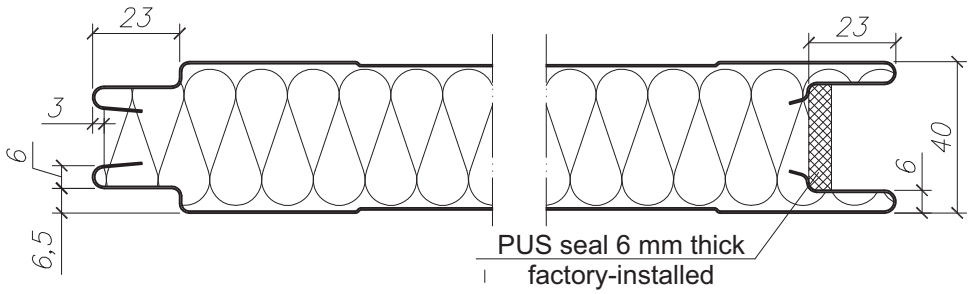
HORIZONTAL ARRANGEMENT of panels

Details of panel connection to grade beam – variant I
Details of panel connection to grade beam – variant II
Detail of panels' connection in a corner
Detail of panels' connection in an optional angle corner
Detail of panel connection to flooring
Detail of panel connection to wall
Detail of panel connection to edge support
Detail of panel connection to intermediate support
Detail of building expansion joint
Detail of panel connection to reinforced concrete support
Detail of roll-up door post
Detail of roll-up door lintel
Window assembly in sandwich panel – variant I – profile
Window assembly in sandwich panel – variant I – cross-section
Window assembly in sandwich panel – variant II – profile
Window assembly in sandwich panel – variant II – cross-section

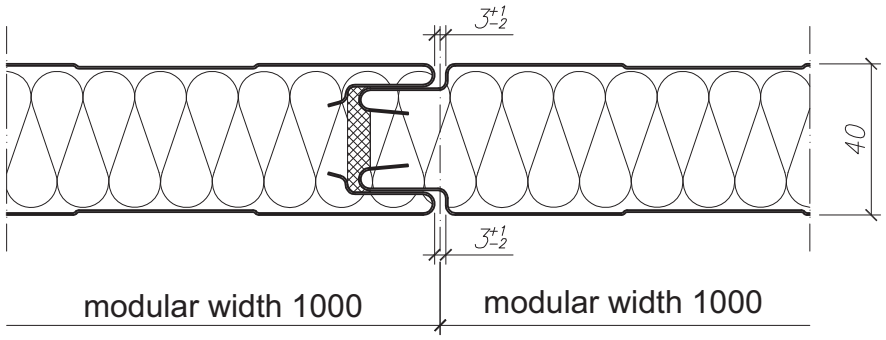
Scale 1:2

Details of cam-lock and 40 mm thick panels' connection
Details of cam-lock and 60, 80, 100 mm thick panels' connection

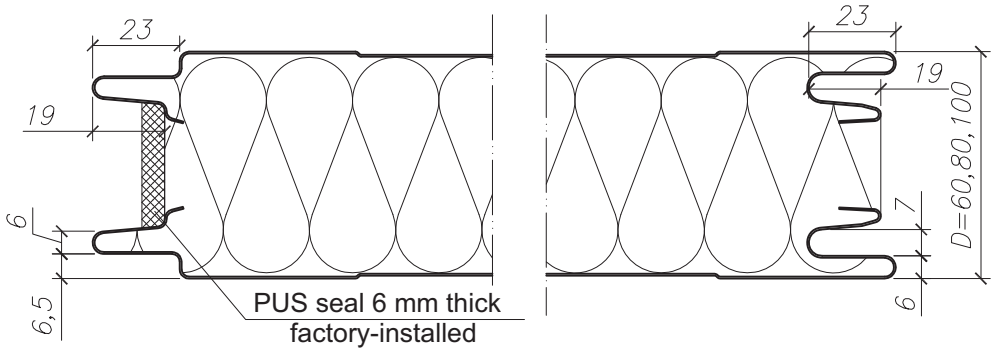
Shape of cam-lock for 40 mm thick panels



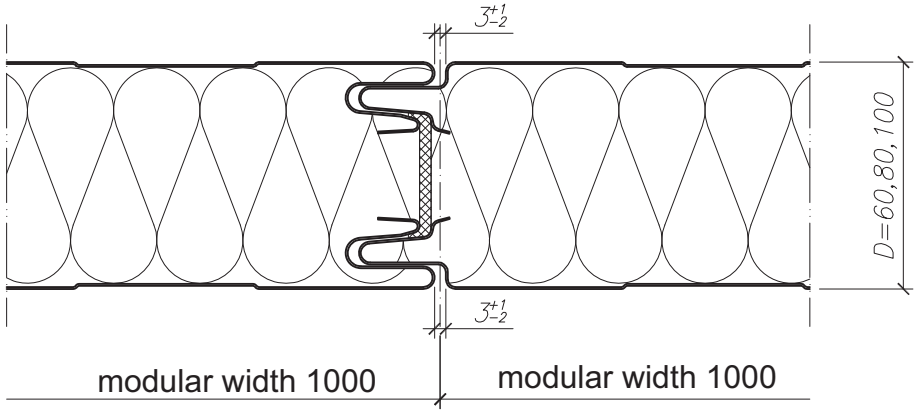
Detail of 40 mm thick panels' connection



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



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



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

Phone/Fax (018) 353 98 00
info@gor-stal.pl
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Details of 40 mm thick panels' connection

Scale 1:2

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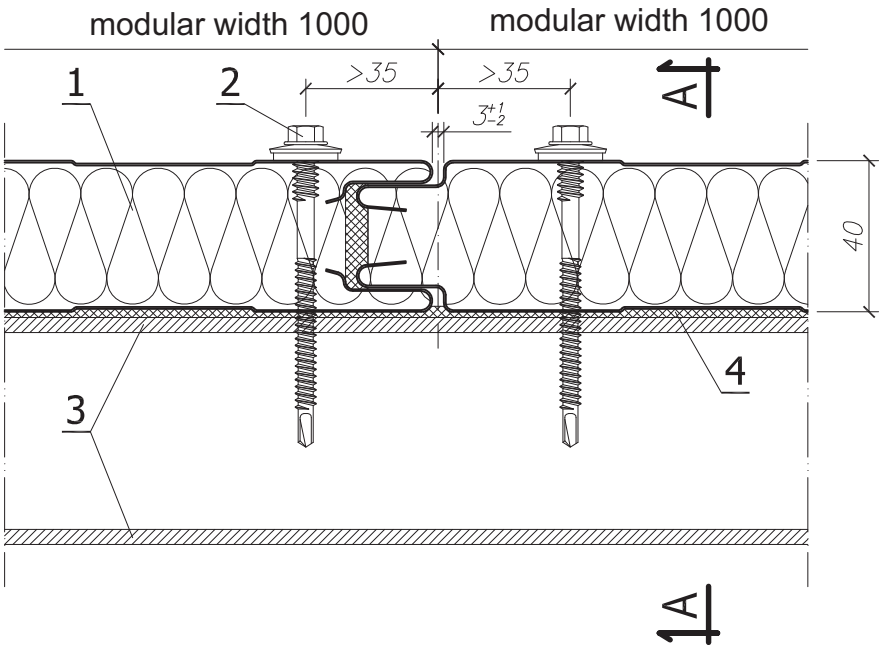
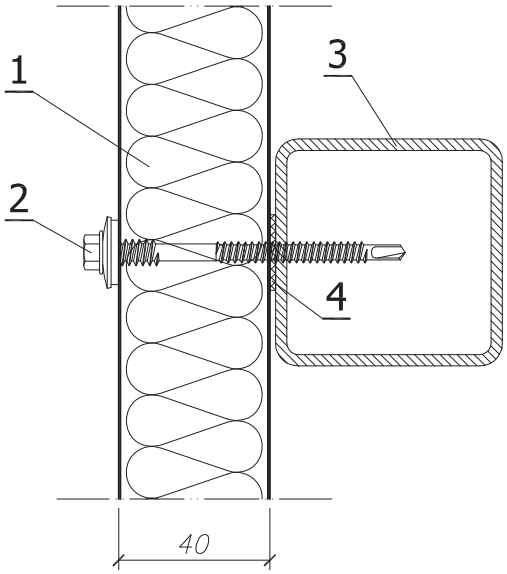
Details of 40 mm thick panels' connection



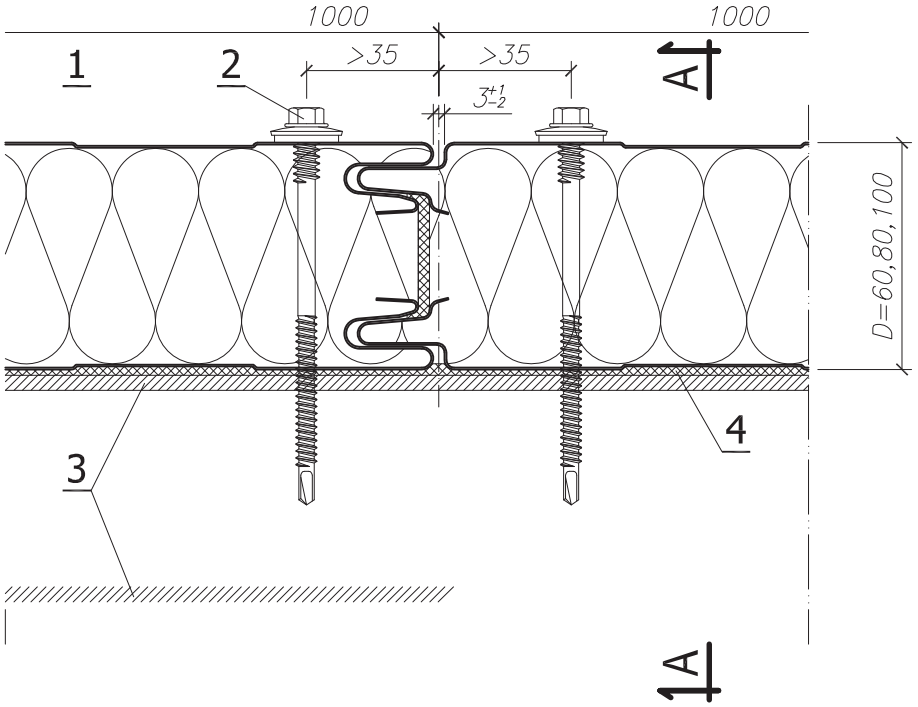
A-A cross-section



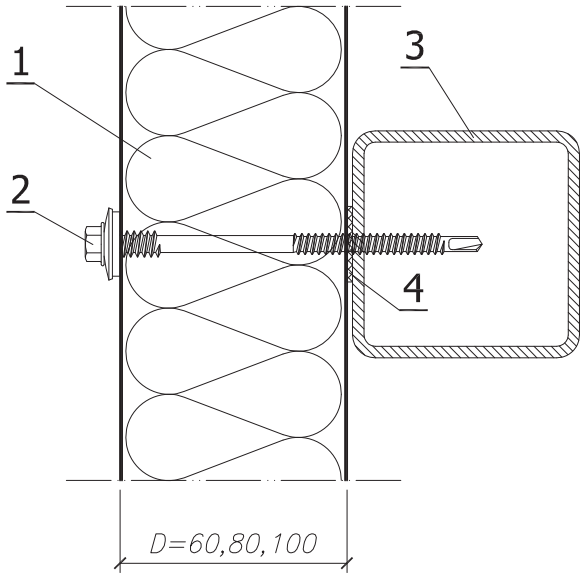
LEGEND:
1. GORLICKA S1000 wall panel
2. Self-drilling connector for sandwich panels
3. Transom acc. to structure design
4. Polyethylene, self-adhesive sealing tape (PES)

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 S1000 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

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

Phone/Fax (018) 353 98 00
info@gor-stal.pl
www.gor-stal.pl

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

Scale
1:2

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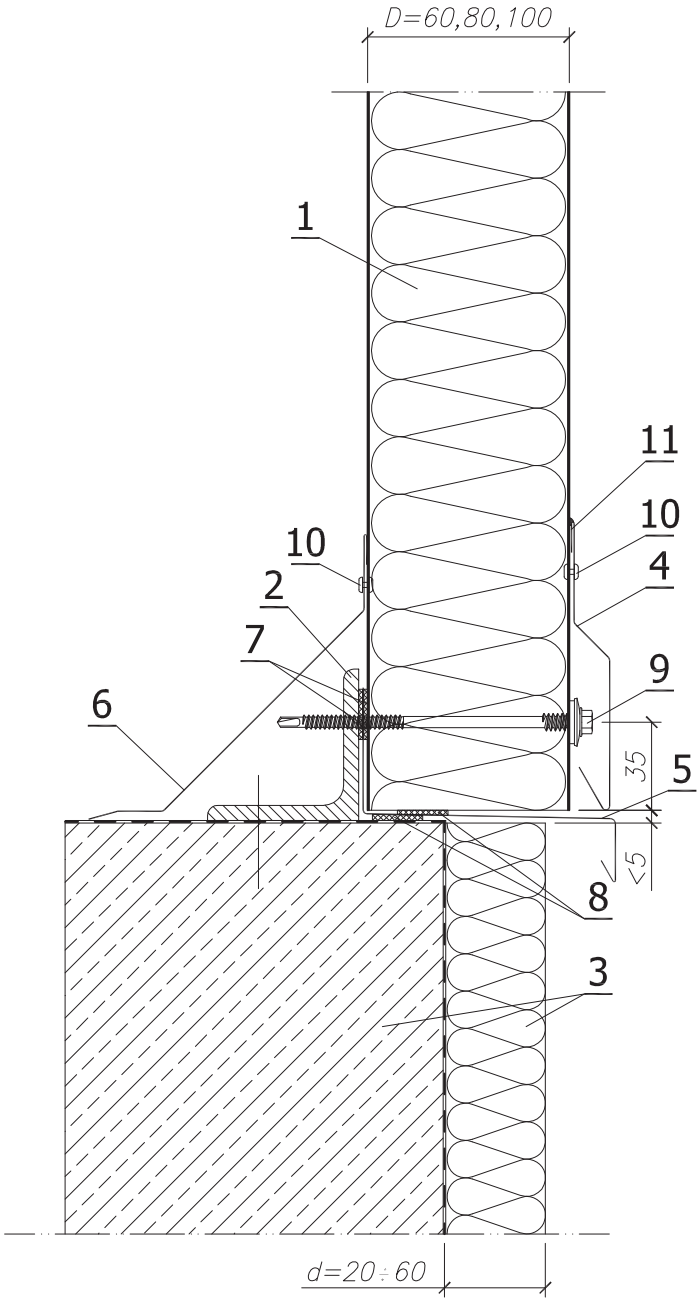
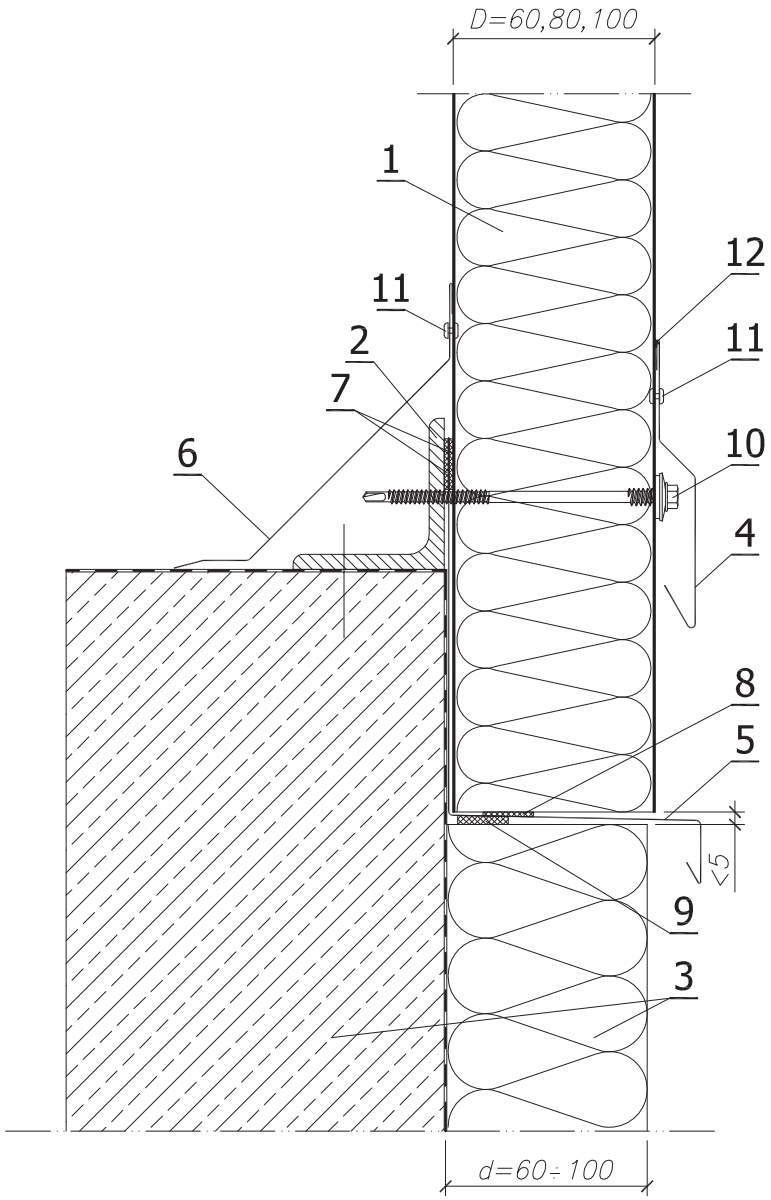


LEGEND:
1. GORLICKA S1000 wall panel
2. Steel section acc. to structure design
3. Grade beam with insulation and thermal insulation acc. to detailed design
4. Drip edge OB-10 (option)
5. Eaves OB-13
6. Covering flashing OB-08
7. Polyethylene, self-adhesive sealing tape (PES)
8. Impregnated polyurethane seal
9. Self-drilling connector for sandwich panels
10. Tight blind rivet 4.8 x 9.5

Scale 1:2

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



LEGEND:
1. GORLICKA S1000 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

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

Phone/Fax (018) 353 98 00
info@gor-stal.pl
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VERTICAL ARRANGEMENT of panels
Detail of panel connection to flooring

Scale
1:2

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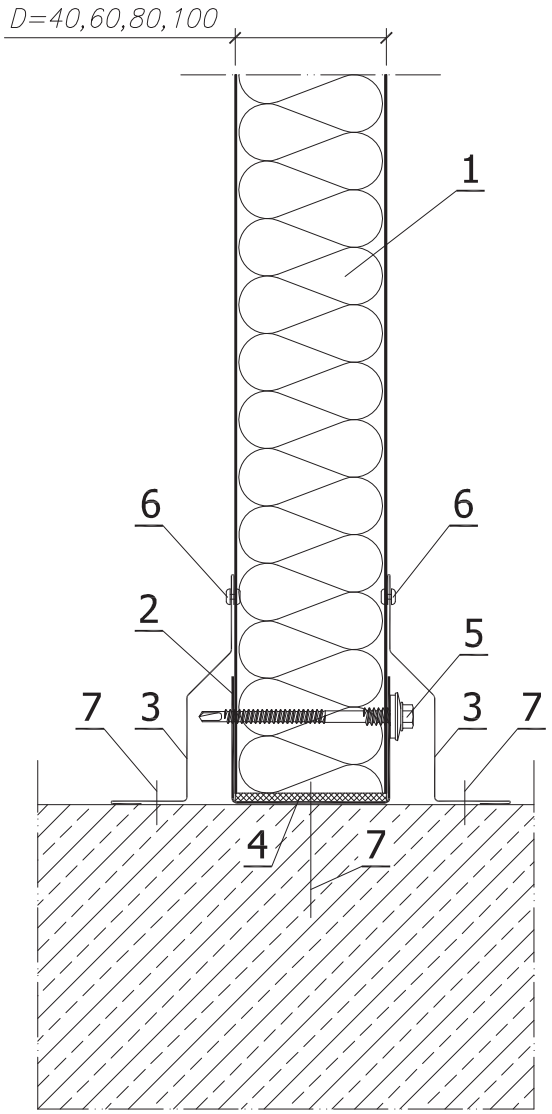
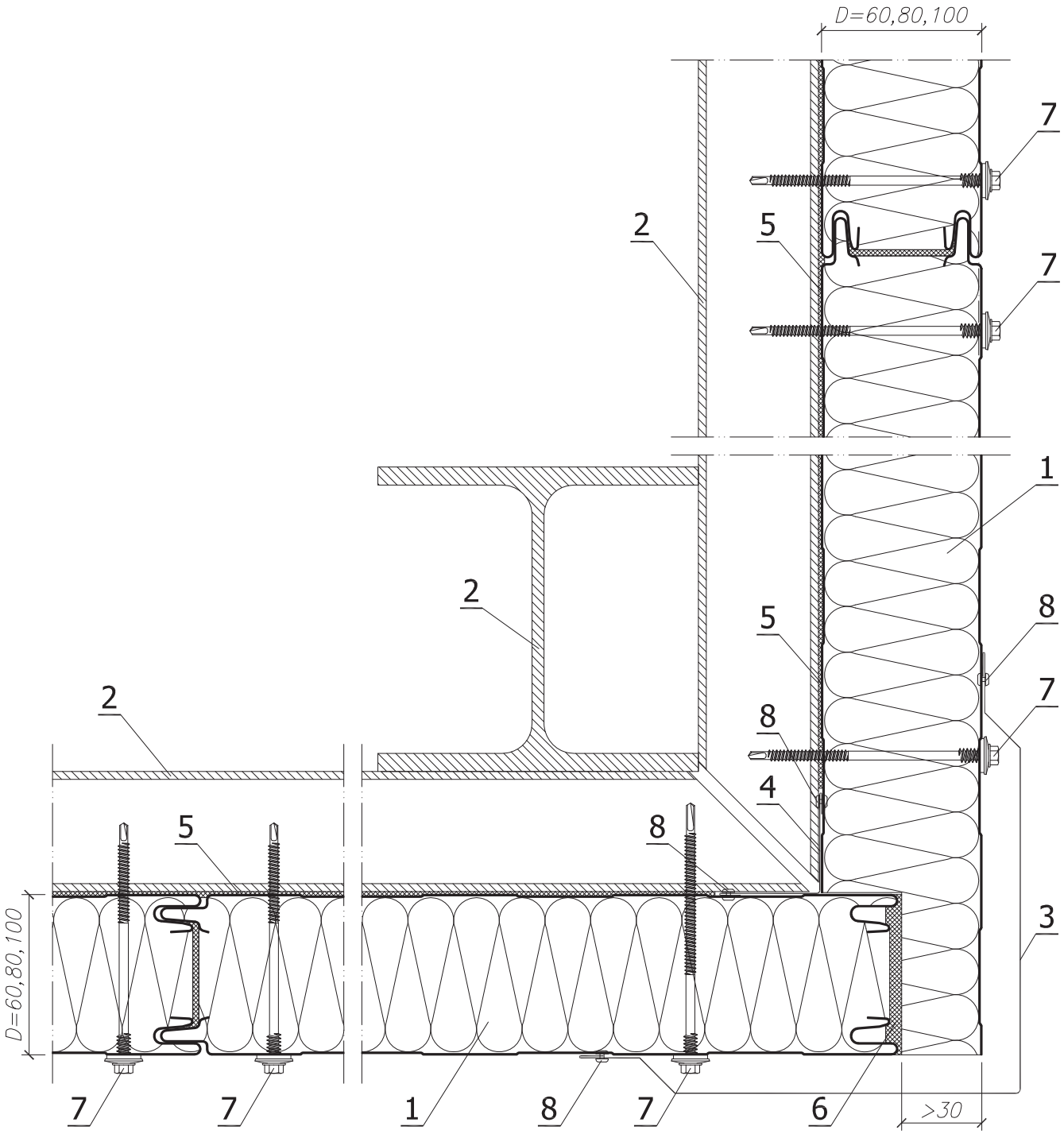


LEGEND:
1. GORLICKA S1000 wall panel
2. Edge channel section OB-42
3. Covering flashing OB-05
4. Impregnated polyurethane seal (PURS) or caulking foam
5. Self-drilling connector for sandwich panels
6. Tight blind rivet 4.8 x 9.5
7. Steel expansion joint for fast assembly

Scale 1:2

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



LEGEND:
1. GORLICKA S1000 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

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

Phone/Fax (018) 353 98 00
info@gor-stal.pl
www.gor-stal.pl

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

Scale
1:3

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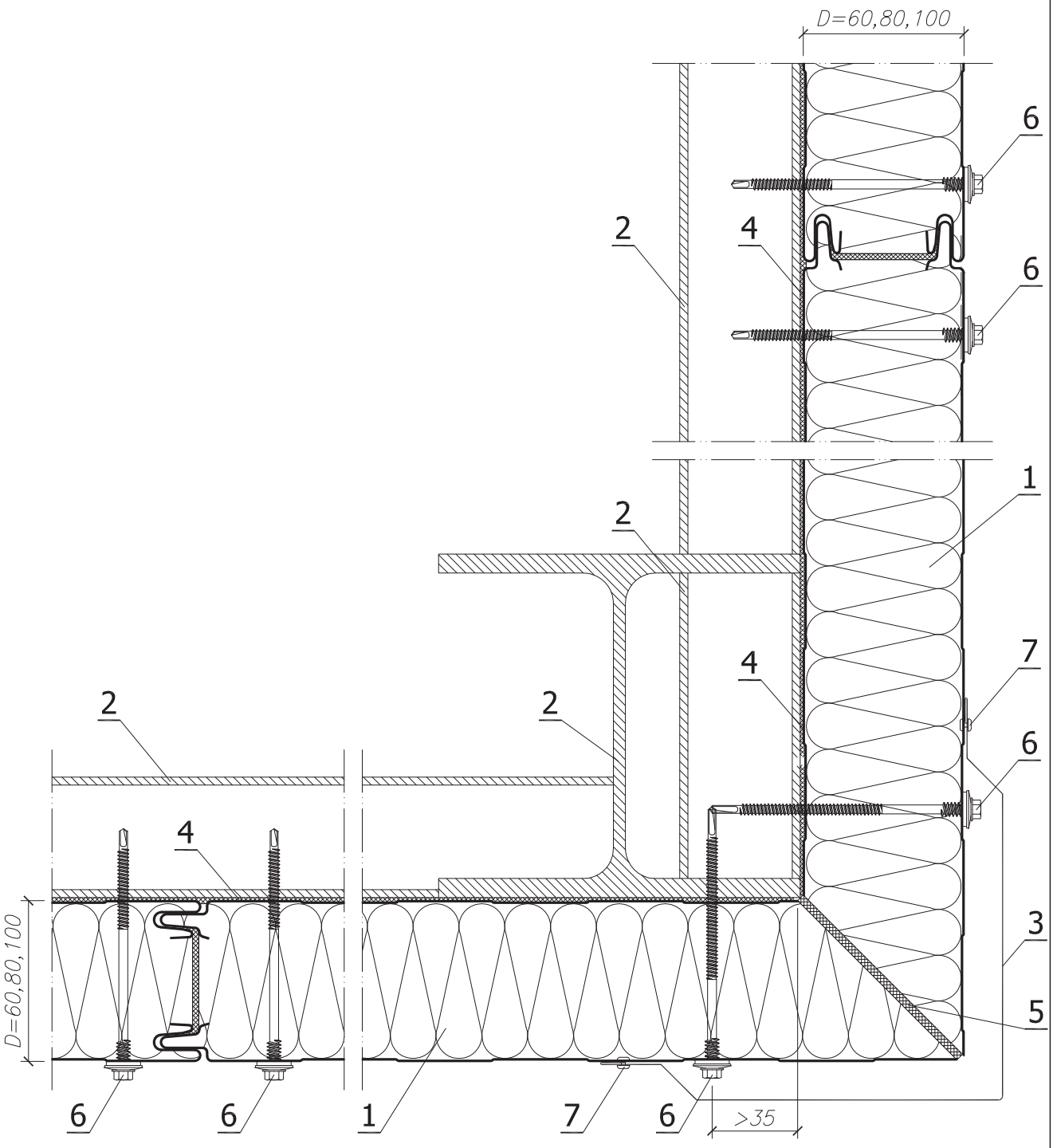
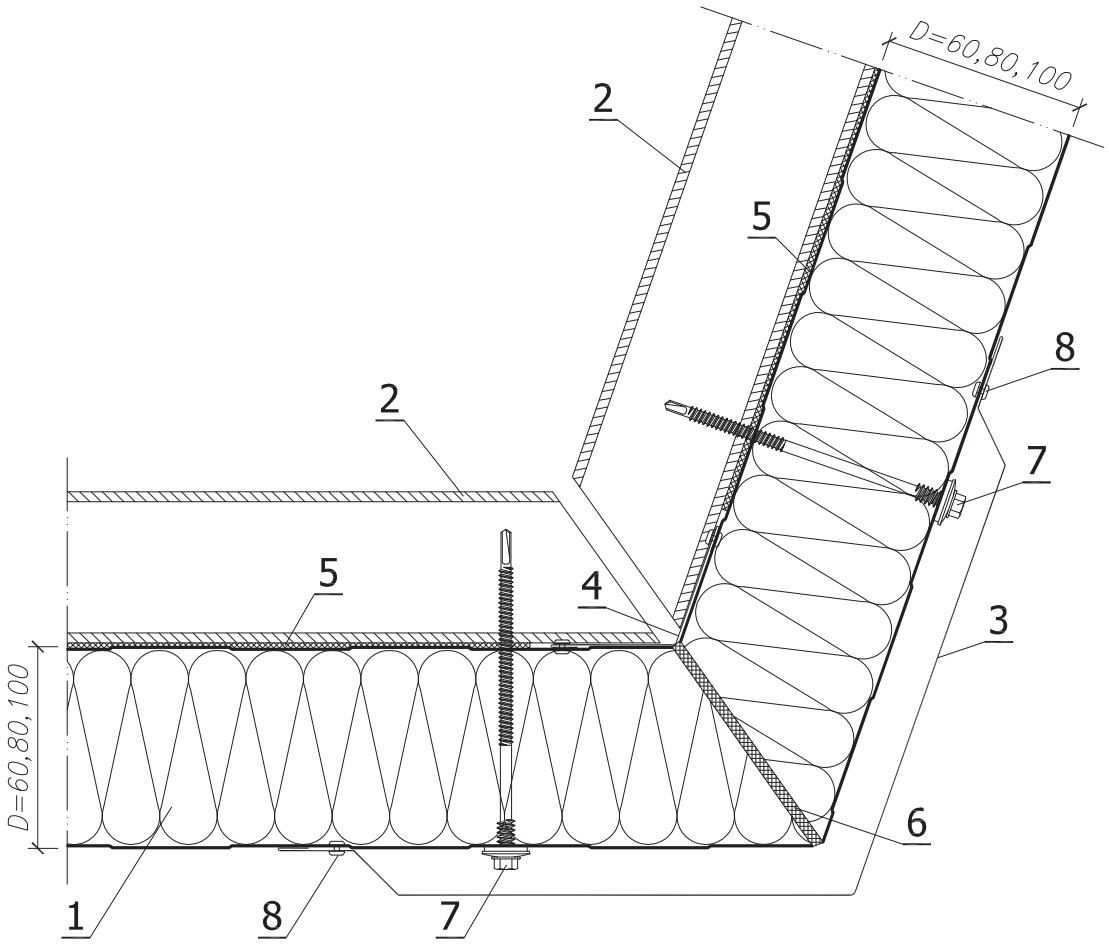


LEGEND:
1. GORLICKA S1000 wall panel
2. Steel post and transom acc. to structure design
3. Corner flashing OB-03
4. Polyethylene, self-adhesive sealing tape (PES)
5. Polyurethane caulking foam
7. Self-drilling connector for sandwich panels
8. Tight blind rivet 4.8 x 9.5

Scale 1:2

VERTICAL ARRANGEMENT of panels
Detail of panels' connection in an optional angle corner



LEGEND:
1. GORLICKA S1000 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

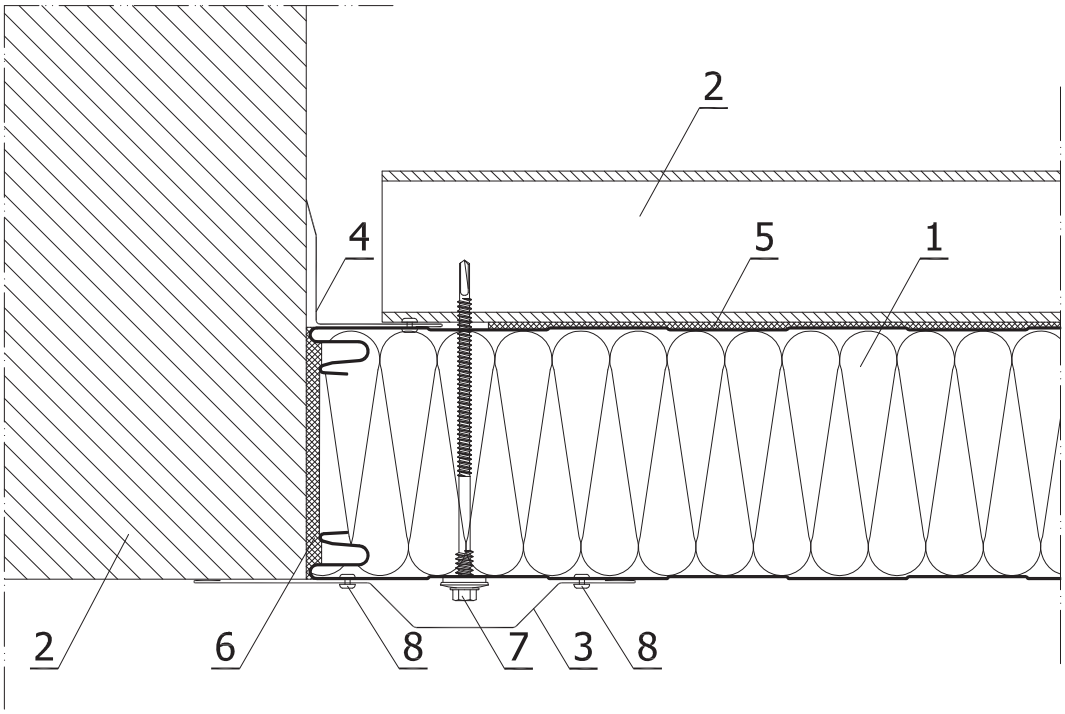
Gór-Stal Sp. z o.o.
ul. Przemysłowa 11
38-300 Gorlice

Phone/Fax (018) 353 98 00
info@gor-stal.pl
www.gor-stal.pl

VERTICAL ARRANGEMENT of panels
Detail of panel connection to wall

Scale
1:3

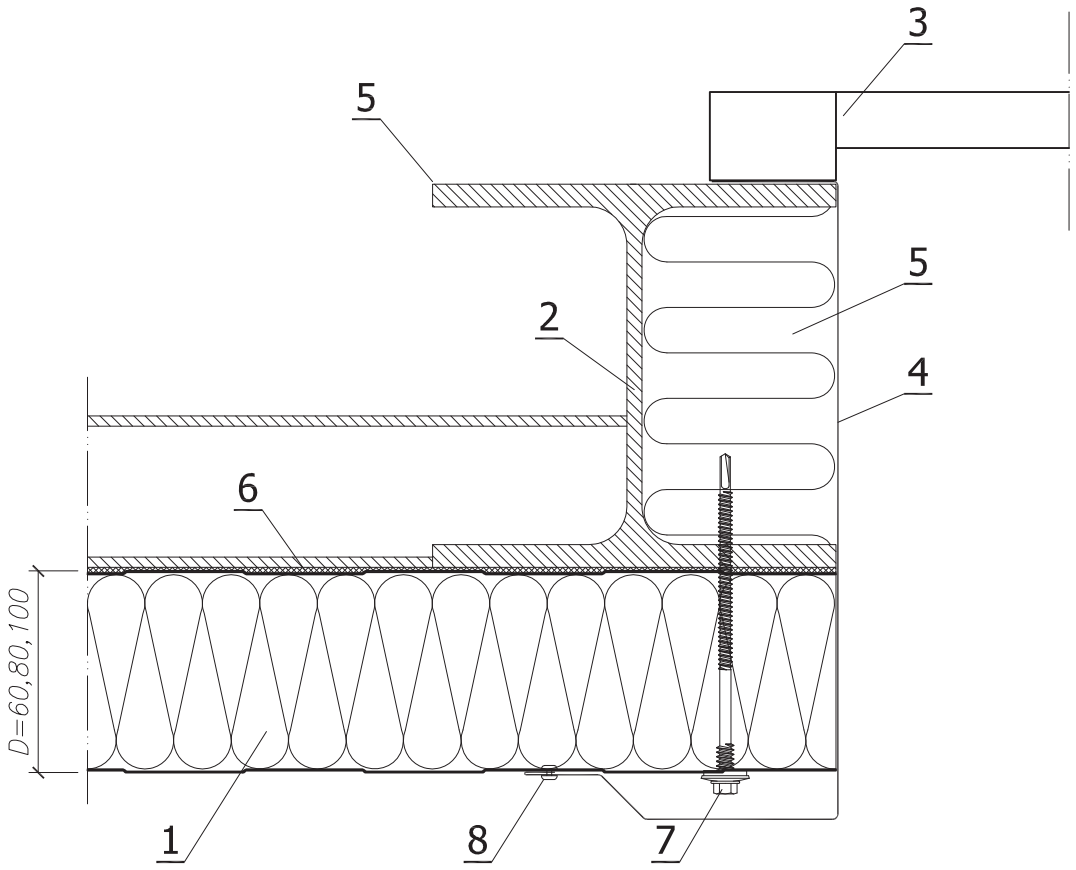
GÓR-STAL



LEGEND:
1. GORLICKA S1000 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

Scale 1:3

VERTICAL ARRANGEMENT of panels
Detail of roll-up door post



LEGEND:
1. GORLICKA S1000 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

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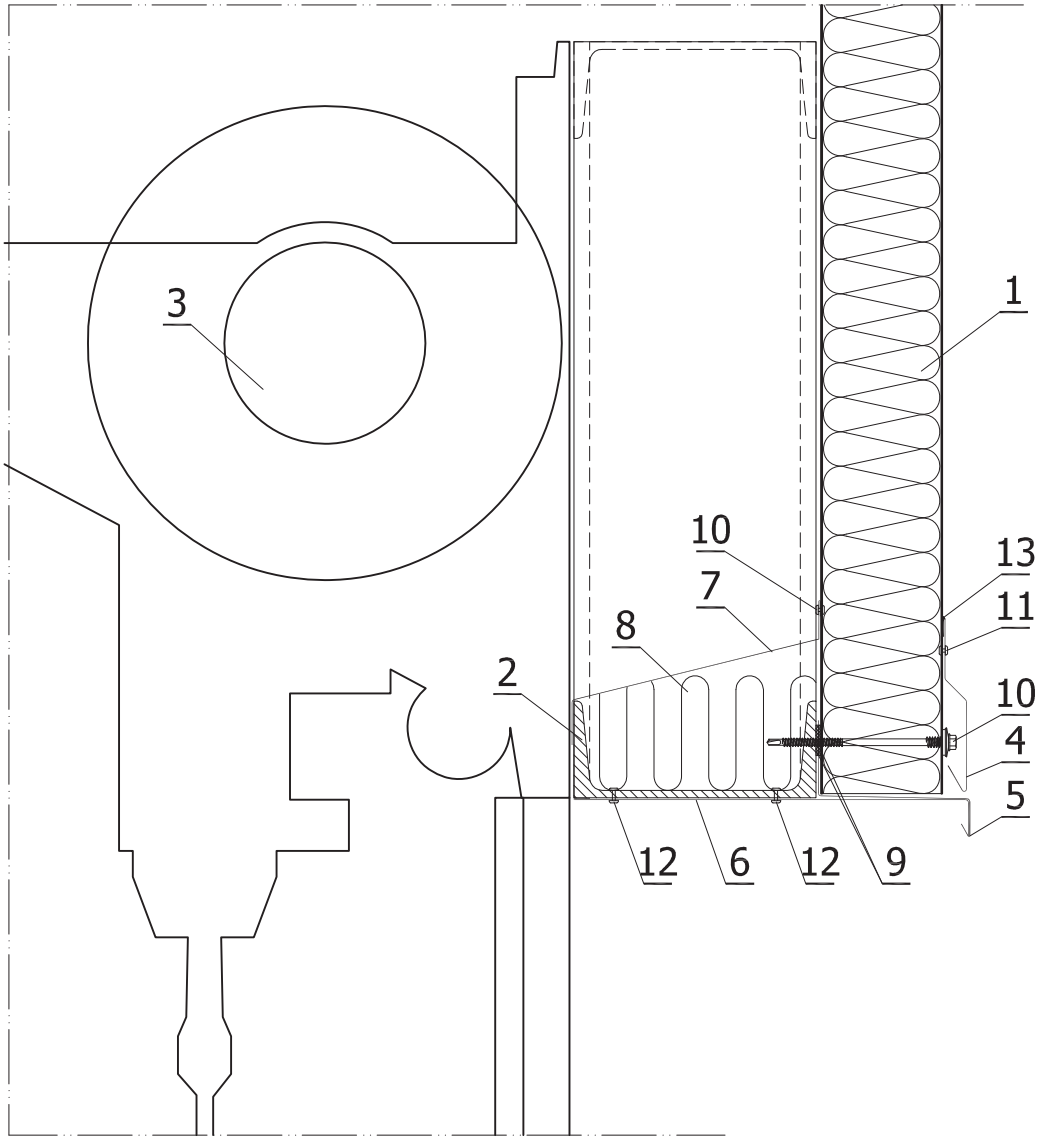
VERTICAL ARRANGEMENT of panels
Detail of roll-up door lintel

Scale
1:5

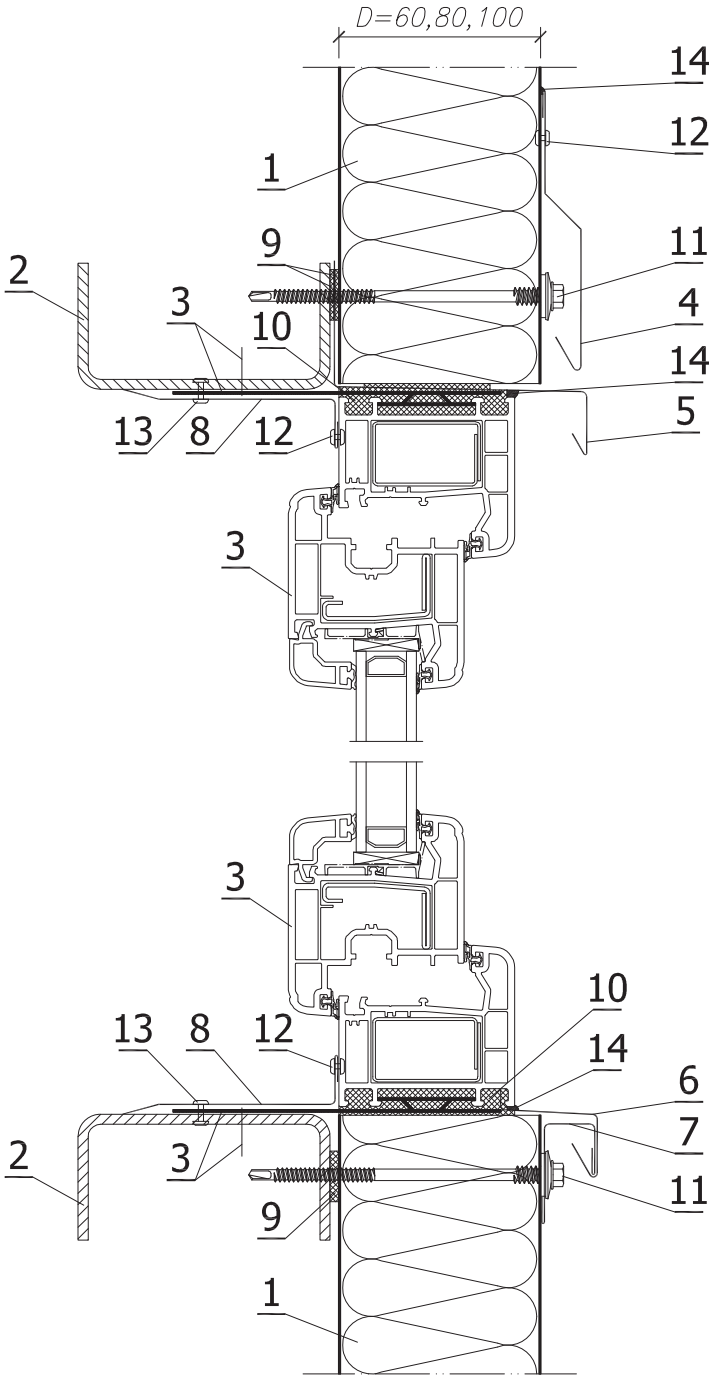
GÓR-STAL



LEGEND:
1. GORLICKA S1000 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

Scale 1:3

VERTICAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant I – profile



LEGEND:
1. GORLICKA S1000 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

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ul. Przemysłowa 11
38-300 Gorlice

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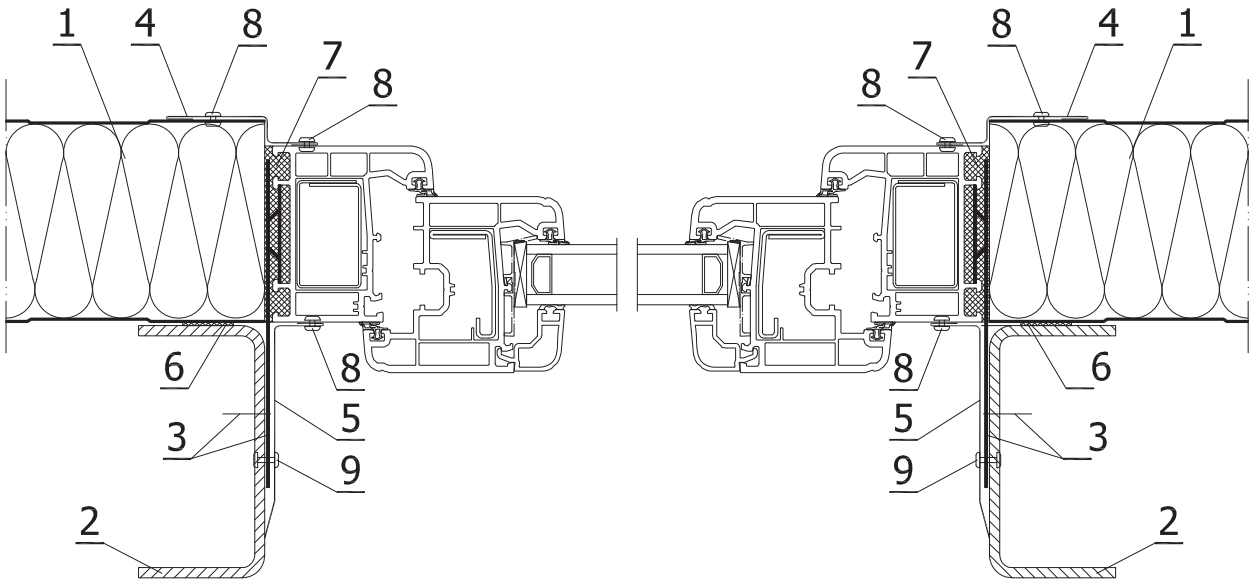
VERTICAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant I – cross-section

Scale
1:3

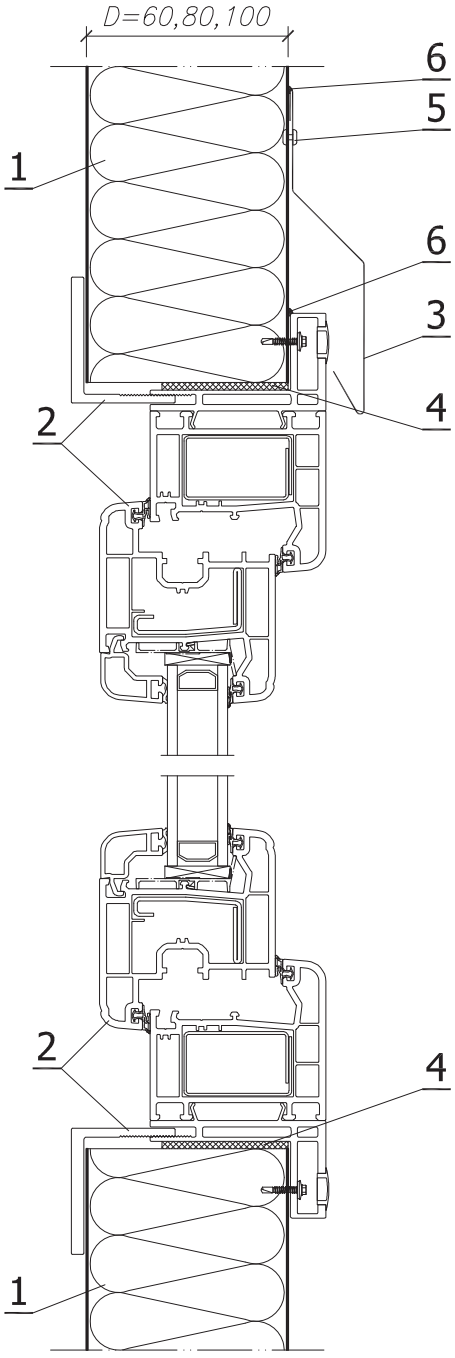
GÓR-STAL



LEGEND:
1. GORLICKA S1000 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)

Scale 1:3

VERTICAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant II – profile



LEGEND:
1. GORLICKA S1000 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

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Phone/Fax (018) 353 98 00
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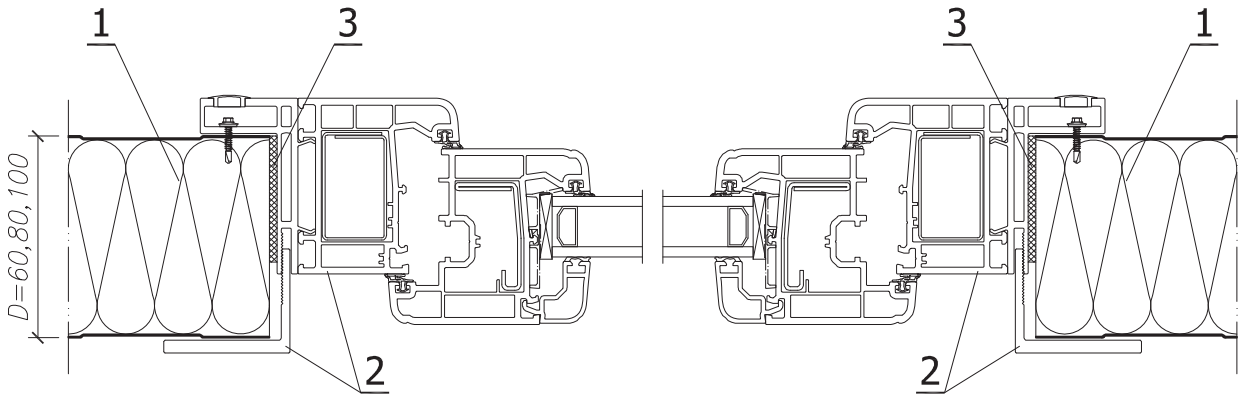
VERTICAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant II – cross-section

Scale
1:3

GÓR-STAL

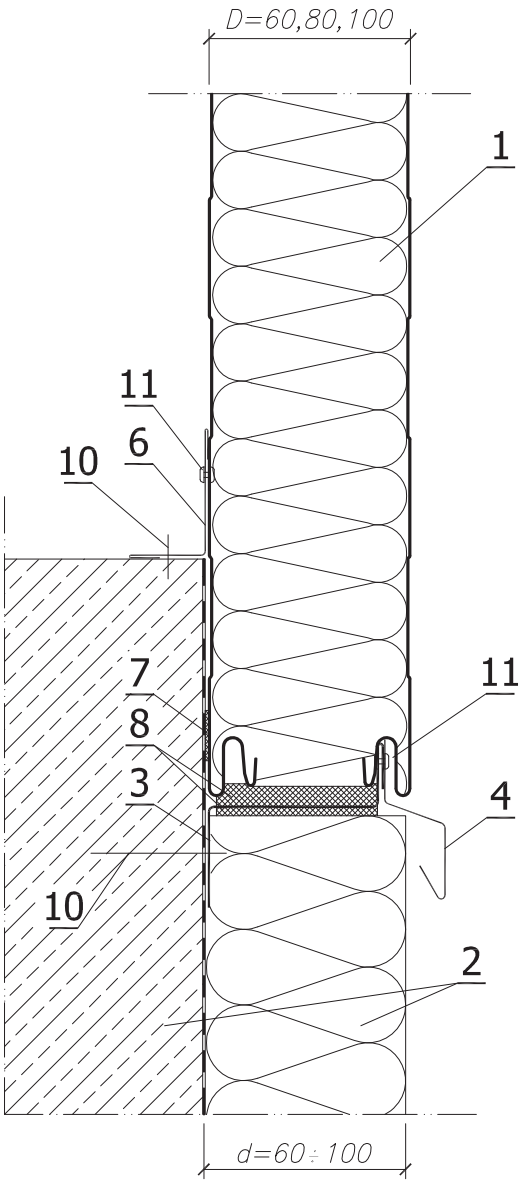


LEGEND:
1. GORLICKA S1000 wall panel
2. PVC or aluminium window with a fastening profile
3. Impregnated polyurethane seal (PURS) or caulking foam

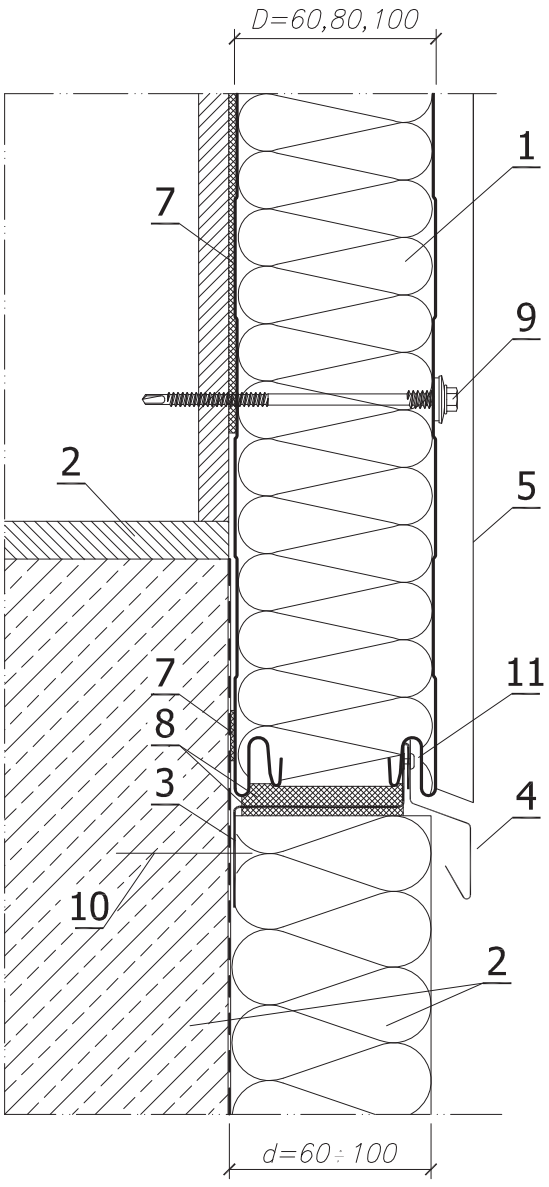
Scale 1:3

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

In the span



On the support



LEGEND:
1. GORLICKA S1000 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

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ul. Przemysłowa 11
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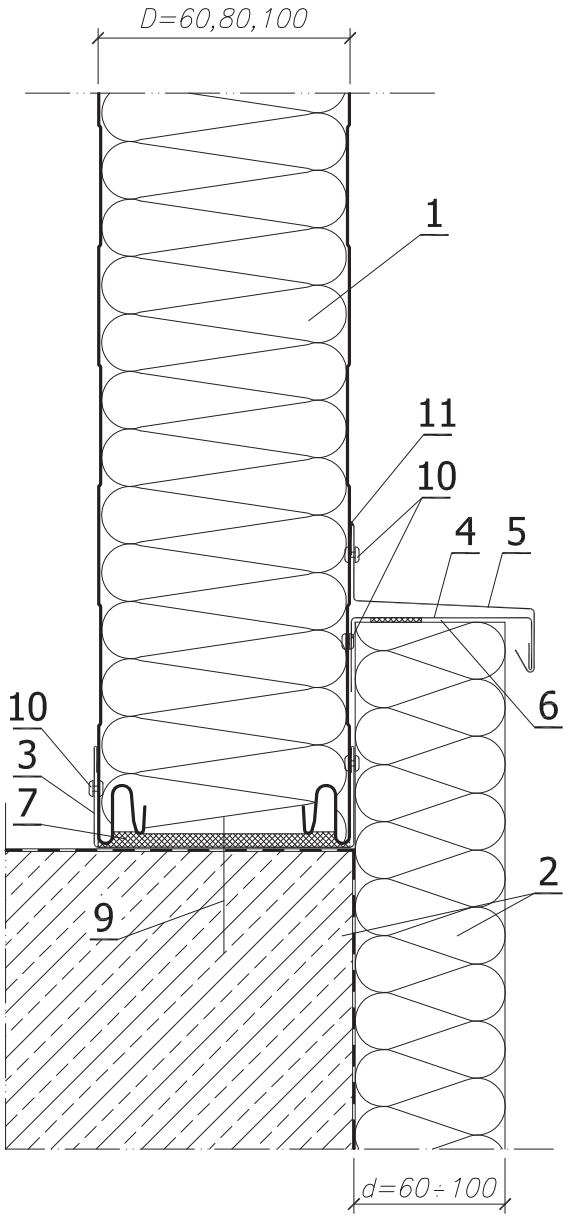
HORIZONTAL ARRANGEMENT of panels
Details of panel connection to grade beam
Variant II

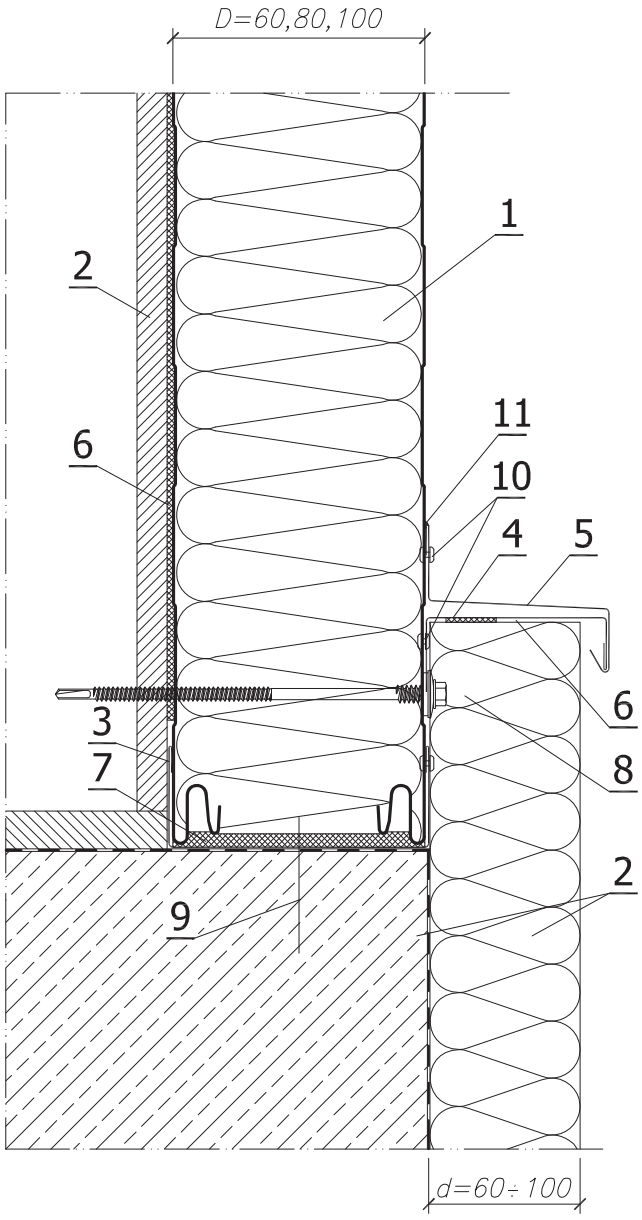
Scale 1:3

GÓR-STAL

In the span



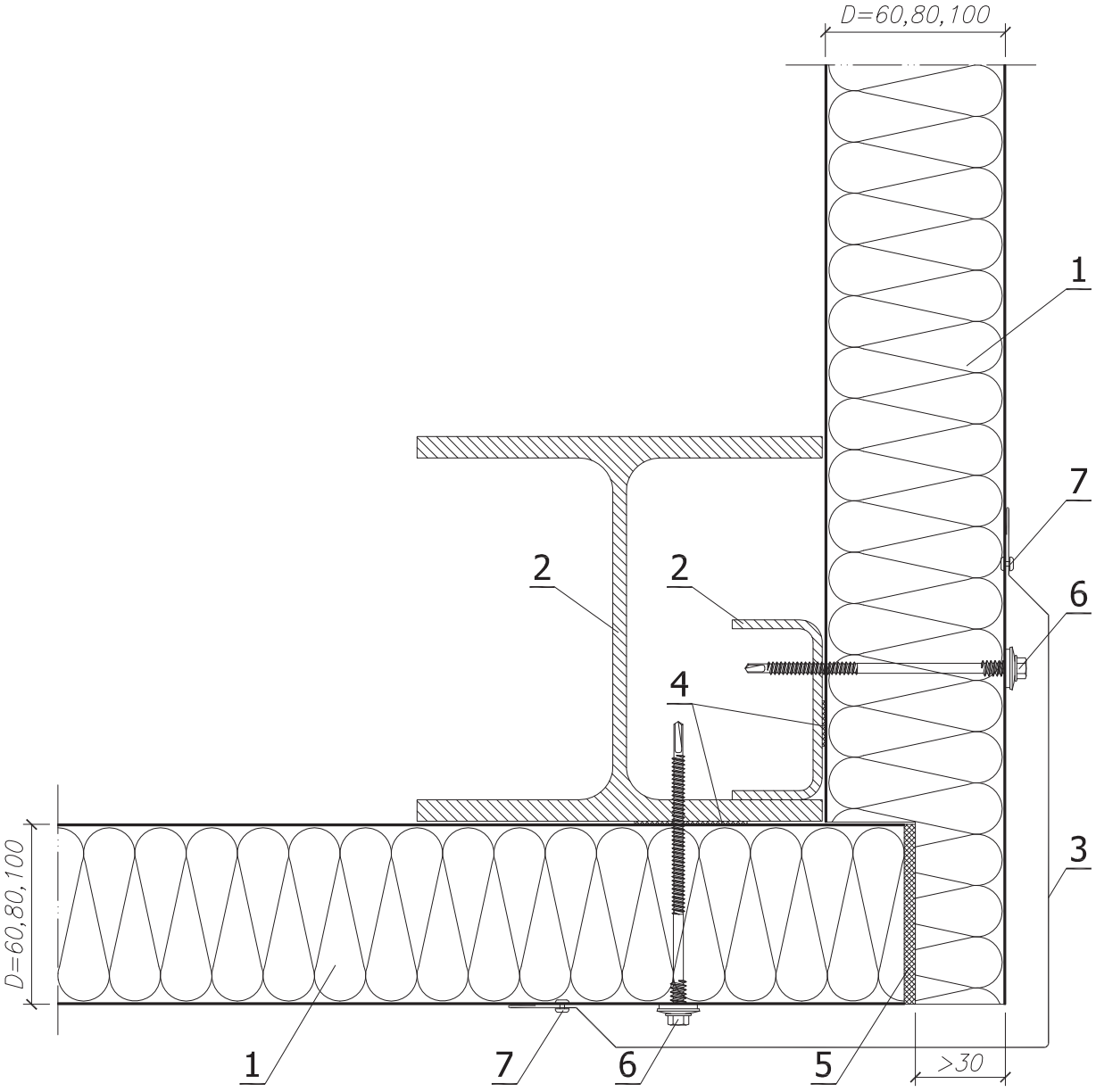
On the support



LEGEND:
1. GORLICKA S1000 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

Scale 1:3

HORIZONTAL ARRANGEMENT of panels
Detail of panels' connection in a corner



LEGEND:
1. GORLICKA S1000 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

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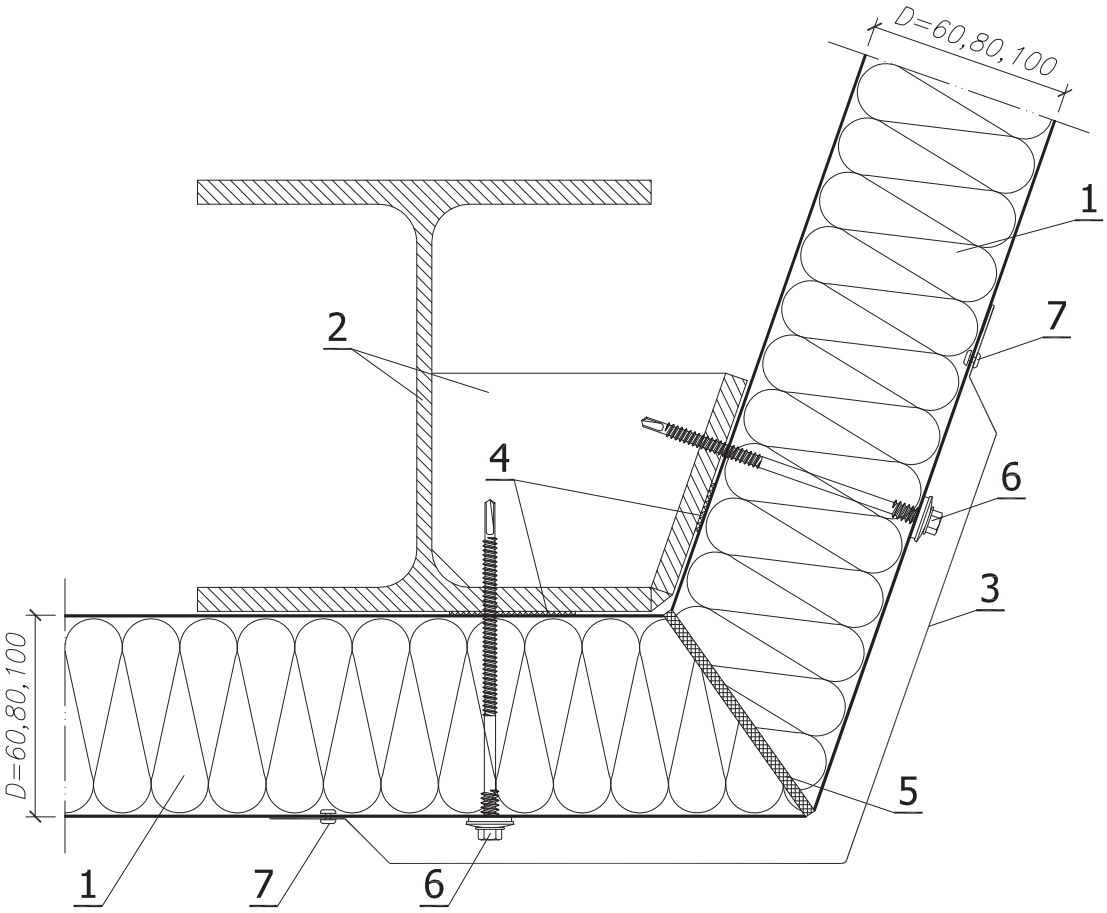
HORIZONTAL ARRANGEMENT of panels
Detail of panels' connection in an optional angle corner

Scale 1:3

GÓR-STAL

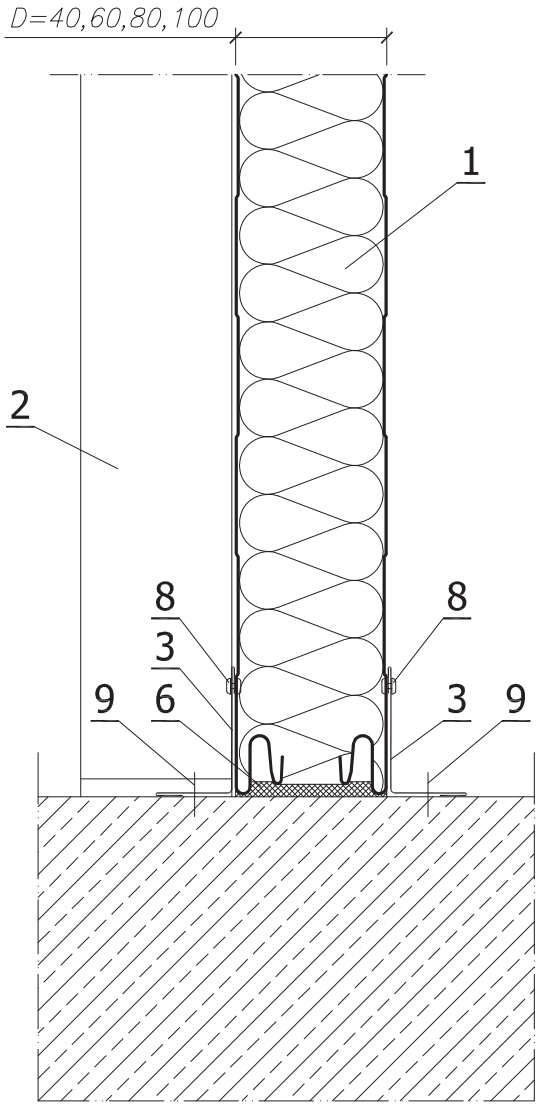


LEGEND:
1. GORLICKA S1000 wall panel
2. Steel post acc. to structure design
3. Corner flashing OB-03
4. Polyethylene, self-adhesive sealing tape (PES)
5. Polyurethane caulking foam
6. Self-drilling connector for sandwich panels
7. Tight blind rivet 4.8 x 9.5

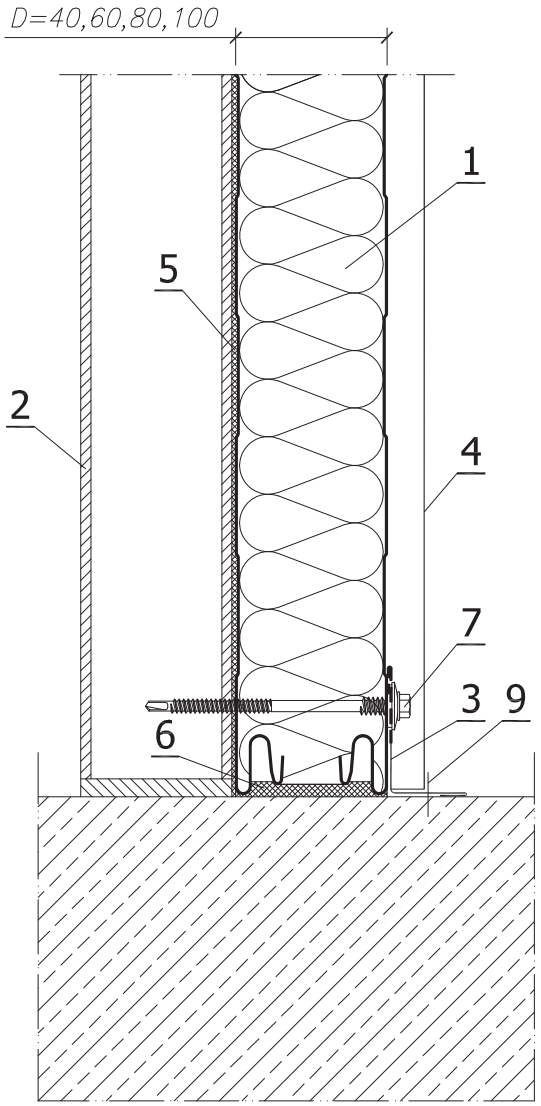
Scale 1:3

HORIZONTAL ARRANGEMENT of panels
Detail of panels connection to flooring

In the span



On the support



LEGEND:
1. GORLICKA S1000 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

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ul. Przemysłowa 11
38-300 Gorlice

Phone/Fax (018) 353 98 00
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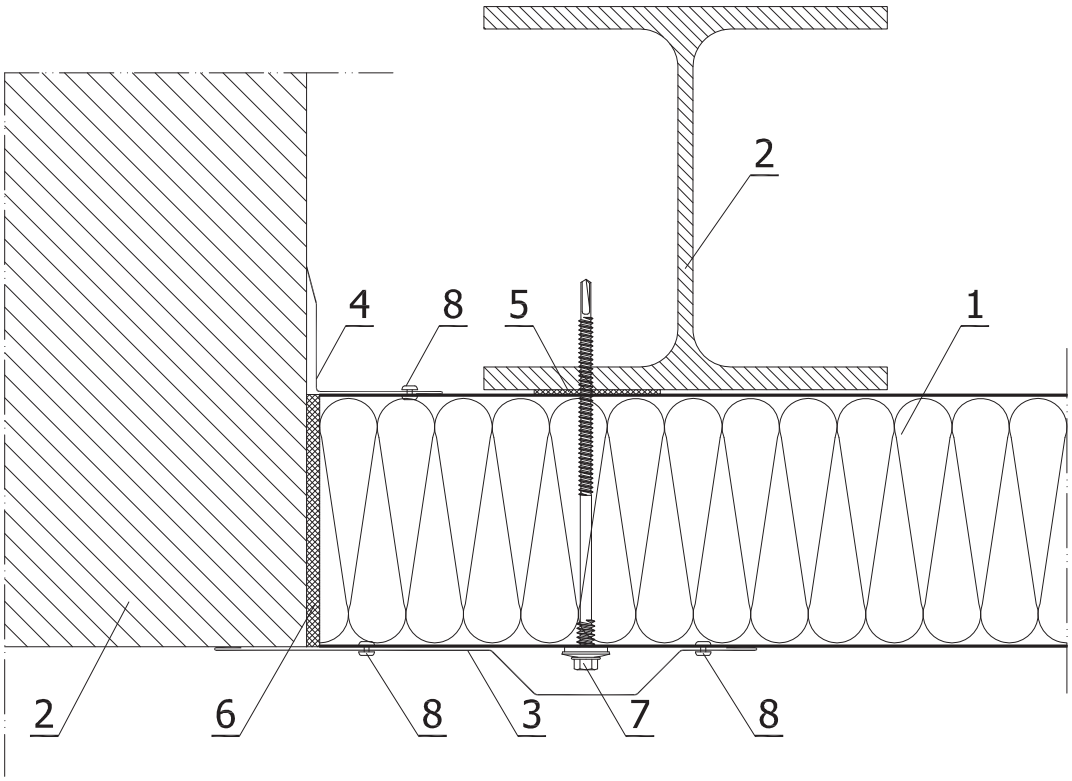
HORIZONTAL ARRANGEMENT of panels
Detail of panel connection to wall

Scale
1:3

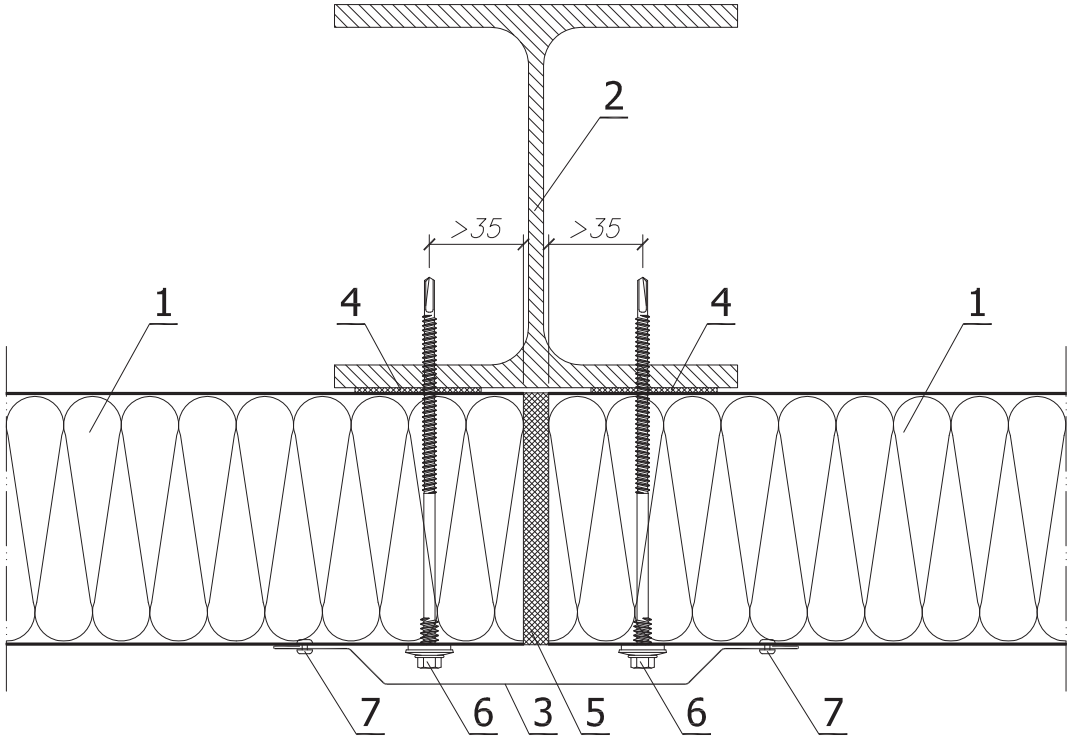
GÓR-STAL



LEGEND:
1. GORLICKA S1000 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

Scale 1:2

HORIZONTAL ARRANGEMENT of panels
Detail of panel connection to edge support



LEGEND:
1. GORLICKA S1000 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

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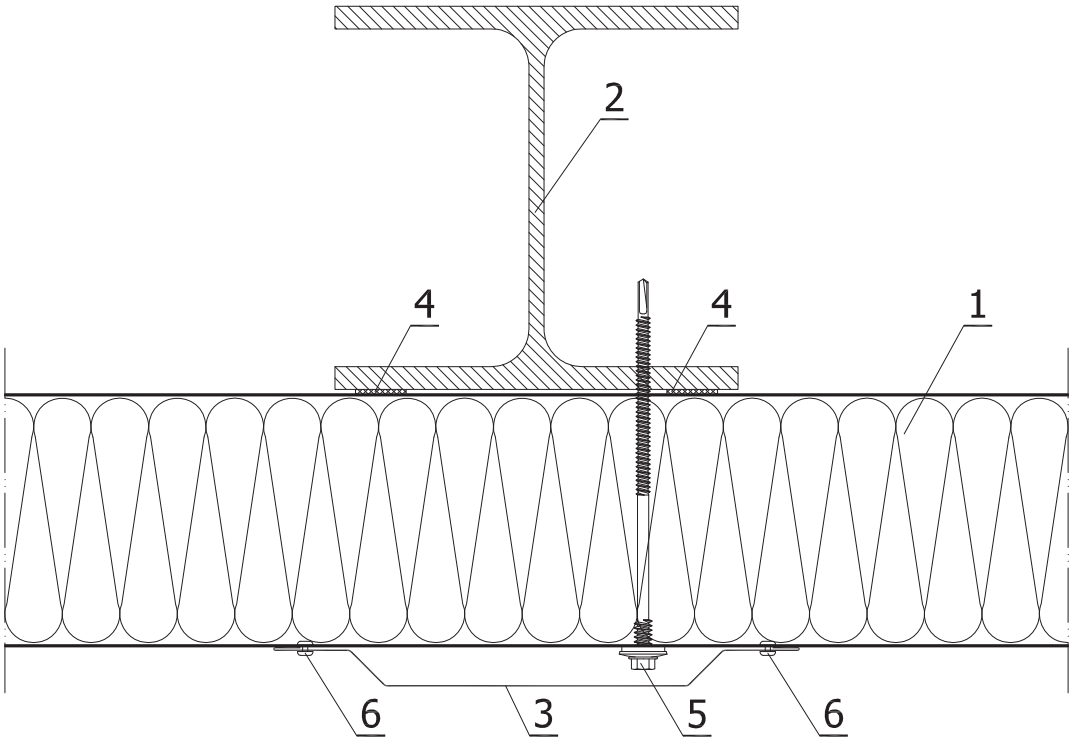
HORIZONTAL ARRANGEMENT of panels
Detail of panel connection to intermediate support

Scale
1:3

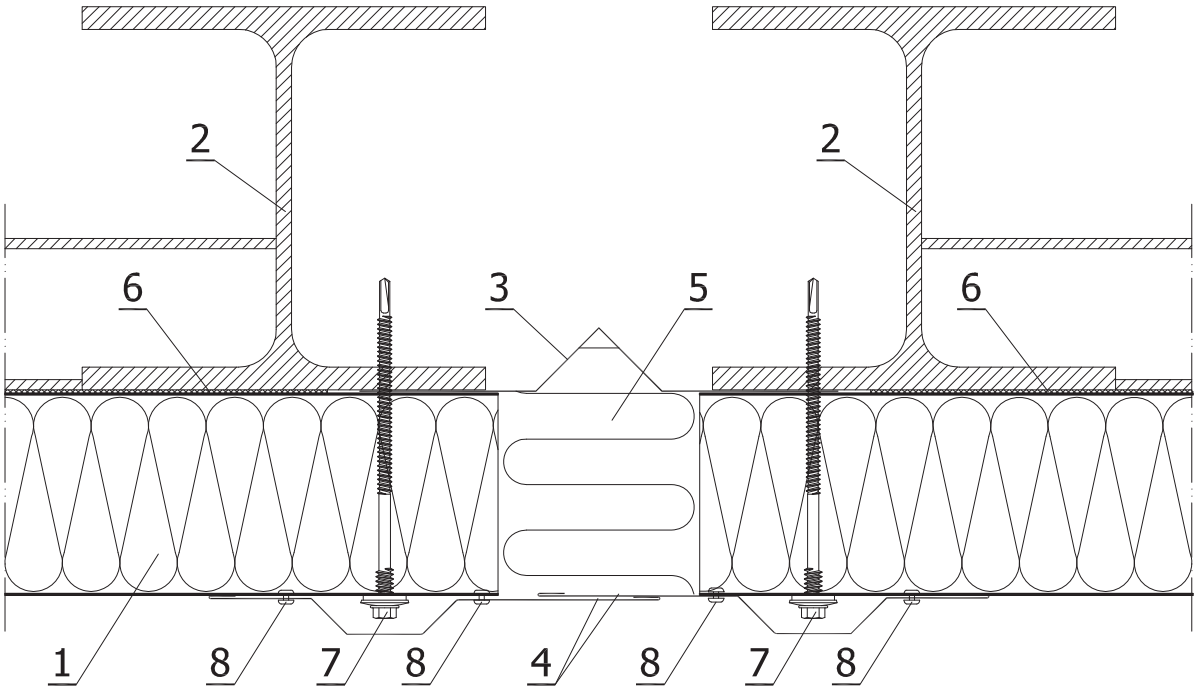
GÓR-STAL



LEGEND:
1. GORLICKA S1000 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

Scale 1:2

HORIZONTAL ARRANGEMENT of panels
Detail of building expansion joint



LEGEND:
1. GORLICKA S1000 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

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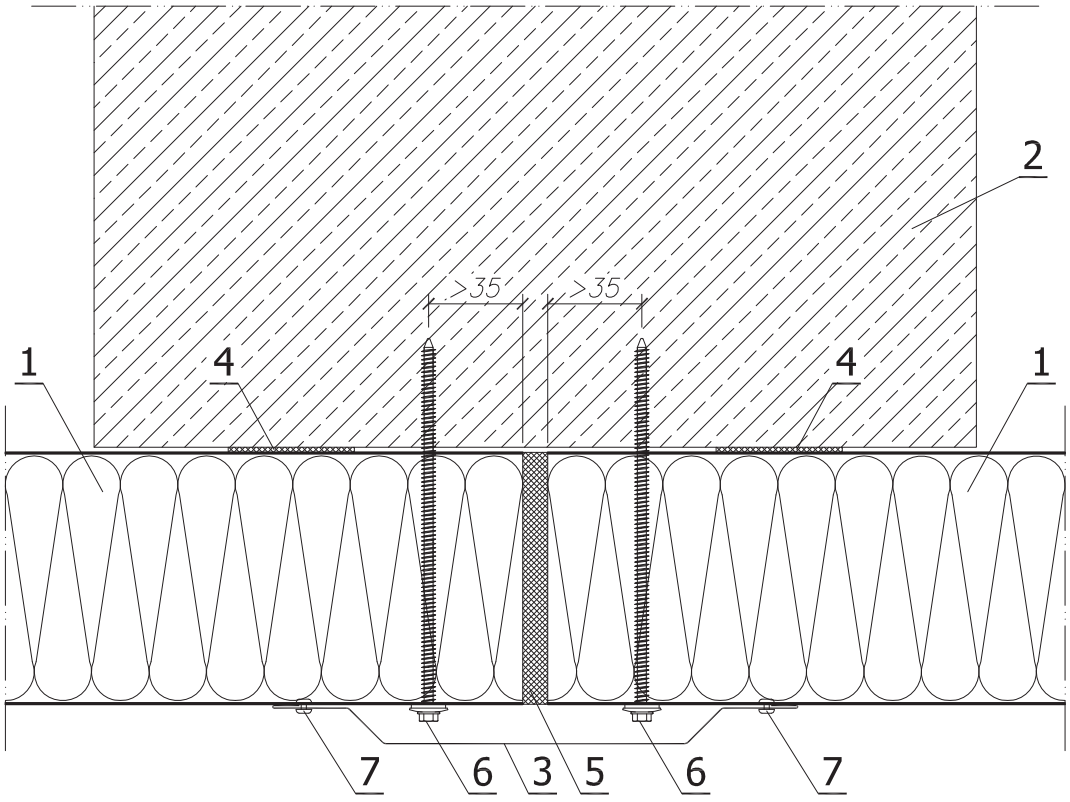
HORIZONTAL ARRANGEMENT of panels
Detail of panel connection to reinforced concrete support

Scale 1:3

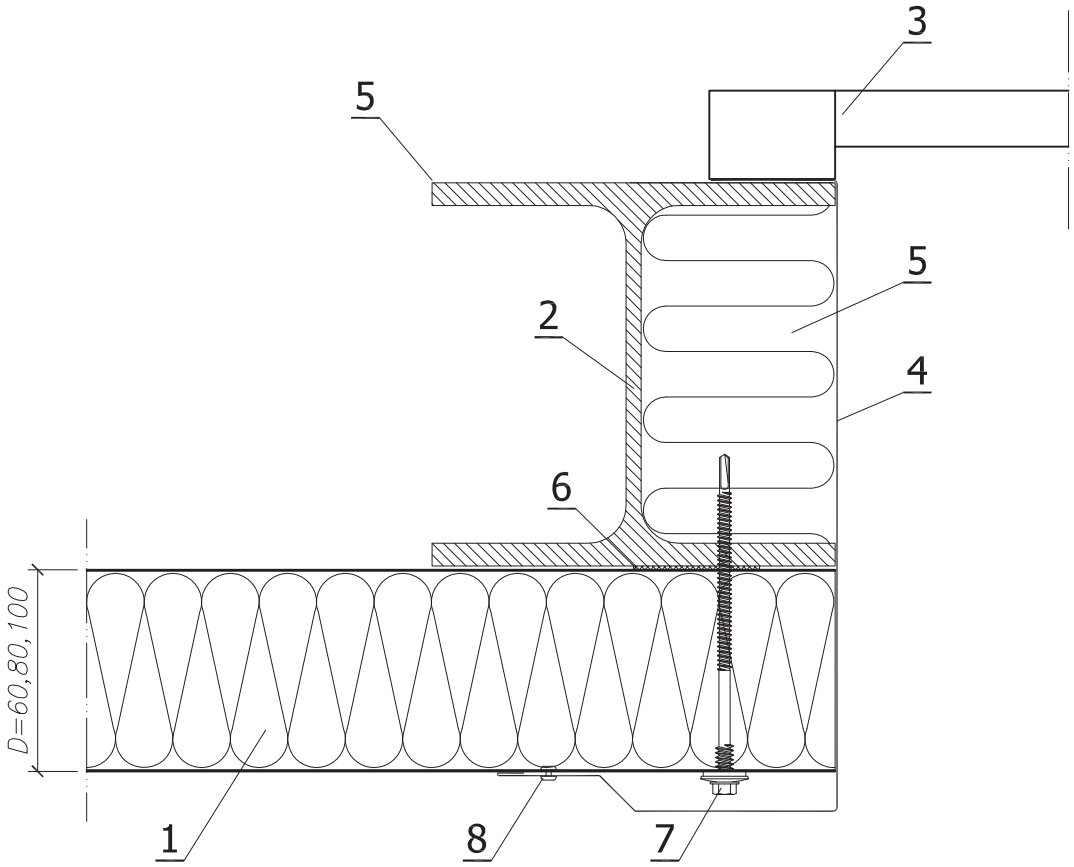
GÓR-STAL



LEGEND:
1. GORLICKA S1000 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

Scale 1:3

HORIZONTAL ARRANGEMENT of panels
Detail of roll-up door post



LEGEND:
1. GORLICKA S1000 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

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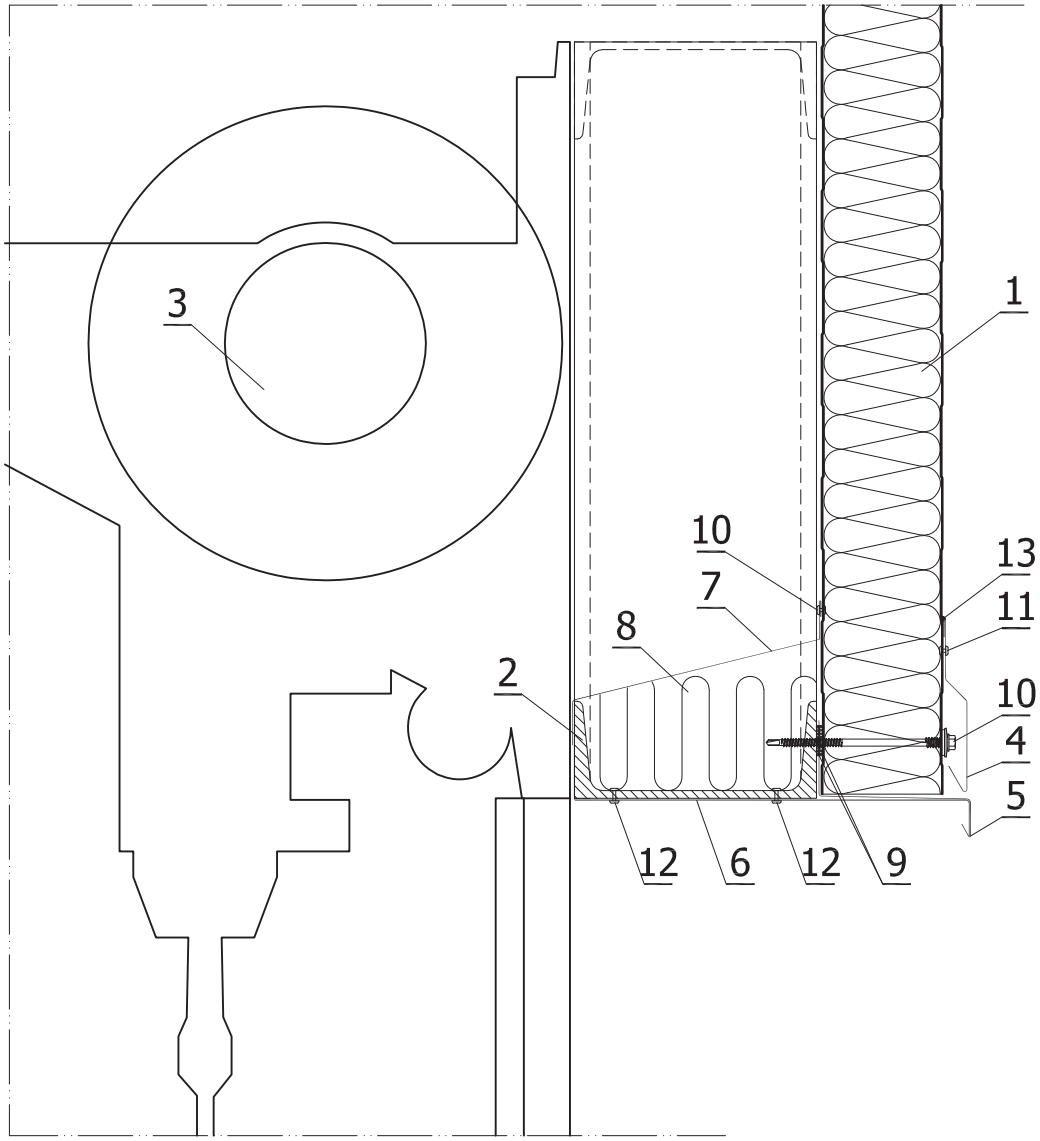
HORIZONTAL ARRANGEMENT of panels
Detail of roll-up door lintel

Scale
1:5

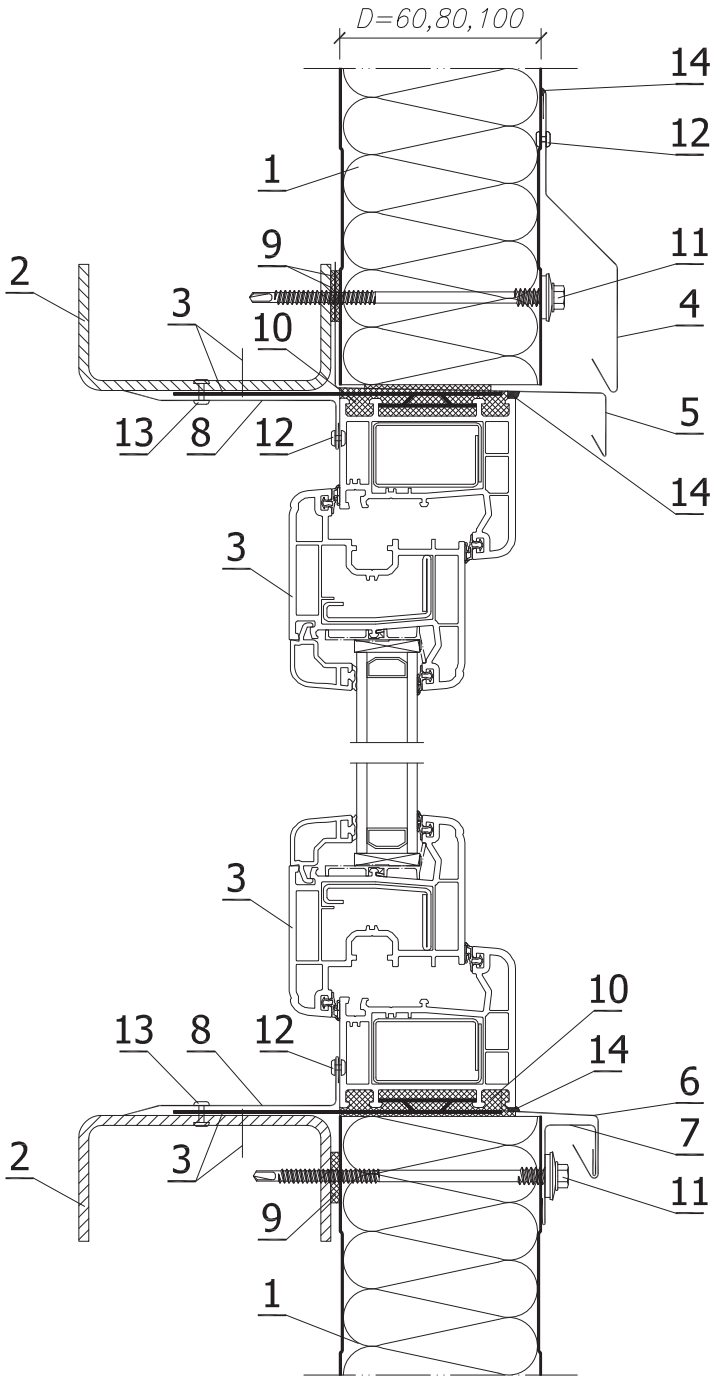
GÓR-STAL



LEGEND:
1. GORLICKA S1000 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

Scale 1:3

HORIZONTAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant I – profile



LEGEND:
1. GORLICKA S1000 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

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ul. Przemysłowa 11
38-300 Gorlice

Phone/Fax (018) 353 98 00
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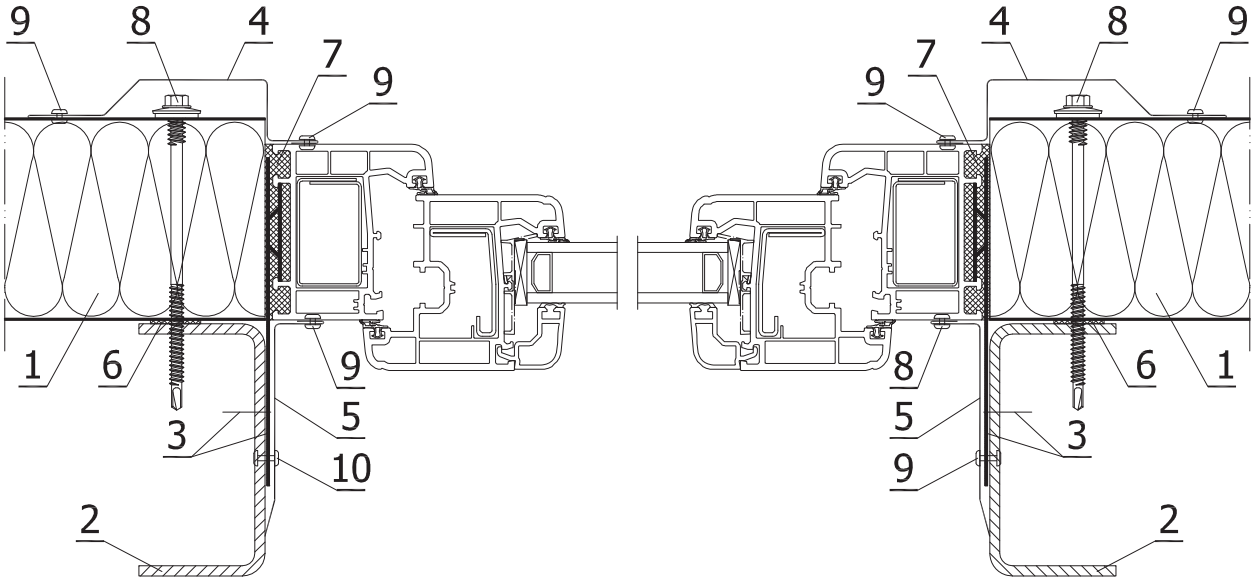
HORIZONTAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant I – cross-section

Scale
1:3

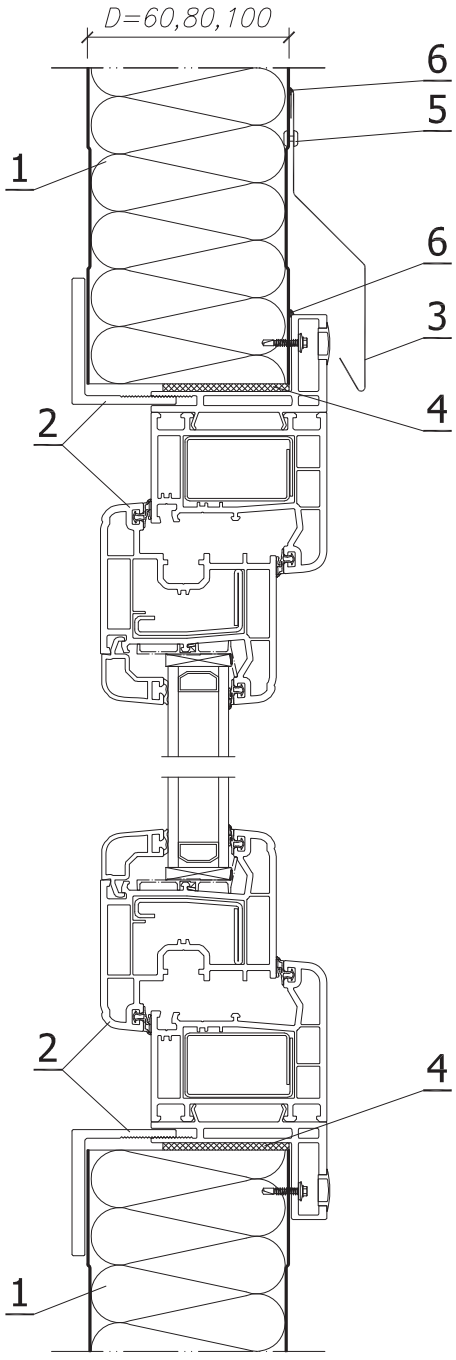
GÓR-STAL



LEGEND:
1. GORLICKA S1000 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)

Scale 1:3

HORIZONTAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant II – profile



LEGEND:
1. GORLICKA S1000 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

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ul. Przemysłowa 11
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Phone/Fax (018) 353 98 00
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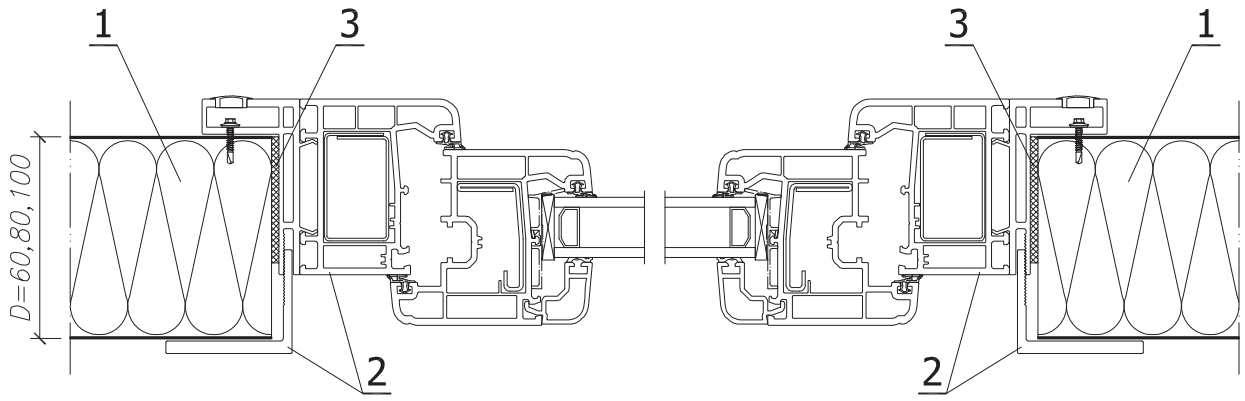
HORIZONTAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant II – cross-section

Scale
1:3

GÓR-STAL



LEGEND:
1. GORLICKA S1000 wall panel
2. PVC or aluminium window with a fastening profile
3. Impregnated polyurethane seal (PURS) or caulking foam

APPLICATIONS

GORLICKA S1000 wall panel is designed for outer screening walls and inner partition walls in structural frame buildings. GR 1000U panels can be mounted in both vertical and horizontal position, as single-span or multi-span wall elements.

PHYSICAL FEATURES

GORLICKA U1000 wall panel is manufactured in three core thickness options: 60, 80 and 100 mm.
Panels' **facing** is made of double-sided galvanized steel sheets, 0.50 mm thick S280GD+Z275 as per PN-EN 10326:2006, with organic polyester coating 25 µm thick.
Panels' **core** of thermal insulation properties is made of rigid polyurethane foam (PUR) of 40±3 kg/m^3 density.
Modular **width** of a panel equals 1000 mm. Standard **lengths** of panels equal from 2.0 m to 12 m. Panels shorter than 2 m or longer than 12 m are also available at customer's special order, and the maximum length can equal even 16,5 m.
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	11,20	1000	2,0-12,0 / 16,5	9002, 9010, 9006, 9007, 5010, 1015, 3000, 6029, 7016
80	12,00			
100	12,80			

TECHNICAL PARAMETERS

Thermal performance of panels depends on the core thickness and is characterized by the heat transfer coefficient U of a division – specified in the table below.
Acoustic parameters of panels are specified based on PN-EN ISO 717-1:1999 standard. Wall panels can be used for divisions, of noise reduction performance requirements below the values specified below.
As regards the **fire resistance** GORLICKA U1000 wall sandwich panels are classified as not spreading fire (**NRO**) material as per PN-90/B-02867.
Based on PN-EN 13501-2+A1:2013 the panel is certified with: basic fire reaction – class **B**, production of smoke - class **s2**, production of flaming droplets and particles - class **d0**.
Based on PN-EN-13501-2+A1:2010 panel U1000 100 mm thick is certified with fire integrity class **(R)EI15**.
Chemical corrosion resistance – GORLICKA sandwich panels can be applied in environments of corrosivity category C1, C2, C3 as per PN-EN ISO 12944-2.

Thickness [mm]	Heat-transfer coefficient U [W/m^{2}K]	Acoustic insulation indicators: R_W, R_{A1}, R_{A2}	Fire classification
60	0,38	R_W = 25 dB R_{A1} = 22 dB R_{a2} = 21 dB	**NRO** acc. PN-90/B-02867 **B-s2,d0** acc. PN-EN 13501-1+A1:2013
80	0,28		
100	0,22		(R)**EI15**

PACKING AND DISPATCH

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**
Maximum number of panels in a pack	19	14	11

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ul. Przemysłowa 11
38-300 Gorlice

Phone/Fax (018) 353 98 00
info@gor-stal.pl
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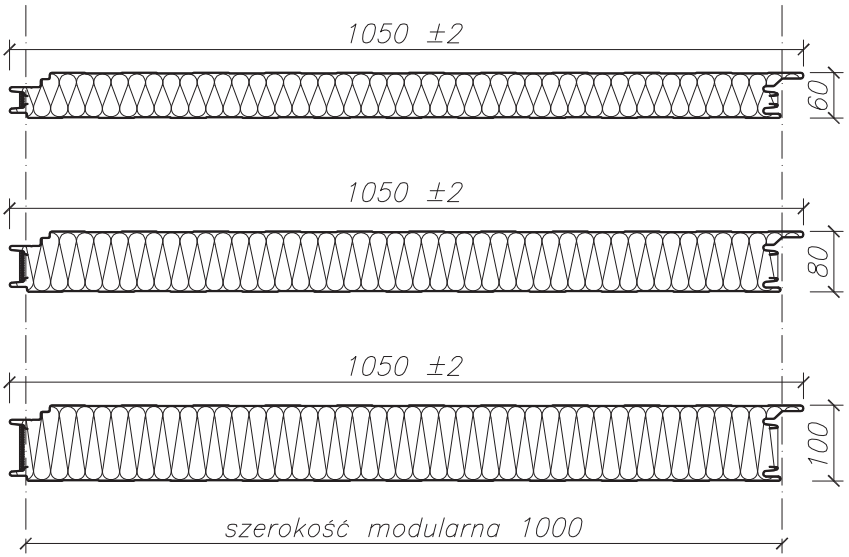
Panel thicknesses
Profiles of outer and inner facing

Scale
1:10
1:1

GÓR-STAL

Panel thicknesses

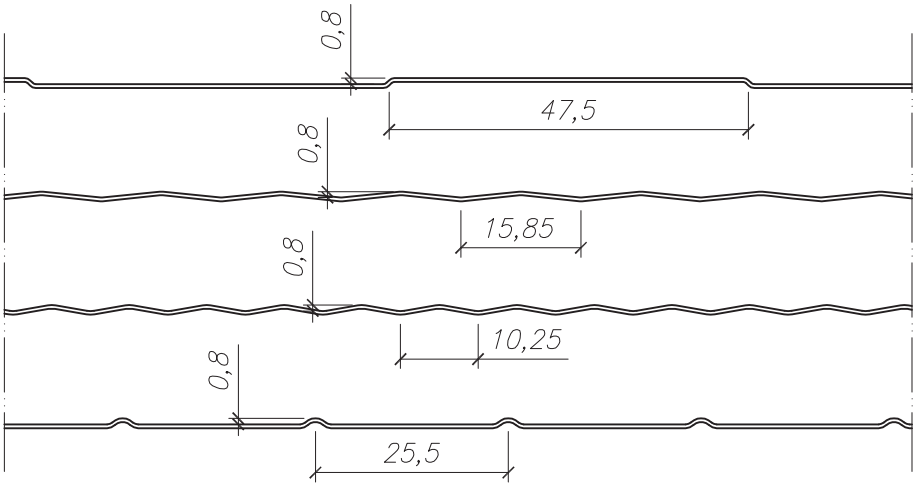


60 mm

80 mm

100 mm

Outer facing profiles



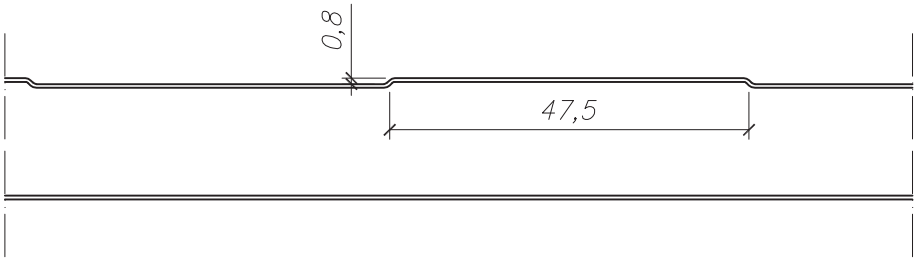
Linear

Micro profiled

Furrowed

Grooving

Inner facing profiles



Linear

Smooth

LOAD SPAN TABLES

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 U1000 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	3,1111	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 U1000 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 U1000 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 U1000 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

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ul. Przemysłowa 11
38-300 Gorlice

Phone/Fax (018) 353 98 00
info@gor-stal.pl
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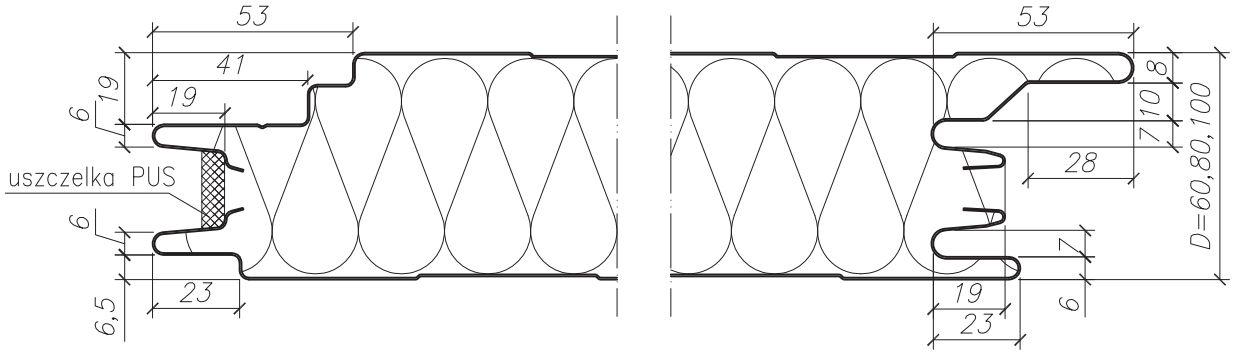
Selected details of cladding made of GORLICKA U1000 sandwich panels

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

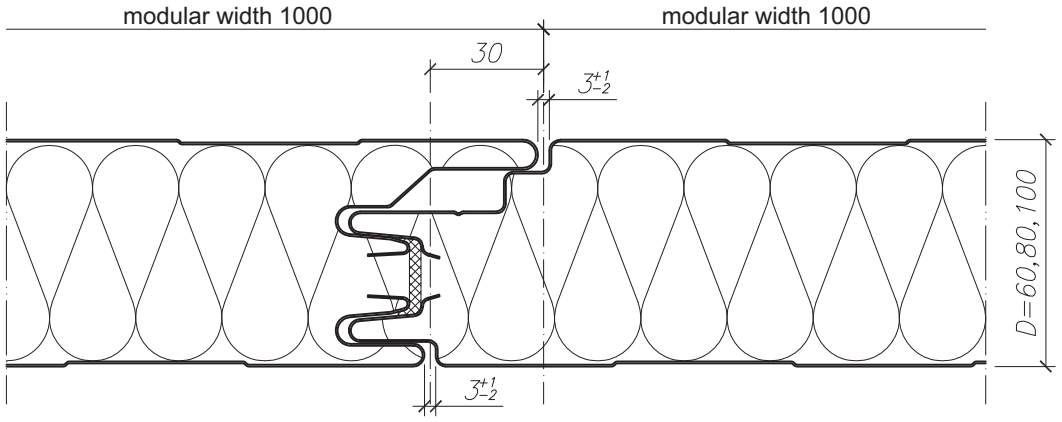
VERTICAL ARRANGEMENT of panels
- Details of panel connection to grade beam – variant I
- Details of panel connection to grade beam – variant II
- Detail of panel connection to flooring
- Detail of panel connection to wall
- Detail of panels' connection in a corner – variant I
- Detail of panels' connection in a corner – variant II
- Detail of panels' connection in an optional angle corner
- Detail of building expansion joint
- Detail of roll-up door post – variant I
- Detail of roll-up door lintel – variant I
- Window assembly in sandwich panel – variant I – profile
- Window assembly in sandwich panel – variant I – cross-section
- Window assembly in sandwich panel – variant II – profile
- Window assembly in sandwich panel – variant II – cross-section

HORIZONTAL ARRANGEMENT of panels
- Details of panel connection to grade beam – variant I
- Details of panel connection to grade beam – variant II
- Details of panel connection to grade beam – variant III
- Detail of panel connection to flooring
- Detail of panels' connection in a corner
- Detail of panels' connection in an optional angle corner
- Detail of panel connection to wall
- Detail of panel connection to reinforced concrete support
- Detail of panel connection to edge support
- Detail of panel connection to intermediate support
- Detail of roll-up door post
- Detail of roll-up door lintel
- Window assembly in sandwich panel – variant I – profile
- Window assembly in sandwich panel – variant I – cross-section
- Window assembly in sandwich panel – variant II – profile
- Window assembly in sandwich panel – variant II – cross-section

Shape of cam-lock for panels



Detail of panels' connection



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Details of panels' connection
PM1 spacer

Scale
1:2

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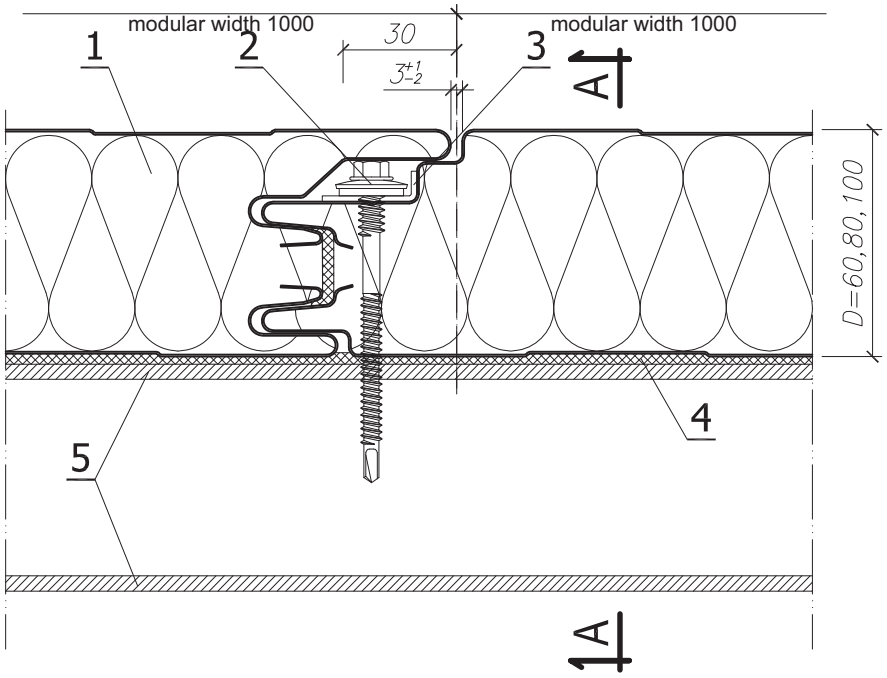
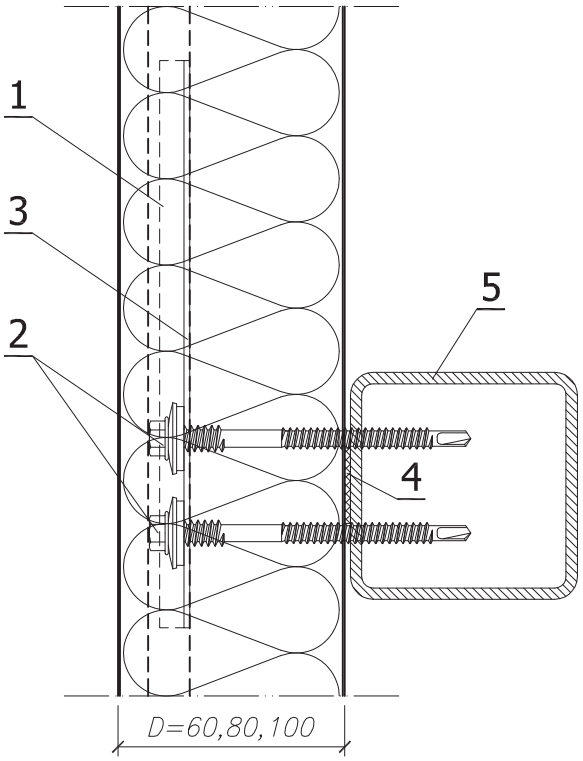
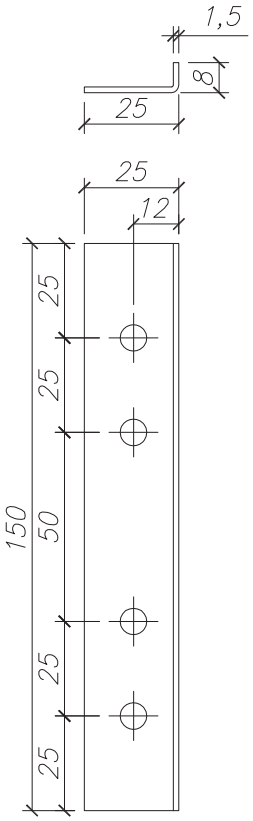
Details of panels' connection



A-A cross-section



PM1 spacer

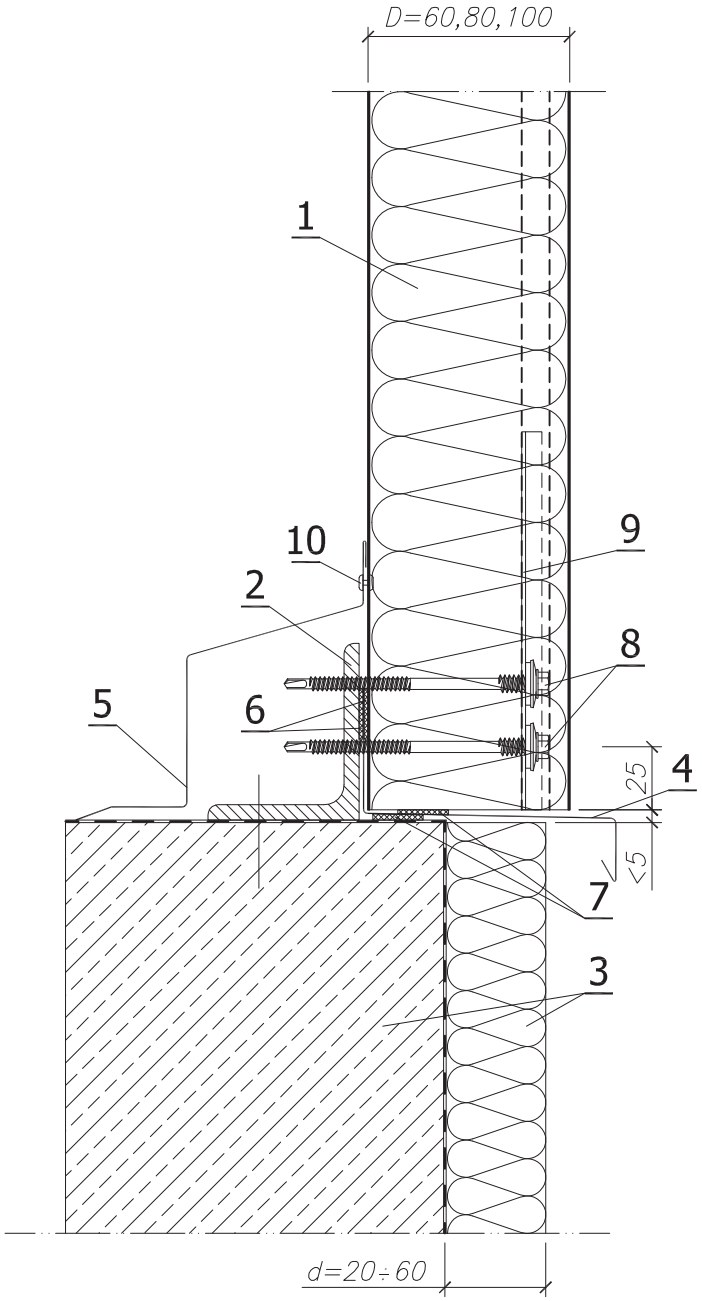


LEGEND:
1. GORLICKA U1000 wall panel
2. Self-drilling connector for sandwich panels
3. PM1 spacer
4. Polyethylene, self-adhesive sealing tape (PE)
5. Transom acc. to structure design

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

Scale 1:3

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



LEGEND:
1. GORLICKA U1000 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

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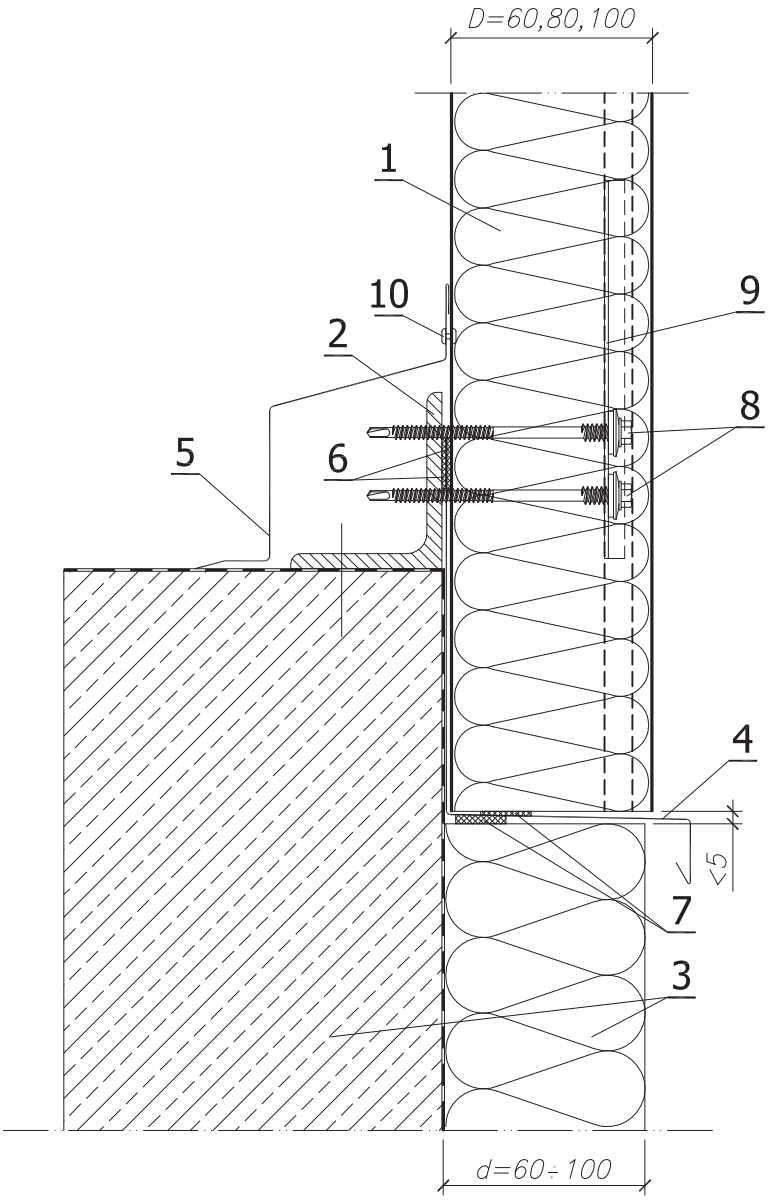
VERTICAL ARRANGEMENT of panels
Details of panel connection to grade beam
Variant II

Scale
1:3

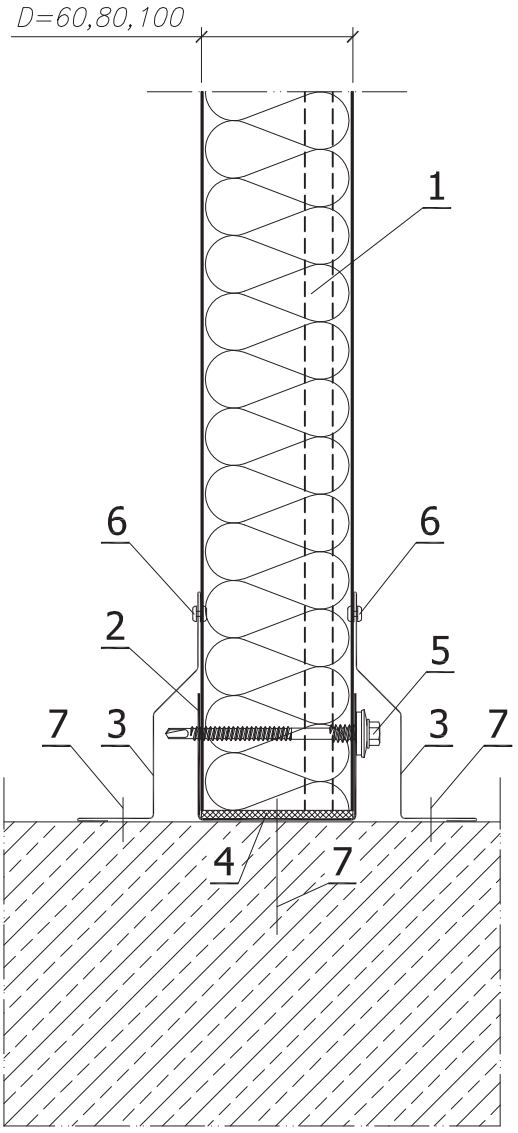
GÓR-STAL



LEGEND:
1. GORLICKA U1000 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

Scale 1:3

VERTICAL ARRANGEMENT of panels
Detail of panel connection to flooring



LEGEND:
1. GORLICKA U1000 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

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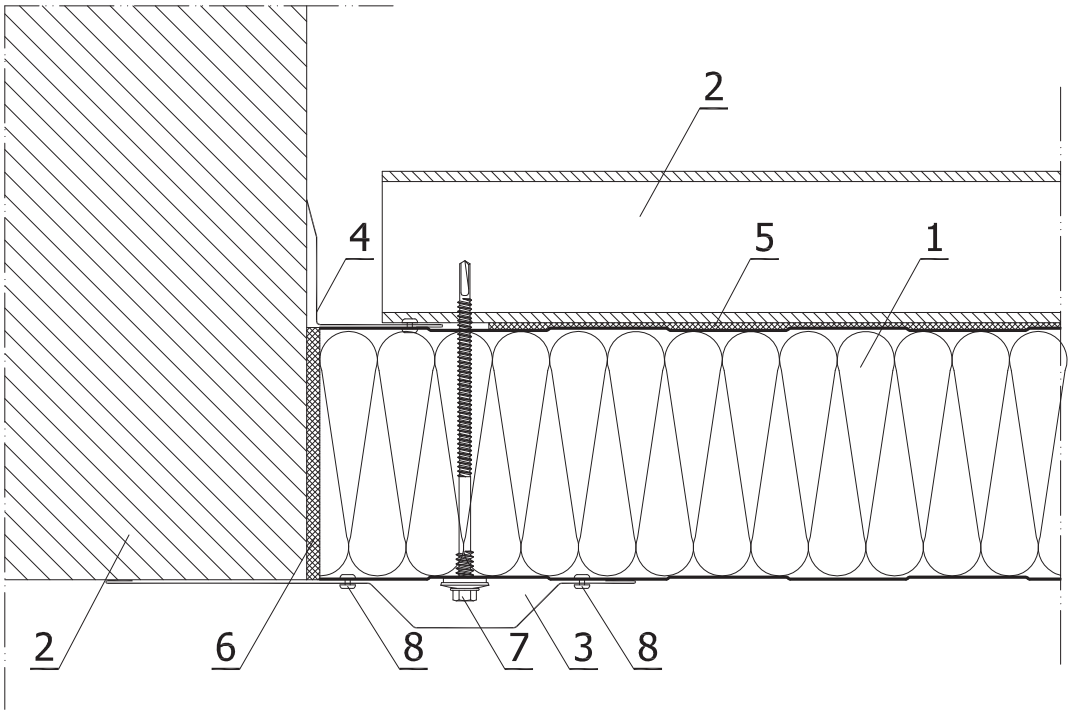
VERTICAL ARRANGEMENT of panels
Detail of panel connection to wall

Scale
1:3

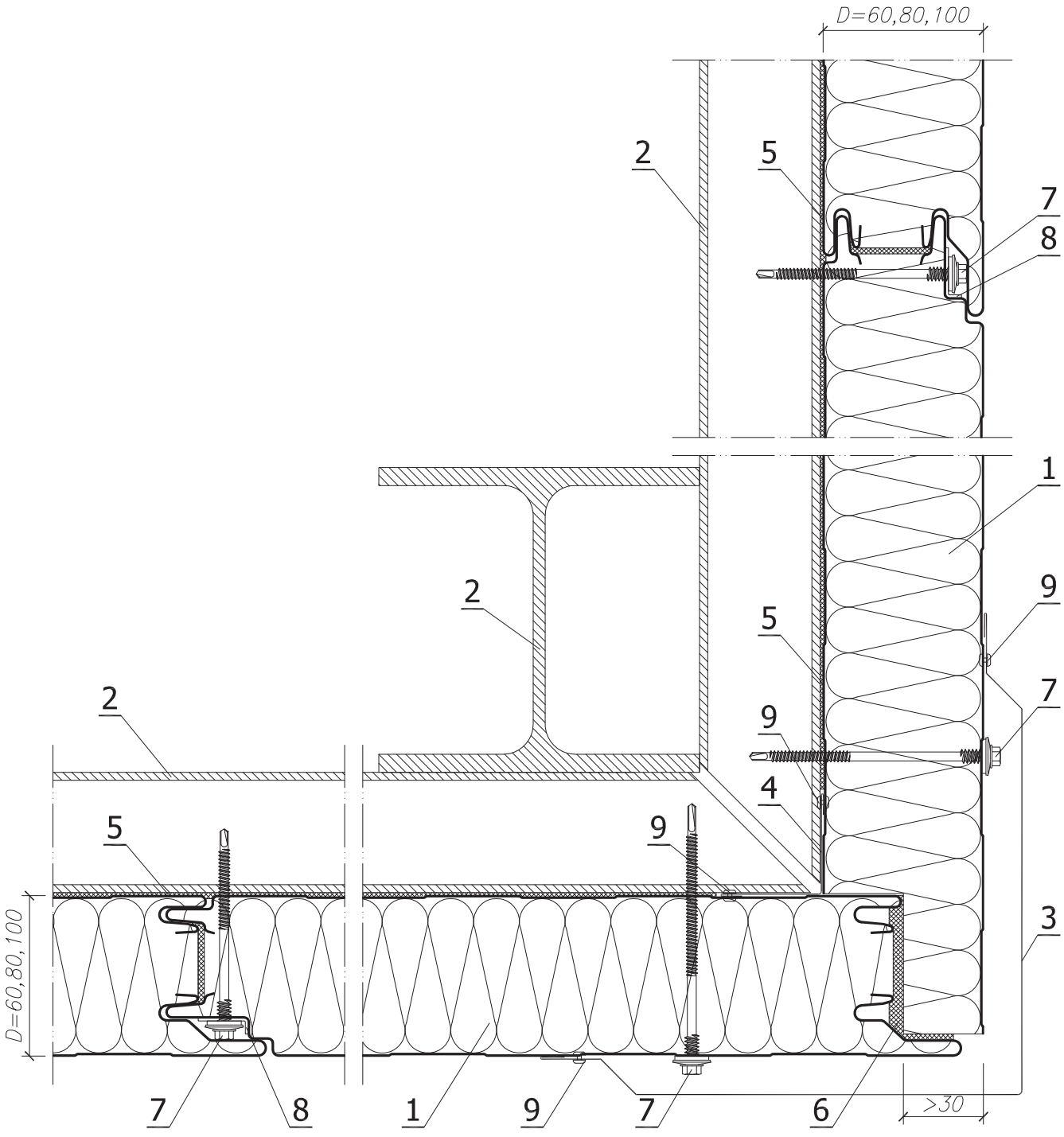
GÓR-STAL



LEGEND:
1. GORLICKA U1000 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

Scale 1:3

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



LEGEND:
1. GORLICKA U1000 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

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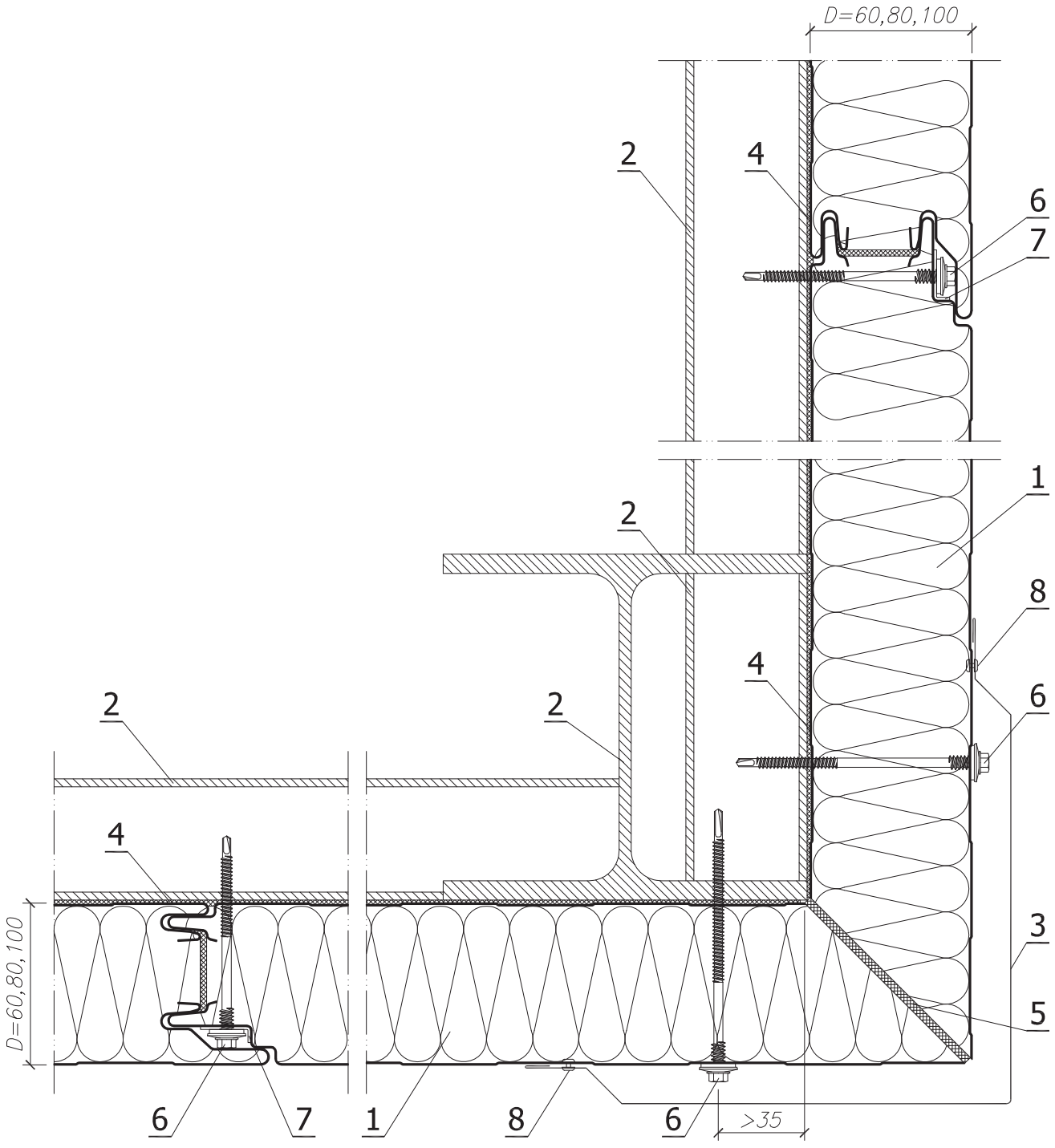
VERTICAL ARRANGEMENT of panels
Detail of panels' connection in a corner
Variant II

Scale
1:3

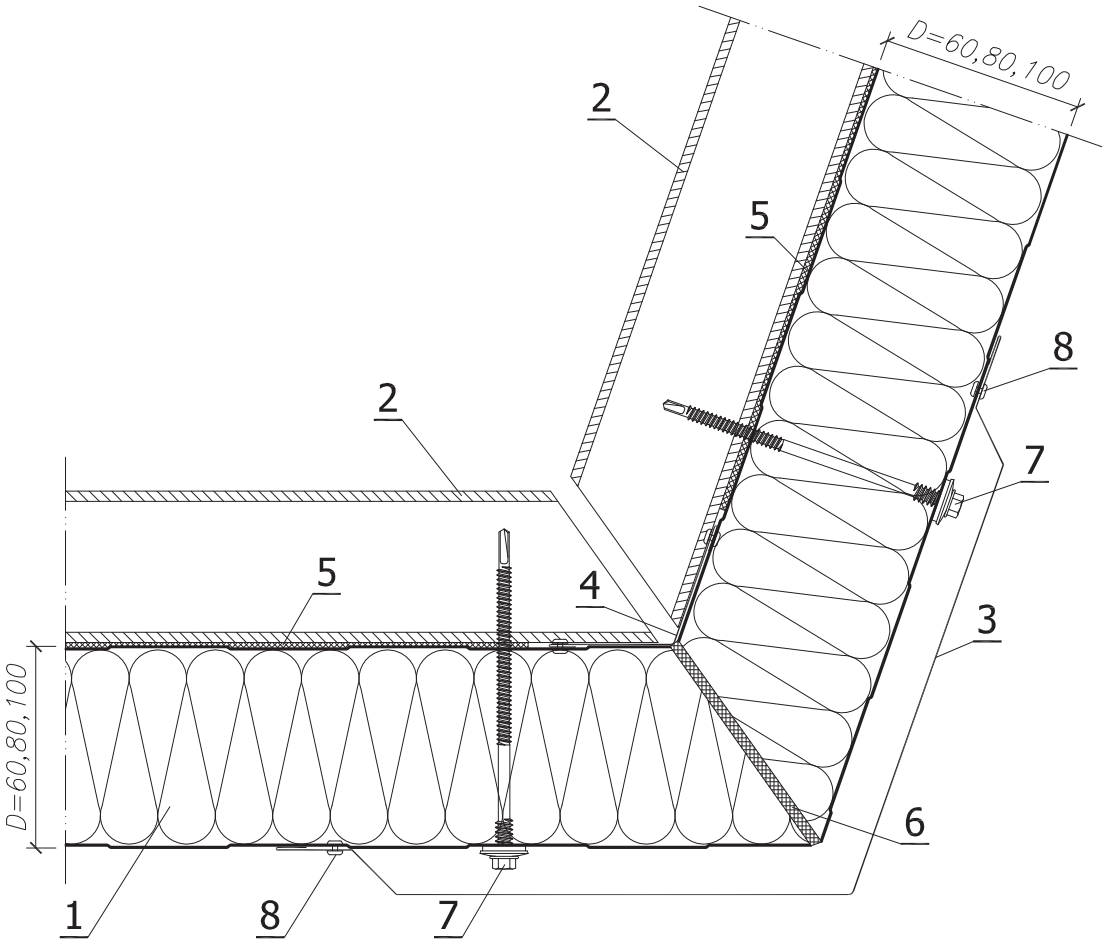
GÓR-STAL



LEGEND:
1. GORLICKA U1000 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

Scale 1:3

VERTICAL ARRANGEMENT of panels
Detail of panels' connection in an optional angle corner



LEGEND:
1. GORLICKA U1000 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

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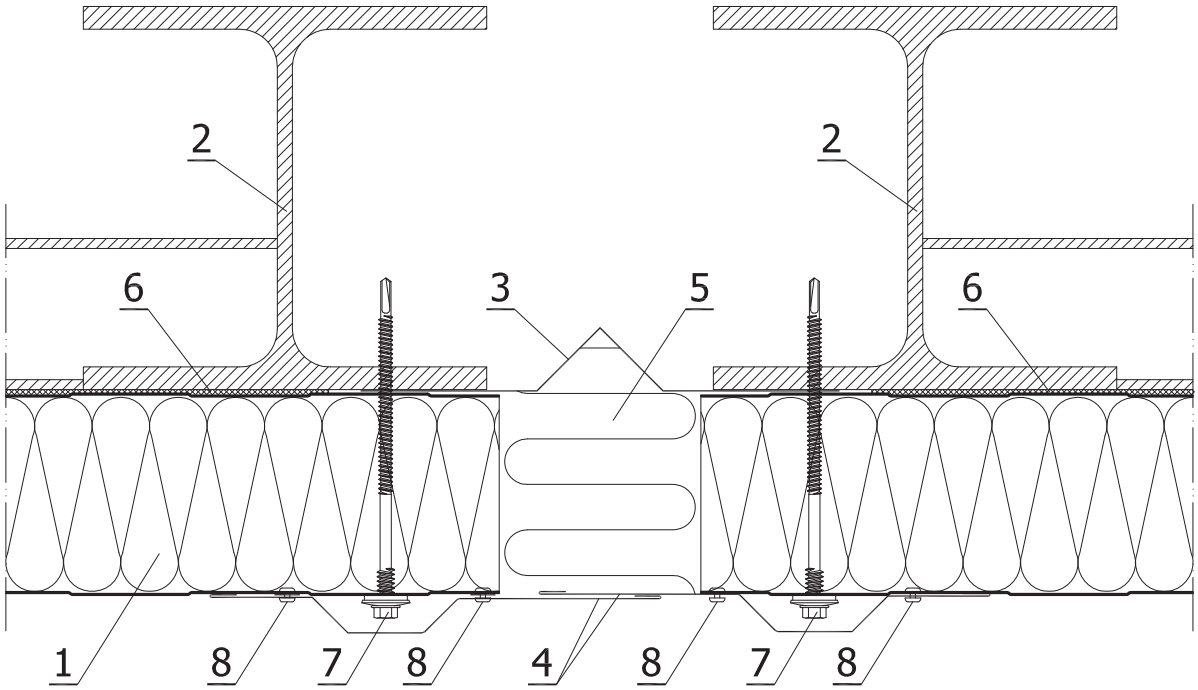
VERTICAL ARRANGEMENT of panels
Detail of building expansion joint

Scale
1:3

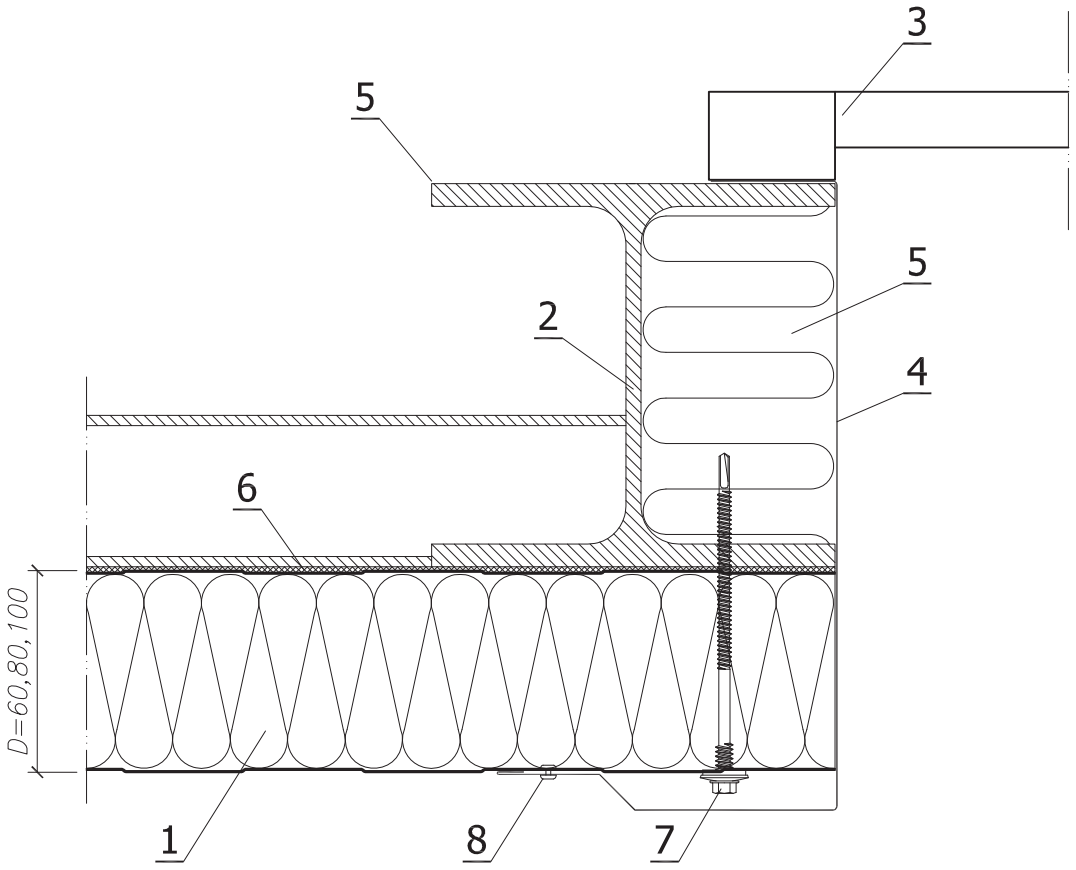
GÓR-STAL



LEGEND:
1. GORLICKA U1000 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

Scale 1:3

VERTICAL ARRANGEMENT of panels
Detail of roll-up door post



LEGEND:
1. GORLICKA U1000 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

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ul. Przemysłowa 11
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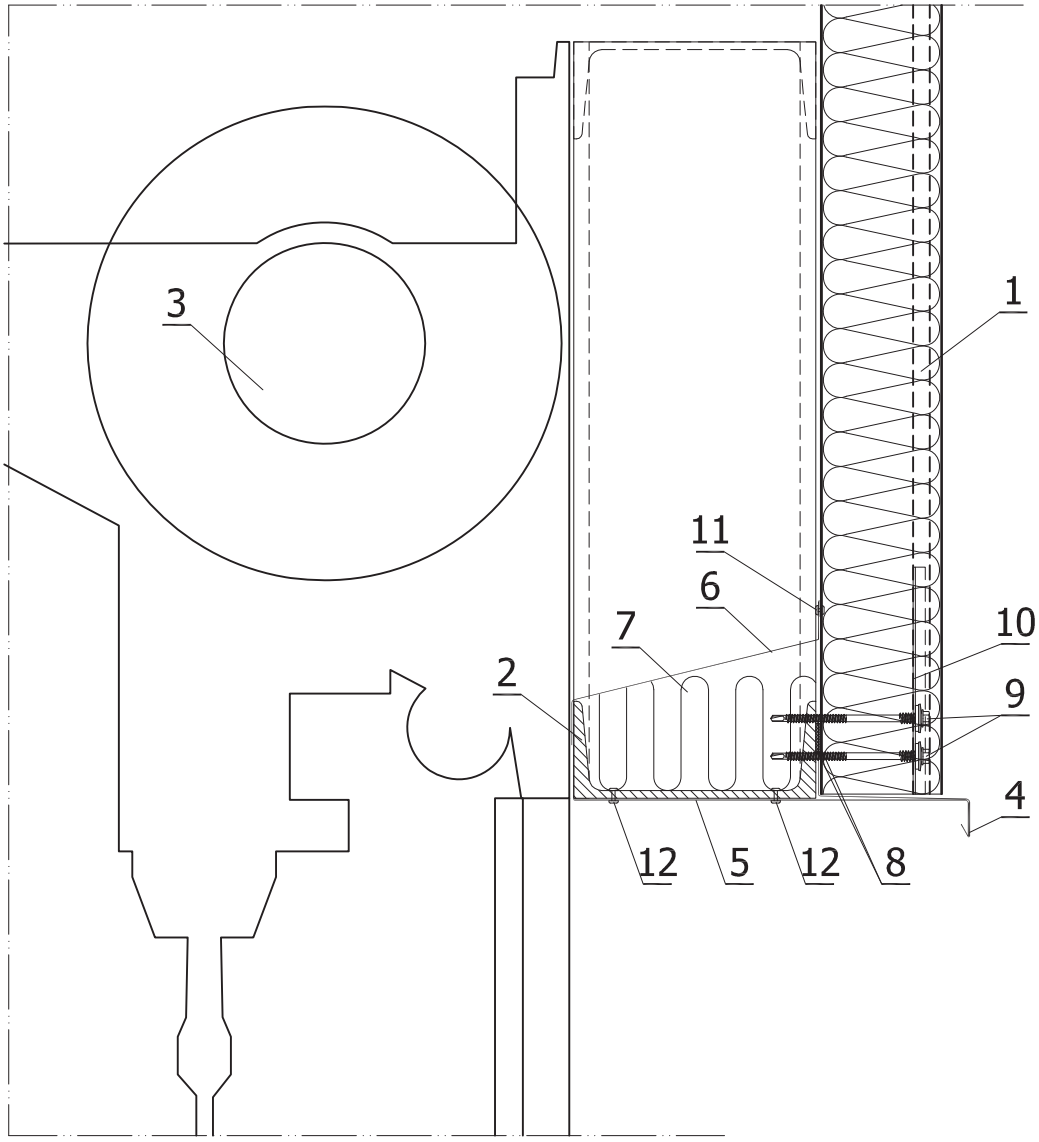
VERTICAL ARRANGEMENT of panels
Detail of roll-up door lintel

Scale
1:5

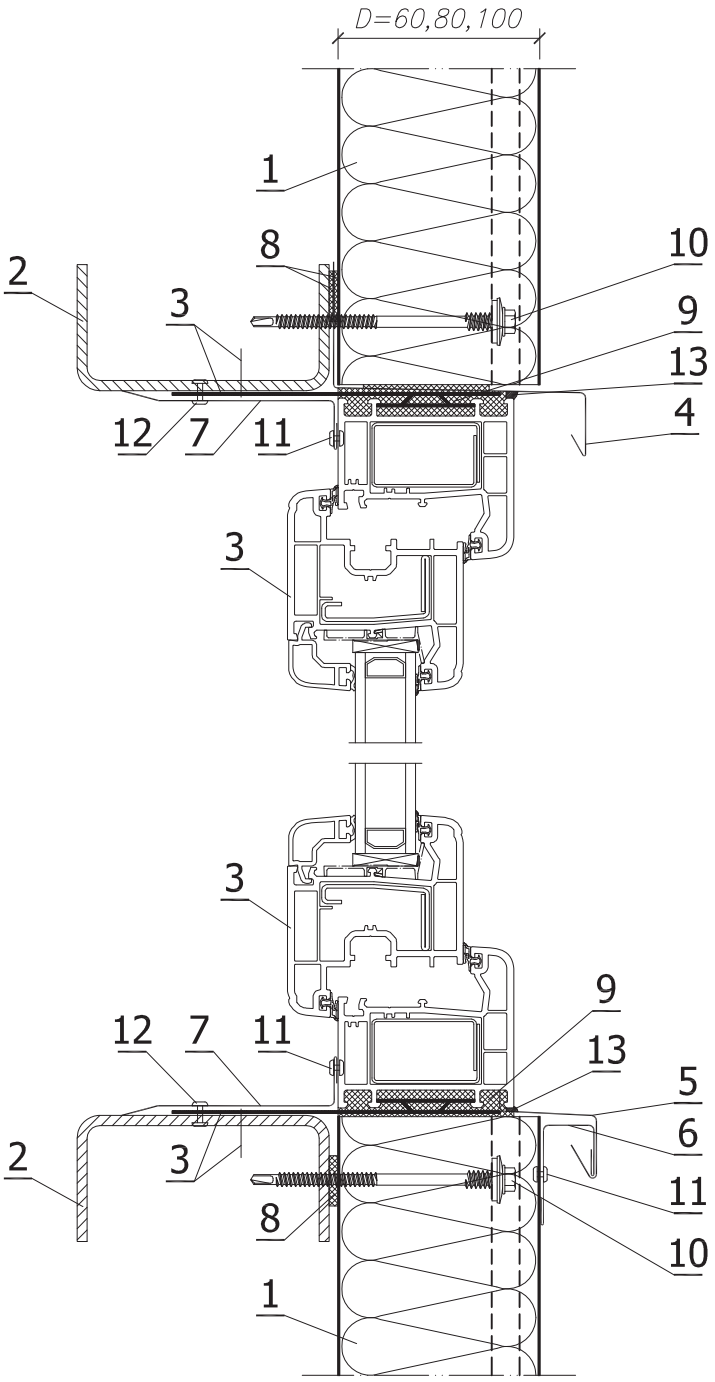
GÓR-STAL



LEGEND:
1. GORLICKA U1000 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)

Scale 1:3

VERTICAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant I – profile



LEGEND:
1. GORLICKA U1000 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

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ul. Przemysłowa 11
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VERTICAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant I – cross-section

Scale
1:3

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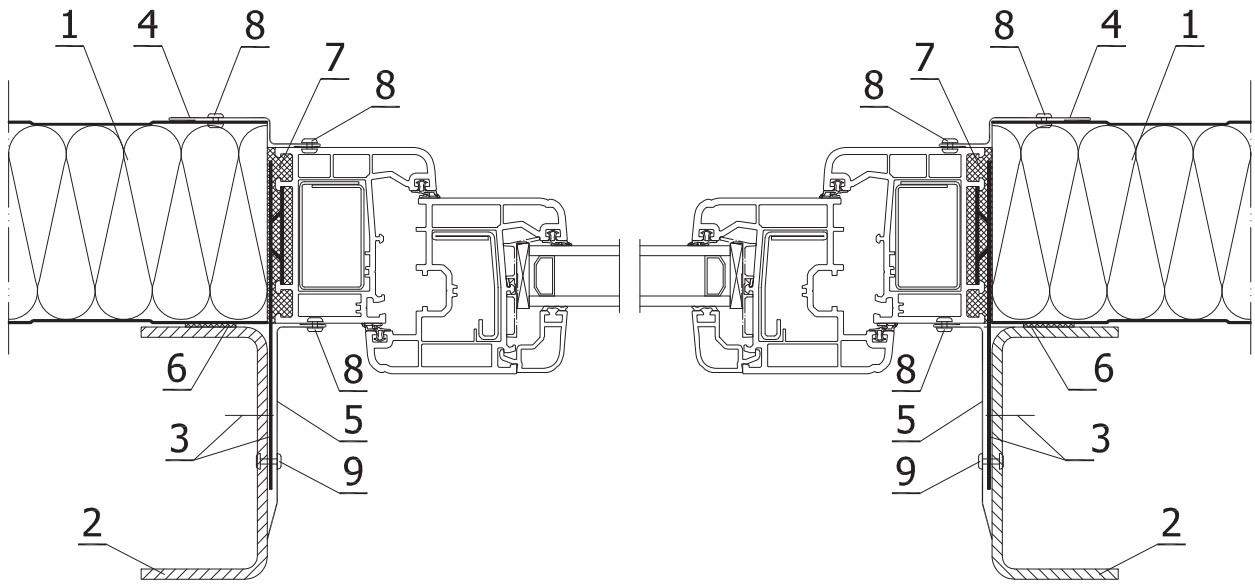
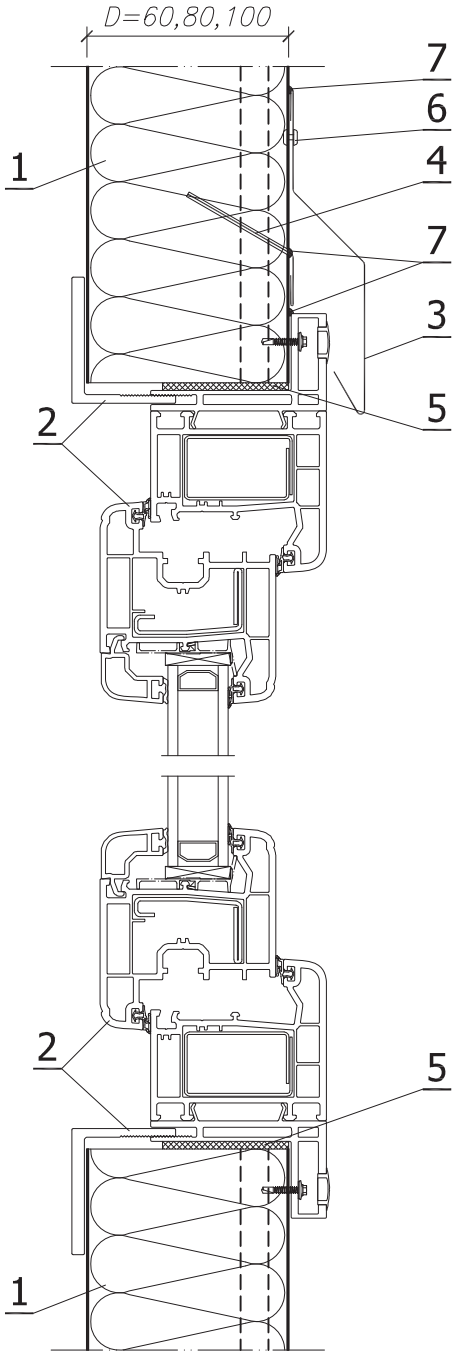


LEGEND:
1. GORLICKA U1000 wall panel
2. Transom acc. to structure design
3. PVC or aluminium window with a holder and connector
4. Individual covering flashing
5. Individual inner corner
6. Polyethylene, self-adhesive sealing tape (PES)
7. Polyethylene caulking foam
8. Tight blind rivet 4.8 x 9.5
9. Blind rivet 4.8 x 15.1 (for the structure)

Scale 1:3

VERTICAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant II – profile



LEGEND:
1. GORLICKA U1000 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

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ul. Przemysłowa 11
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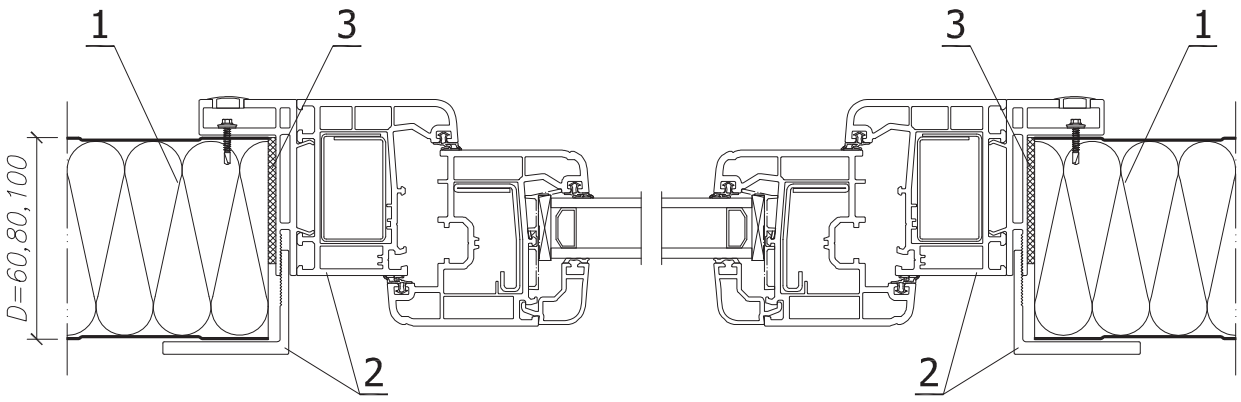
VERTICAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant II – cross-section

Scale
1:2

GÓR-STAL

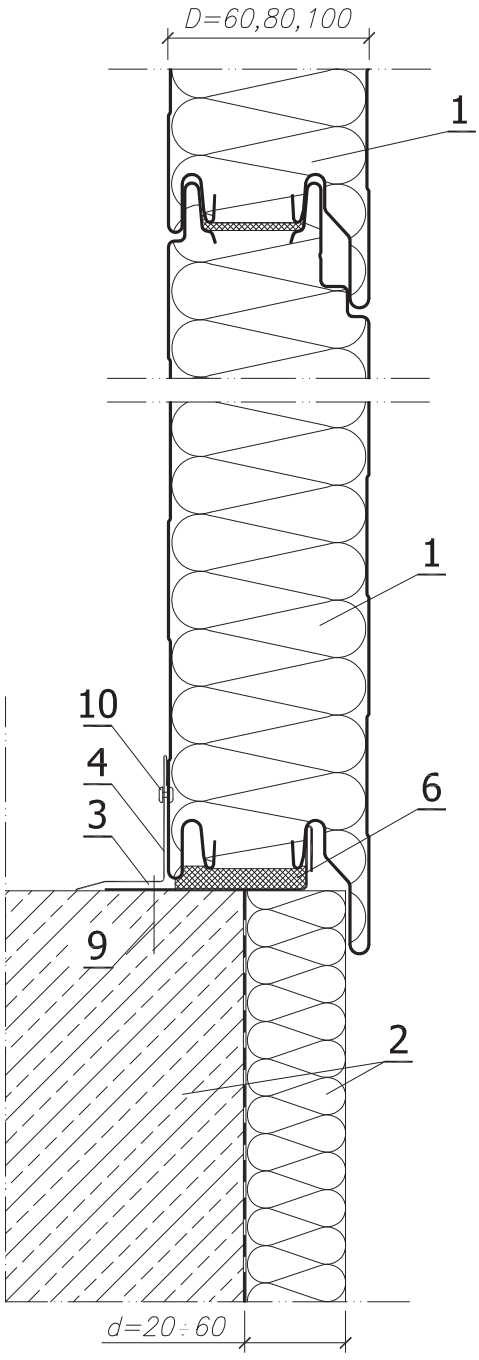


LEGEND:
1. GORLICKA U1000 wall panel
2. PVC or aluminium window with a fastening profile
3. Impregnated polyurethane seal (PURS) or caulking foam

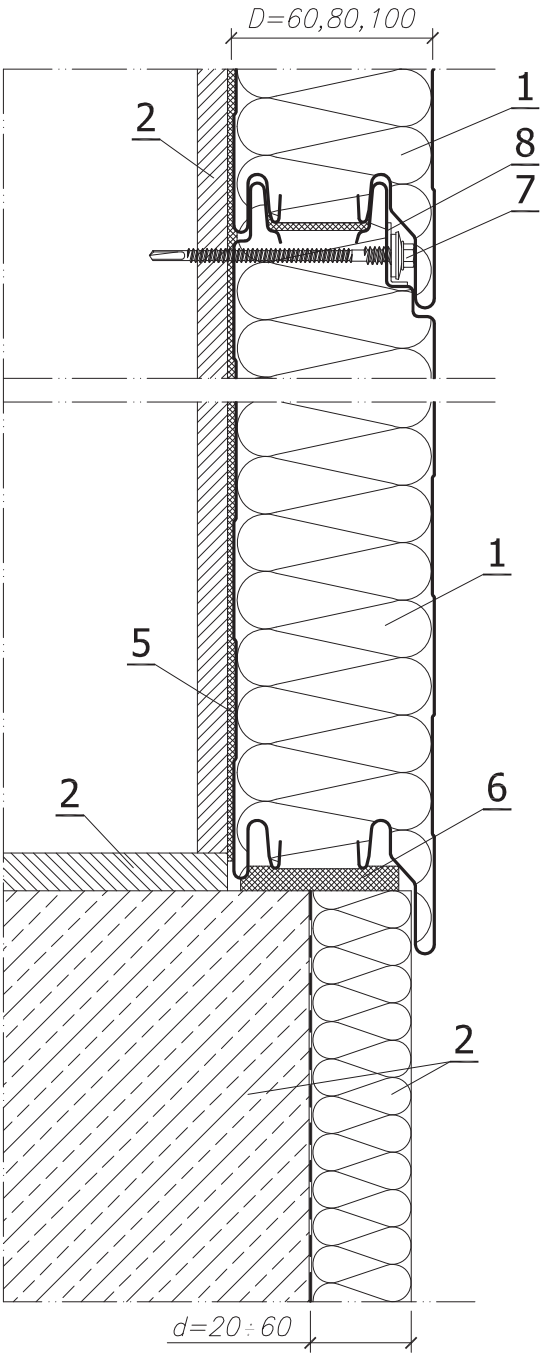
Scale 1:3

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

In the span



On the support



LEGEND:
1. GORLICKA U1000 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

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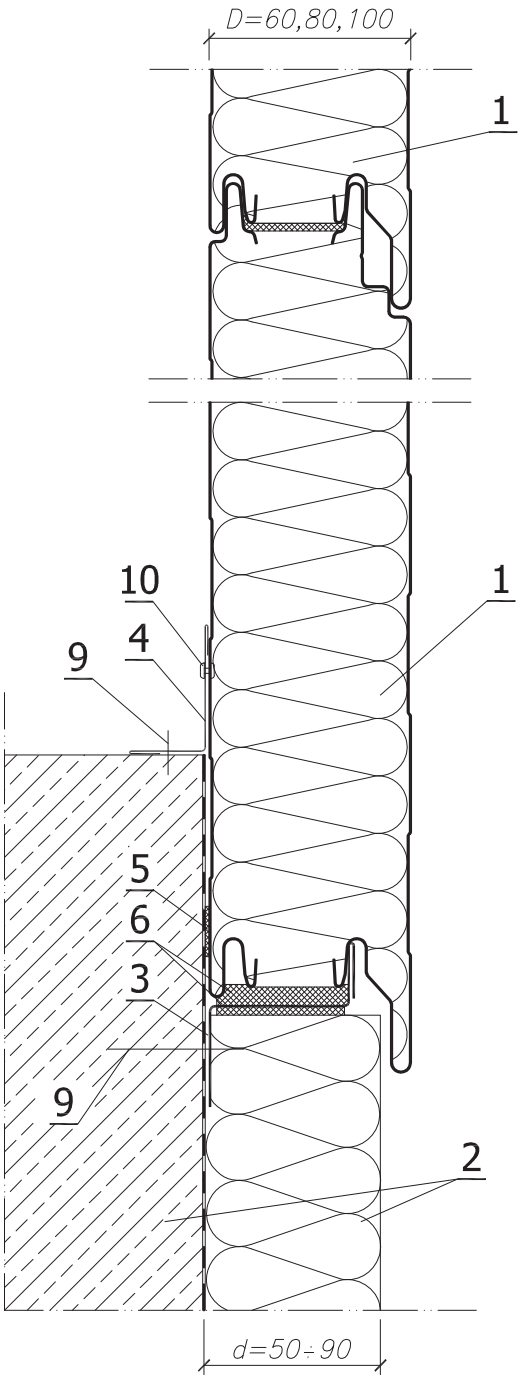
HORIZONTAL ARRANGEMENT of panels
Details of panel connection to grade beam
Variant II

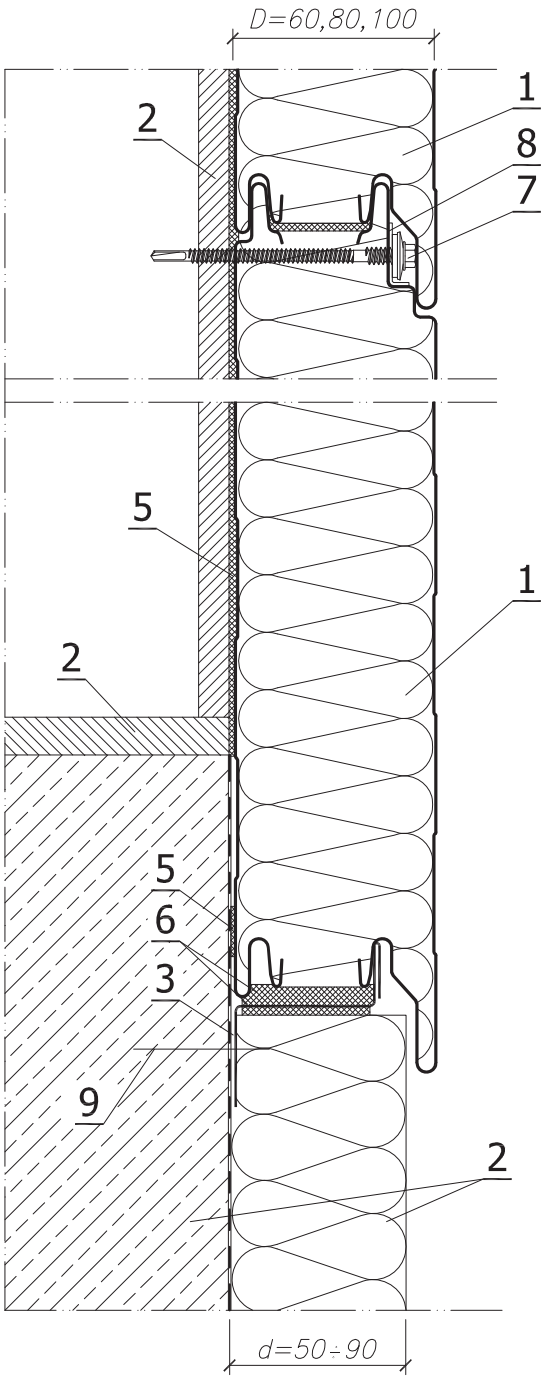
Scale 1:3

GÓR-STAL

In the span



On the support



LEGEND:
1. GORLICKA U1000 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

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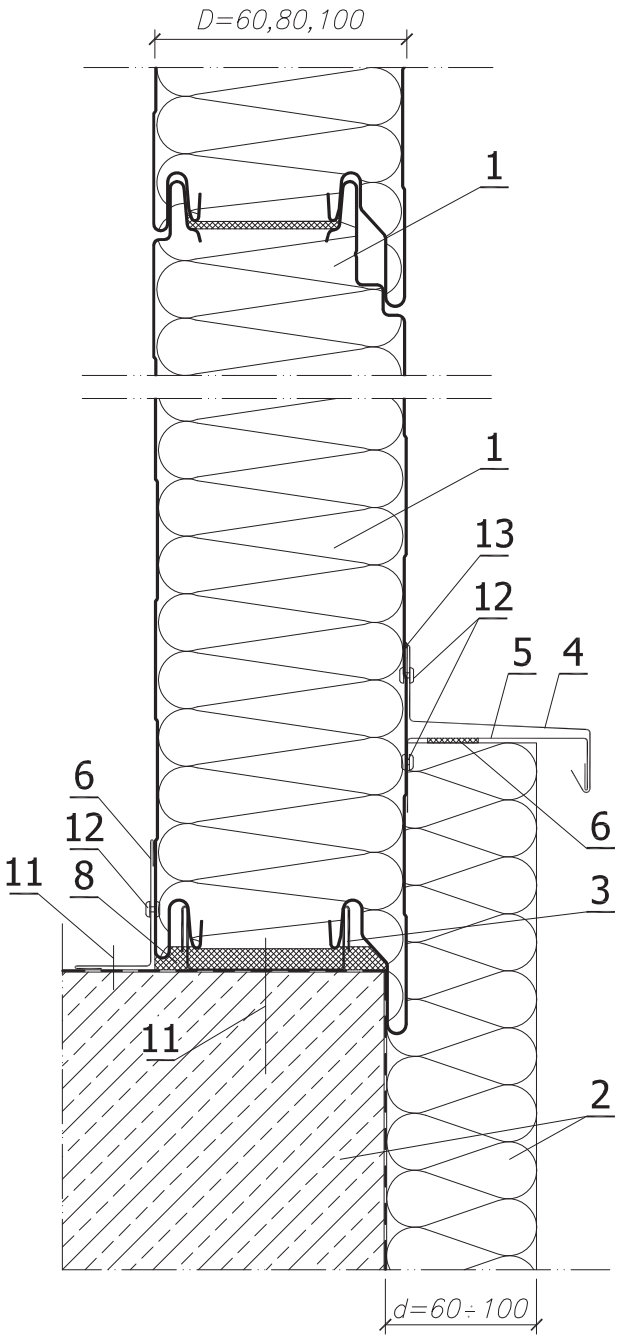
GORLICKA U1000 wall sandwich panel (Concealed connector)

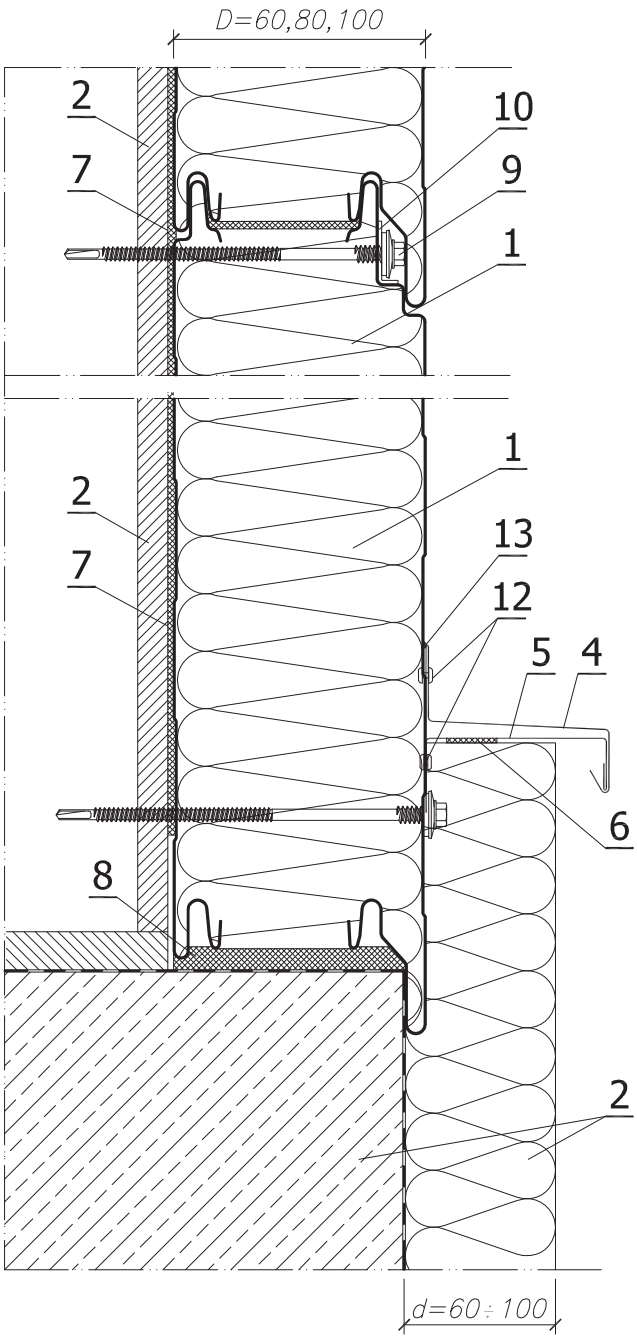
Scale 1:3

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

In the span



On the support



LEGEND:
1. GORLICKA U1000 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

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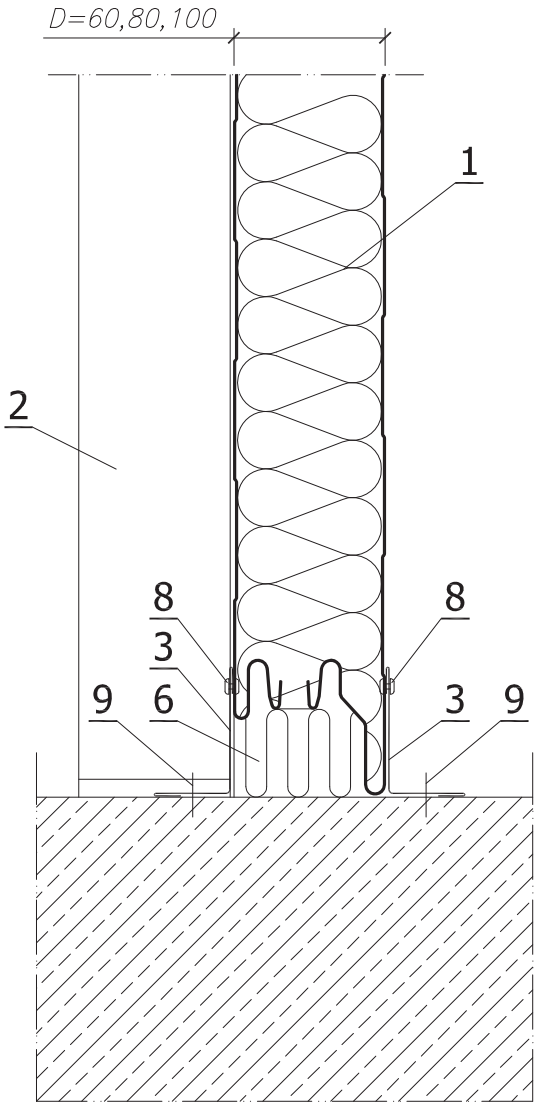
HORIZONTAL ARRANGEMENT of panels
Detail of panels connection to flooring

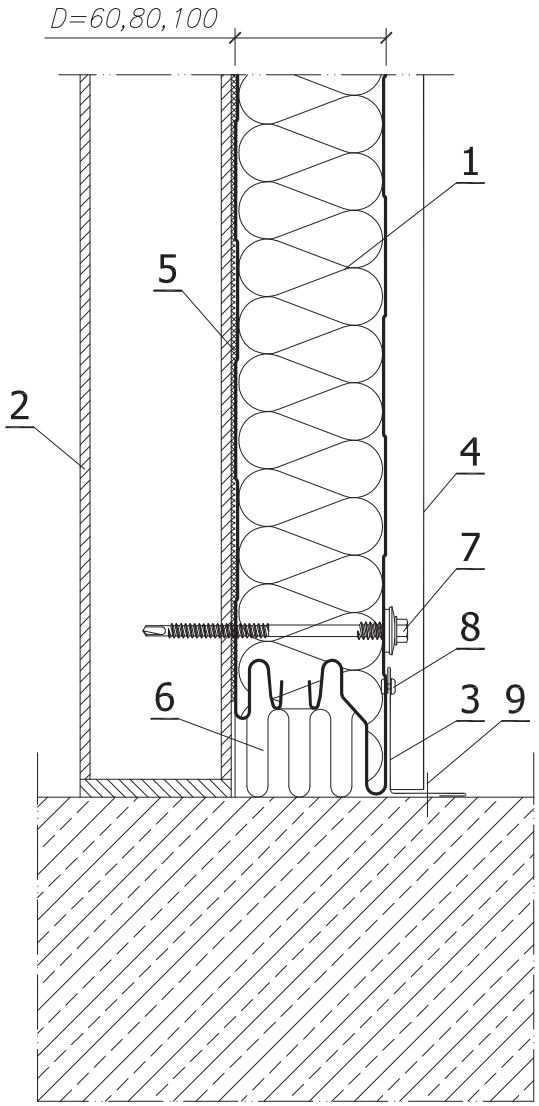
Scale
1:3

GÓR-STAL

In the span



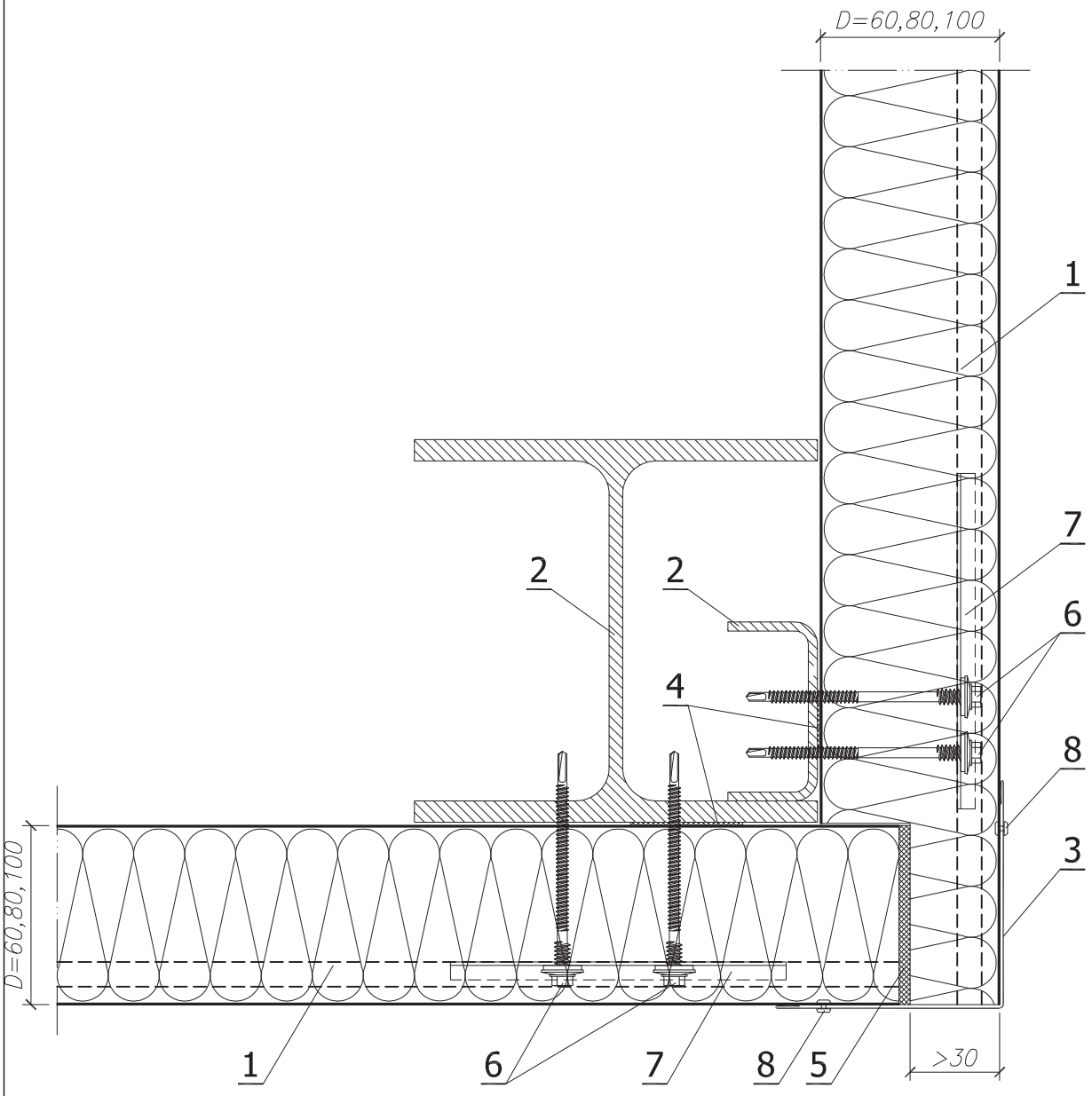
On the support



LEGEND:
1. GORLICKA U1000 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

Scale 1:3

HORIZONTAL ARRANGEMENT of panels
Detail of panels' connection in a corner



LEGEND:
1. GORLICKA U1000 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

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ul. Przemysłowa 11
38-300 Gorlice

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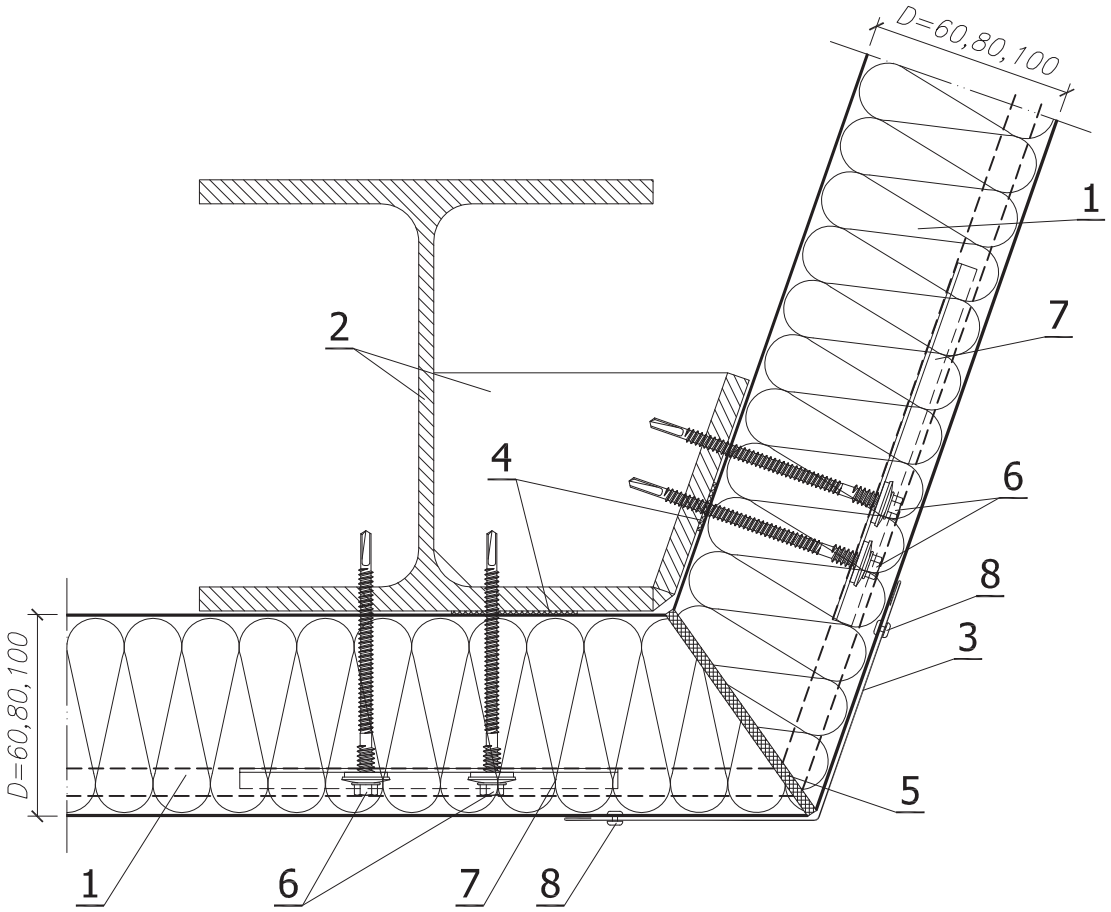
HORIZONTAL ARRANGEMENT of panels
Detail of panels' connection in an optional angle corner

Scale
1:2

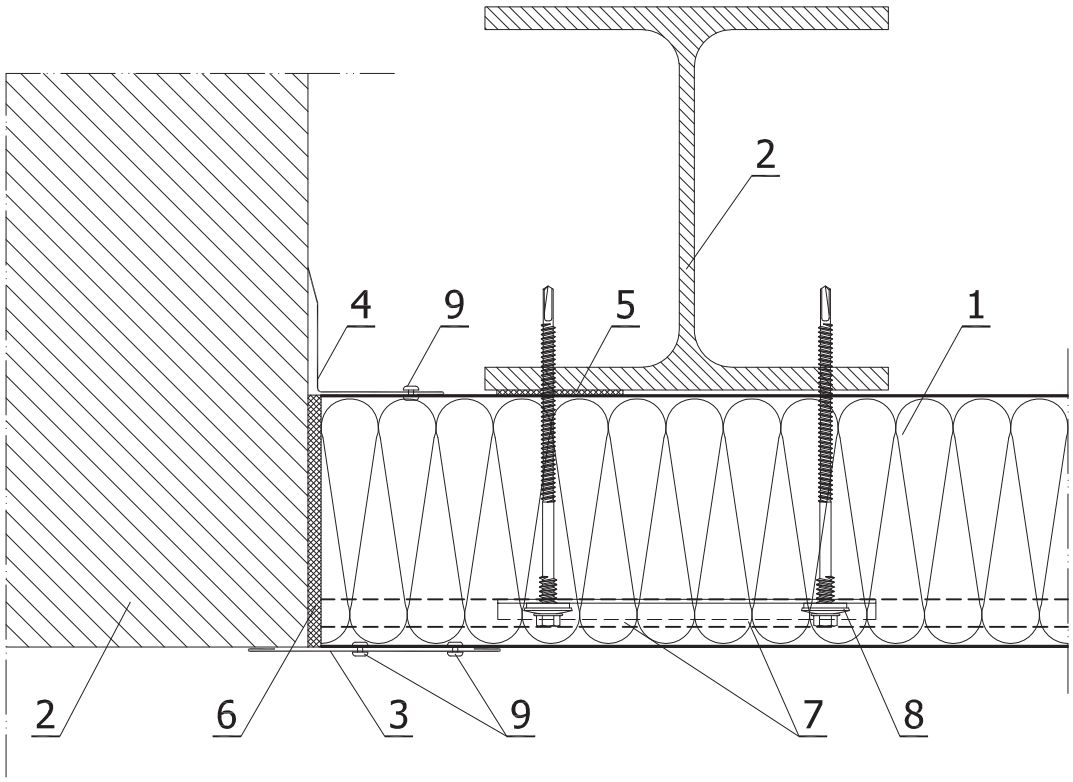
GÓR-STAL



LEGEND:
1. GORLICKA U1000 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

Scale 1:3

HORIZONTAL ARRANGEMENT of panels
Detail of panel connection to wall



LEGEND:
1. GORLICKA U1000 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

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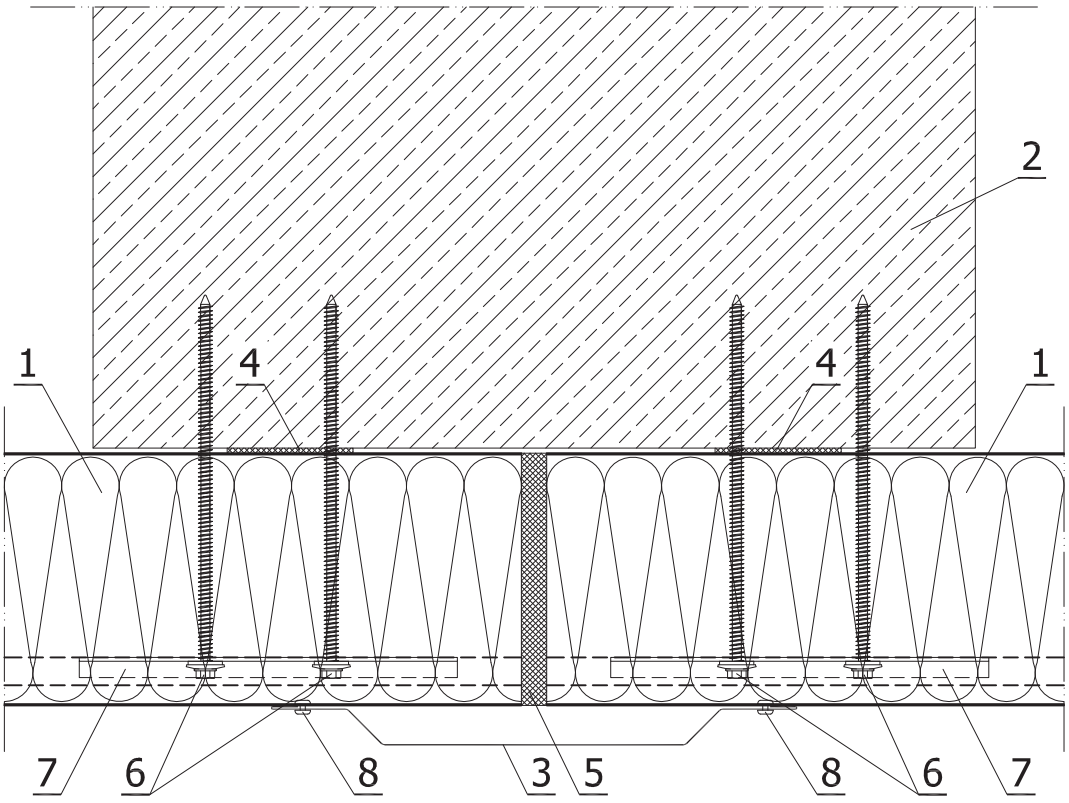
HORIZONTAL ARRANGEMENT of panels
Detail of panel connection to reinforced concrete support

Scale
1:2

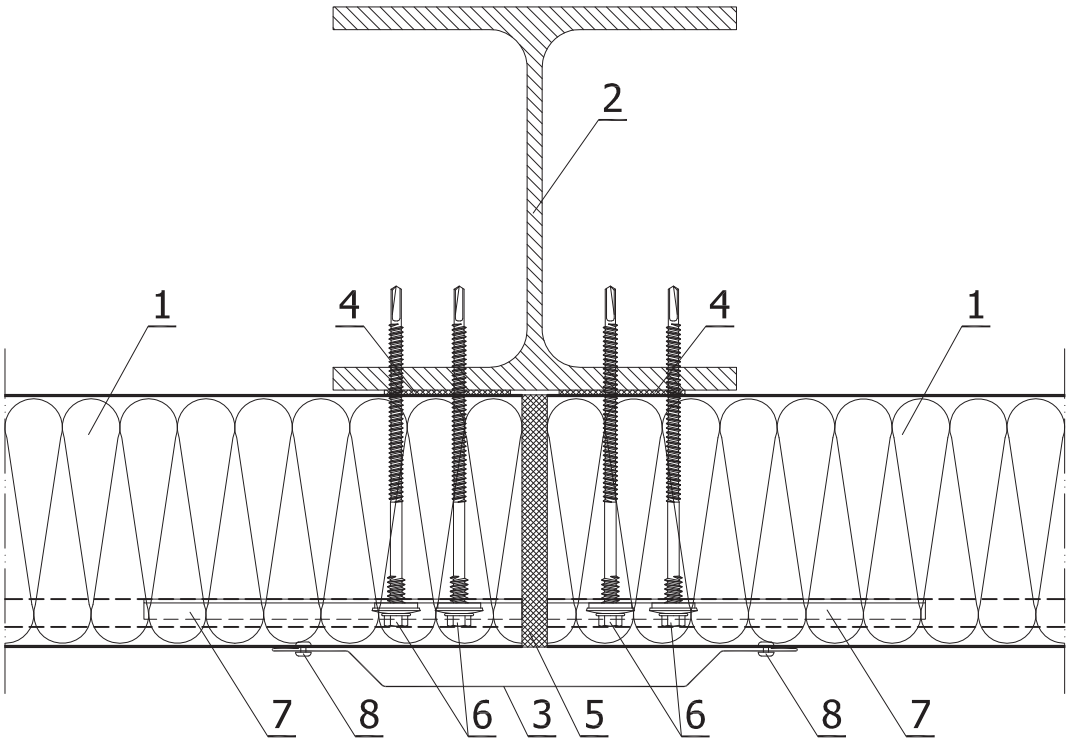
GÓR-STAL



LEGEND:
1. GORLICKA U1000 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

Scale 1:3

HORIZONTAL ARRANGEMENT of panels
Detail of panel connection to edge support



LEGEND:
1. GORLICKA U1000 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

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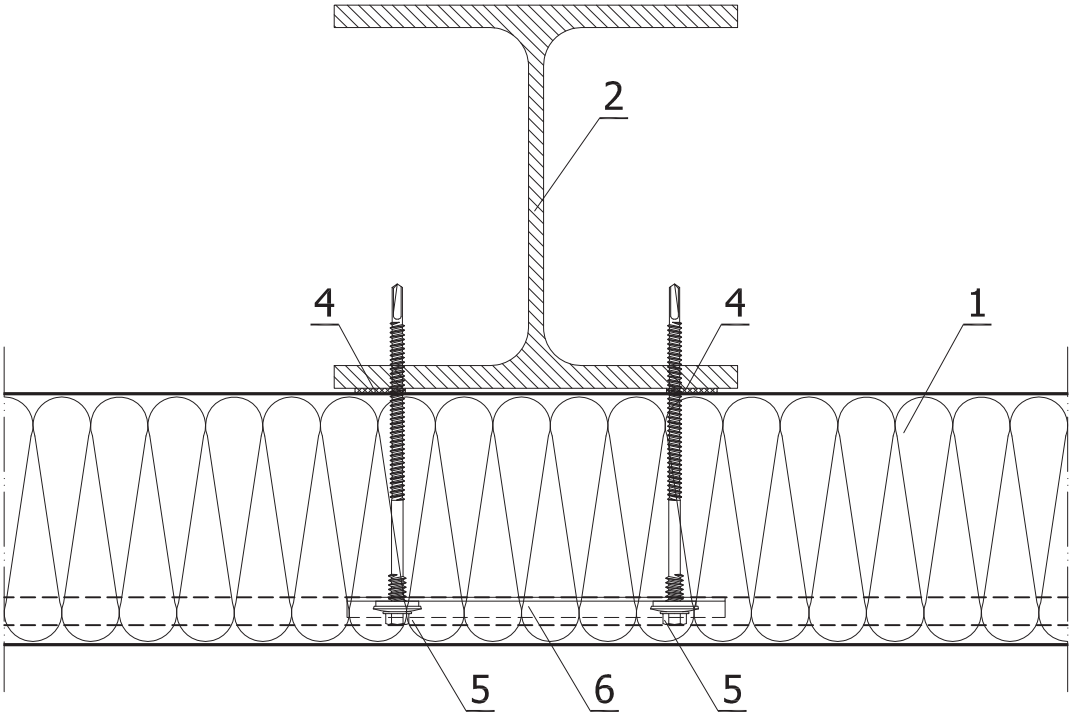
HORIZONTAL ARRANGEMENT of panels
Detail of panel connection to intermediate support

Scale
1:3

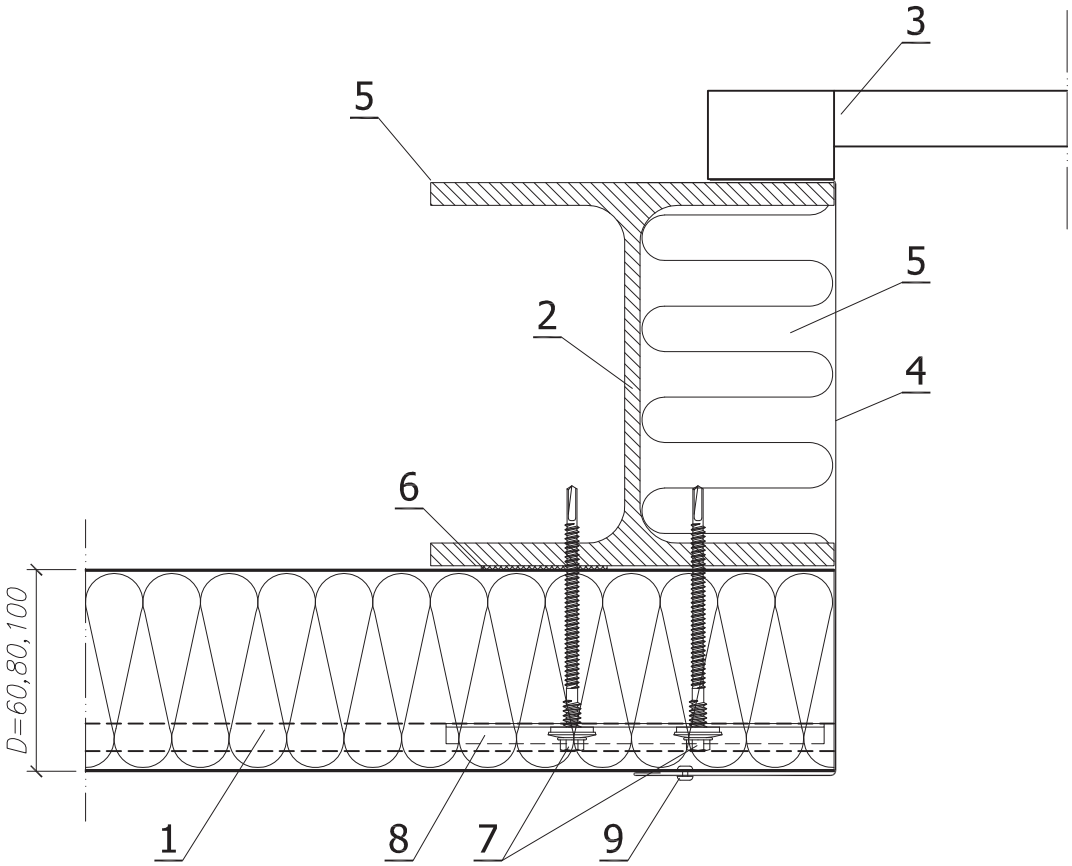
GÓR-STAL



LEGEND:
1. GORLICKA U1000 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

Scale 1:3

HORIZONTAL ARRANGEMENT of panels
Detail of roll-up door post



LEGEND:
1. GORLICKA U1000 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

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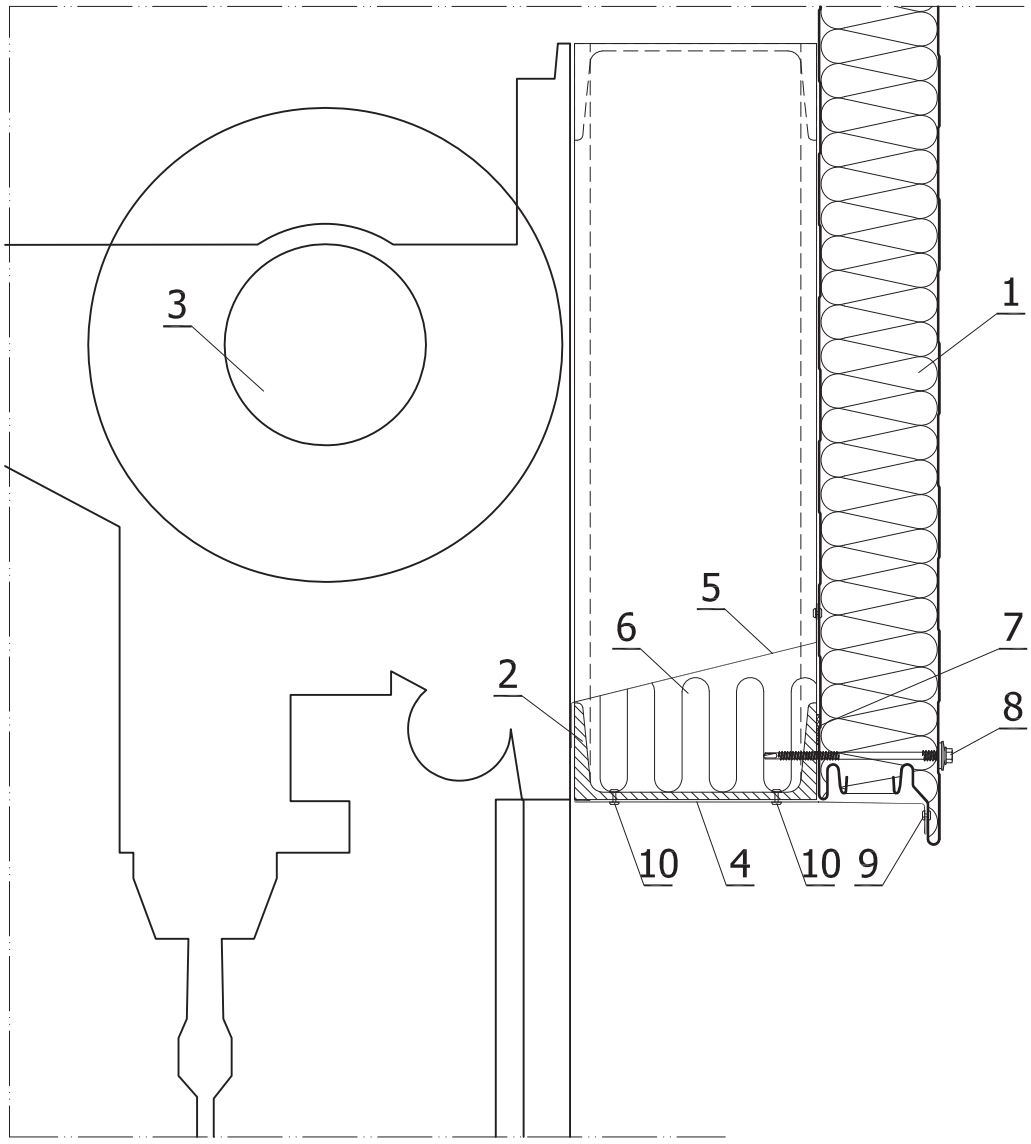
HORIZONTAL ARRANGEMENT of panels
Detail of roll-up door lintel

Scale
1:5

GÓR-STAL

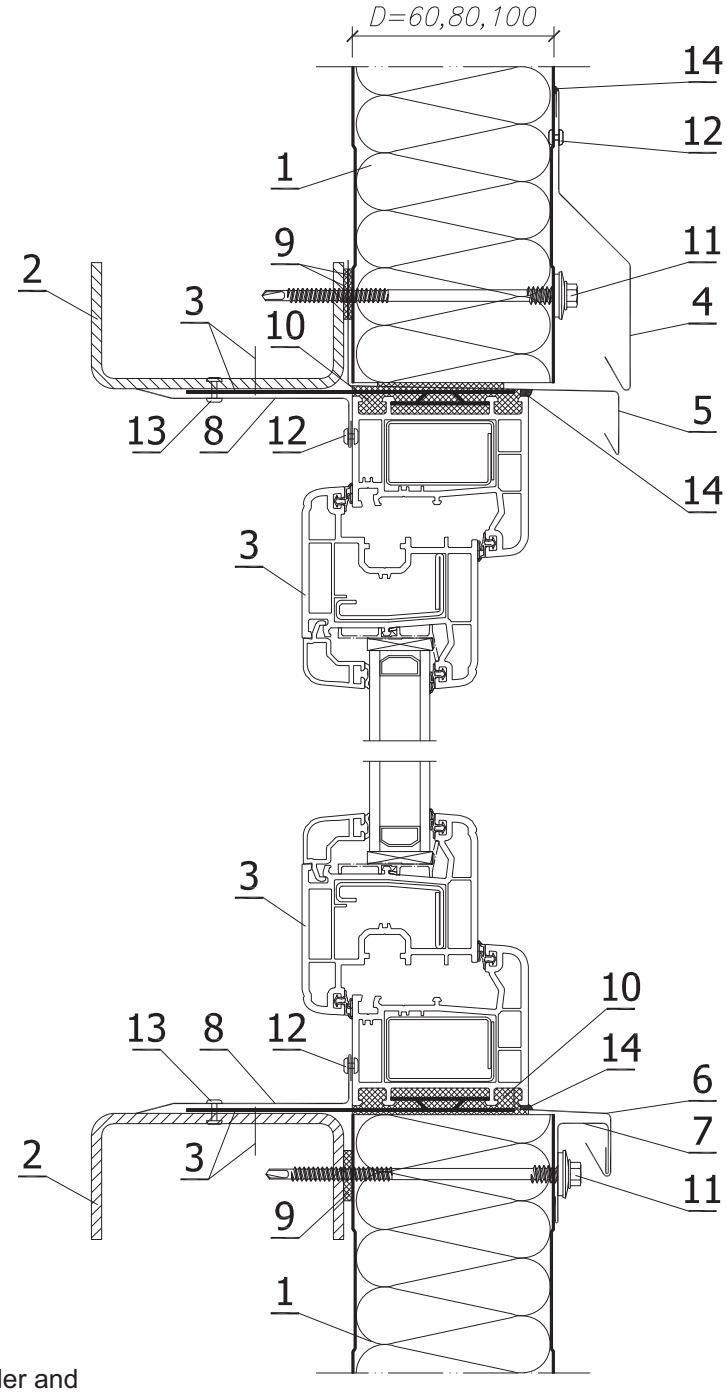


LEGEND:
1. GORLICKA U1000 wall panel
2. Transom acc. to structure design
3. Industrial door
4. Individual covering flashing
5. Individual covering flashing
6. Thermal insulation on the fastening
7. Polyethylene, self-adhesive sealing tape (PES)
8. Self-drilling connector for sandwich panels
9. Tight blind rivet 4.8 x 9.5
10. Blind rivet 4.8 x 15.1 (for the structure)

GORLICKA U1000 wall sandwich panel (Concealed connector)

Scale 1:3

HORIZONTAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant I – profile



LEGEND:
1. GORLICKA U1000 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

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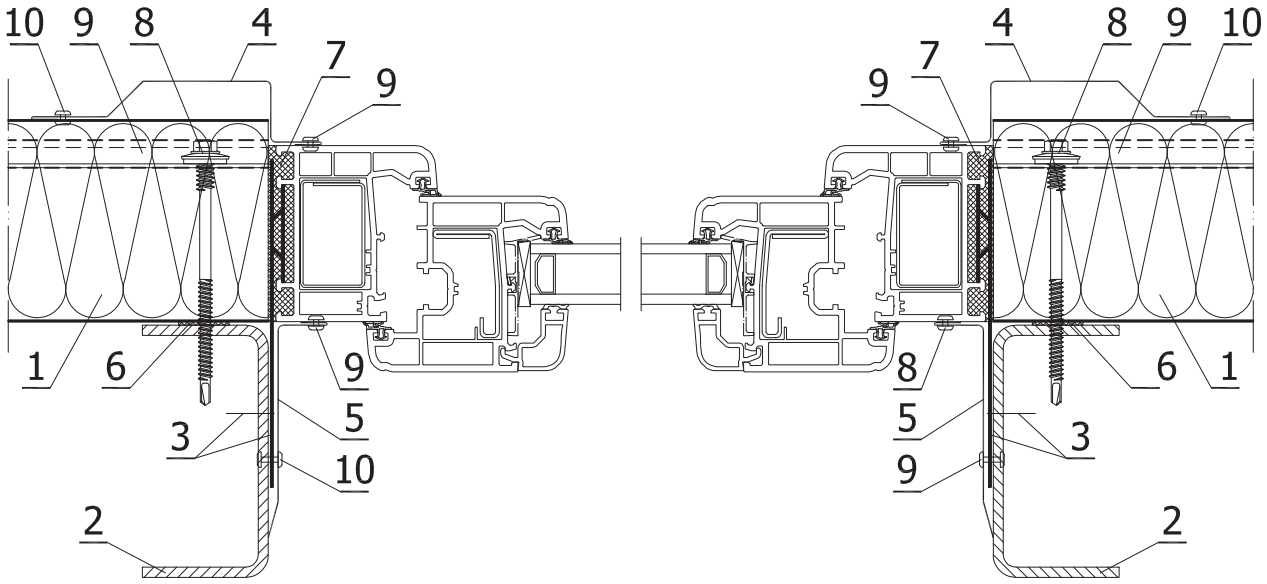
HORIZONTAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant I – cross-section

Scale
1:2

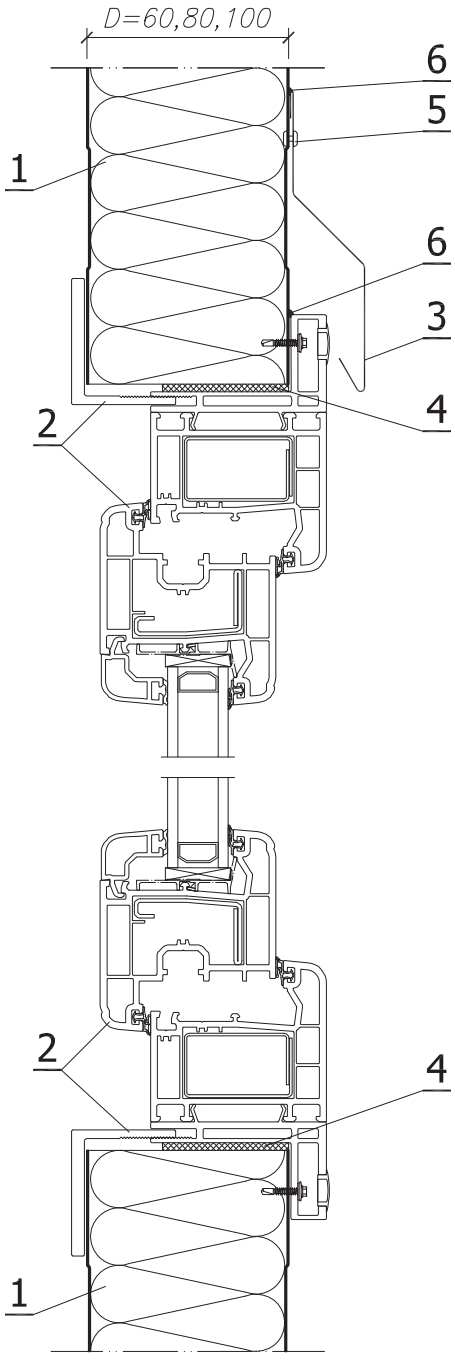
GÓR-STAL



LEGEND:
1. GORLICKA U1000 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)

Scale 1:3

HORIZONTAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant II – profile



LEGEND:
1. GORLICKA U1000 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

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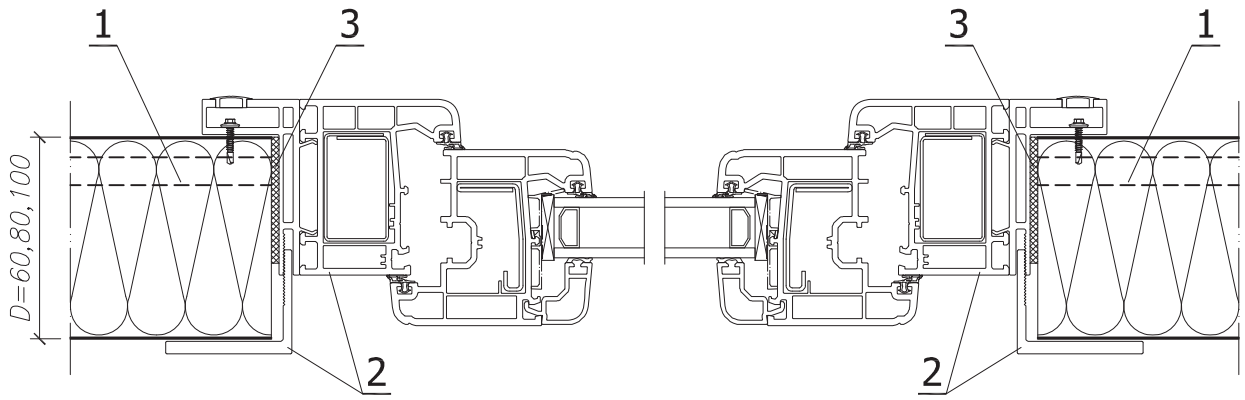
HORIZONTAL ARRANGEMENT of panels
Window assembly in sandwich panel
Variant II – cross-section

Scale
1:3

GÓR-STAL



LEGEND:
1. GORLICKA U1000 wall panel
2. PVC or aluminium window with a fastening profile
3. Impregnated polyurethane seal (PURS) or caulking foam

APPLICATIONS

GORLICKA D1000 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 (< 16m), without skylights and 5° (8,7%) for cover made of panels connected along their length. GR 1000D panels can also be used as the external cladding of walls.

PHYSICAL FEATURES

GORLICKA D1000 wall panel is manufactured in four core thickness options: 40, 60, 80,100 and 120 mm.
Panels' **facing** is made of double-sided galvanized steel sheets, 0.50 mm thick S280GD+Z275 as per PN-EN 10326:2006, with organic polyester coating 25 µm thick.
Panels' **core** of thermal insulation properties is made of rigid polyurethane foam (PUR) of 40±3 kg/m^3 density.
Modular **width** of a panel equals 1000 mm. Standard **lengths** of panels equal from 2.0 m to 12 m. Panels shorter than 2 m or longer than 12 m are also available at customer's special order, and the maximum length can equal even 16,5m.
Tightness of panel joints is provided by impregnated polyurethane seals.

Thickness [mm]	Weight [kg/m^2]	Modular width [mm]	Length: typical/available [m]	Lining standard RAL colours
40	10,60	1000	2,0-12,0 / 16,5	9002, 9010, 9006 9007, 5010, 1015 3000, 6029, 7016
60	11,40			
80	12,20			
100	13,00			
120	13,80			

TECHNICAL PARAMETERS

Thermal performance of panels depends on the core thickness and is characterized by the heat transfer coefficient U of a division – specified in the table below.
Acoustic parameters of panels are specified based on PN-EN ISO 717-1:1999 standard. Roof panels can be used for divisions, of noise reduction performance requirements below the values specified below.
As regards the **fire resistance** GORLICKA D1000 roof sandwich panels are classified as not spreading fire (**NRO**) material as per PN-EN 13501-5+A1:2010.
As regards external fire resistance of a roof, based on PN-ENV 1187:2004 and PN-EN-13501-2:2006 the panel is certified with class **B_{ROOF}(t1)**.
Based on PN-EN-13501-5+A1:2010 panel D1000 80 mm thick is certified with: fire insulation – class (R)**EI 15**.
Chemical corrosion resistance – GORLICKA sandwich panels can be applied in environments of corrosivity category C1, C2, C3 as per PN-EN ISO 12944-2.

Thickness [mm]	Heat transfer coefficient U [W/m^{2}K]	Noise reduction coefficient R_W, R_{A1}, R_{A2}	Fire rating
40	0,49	R_W=26 dB R_{A1}=24 dB R_{A2}=22 dB	B_{ROOF}(t1)+NRO as per PN-EN 13501-5+A1:2010 (R)**EI 15** (R)**E 30** (for panel thickness ≥ 80mm)
60	0,34		
80	0,26		
100	0,21		
120	0,18		

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ul. Przemysłowa 11
38-300 Gorlice

Phone/Fax (018) 353 98 00
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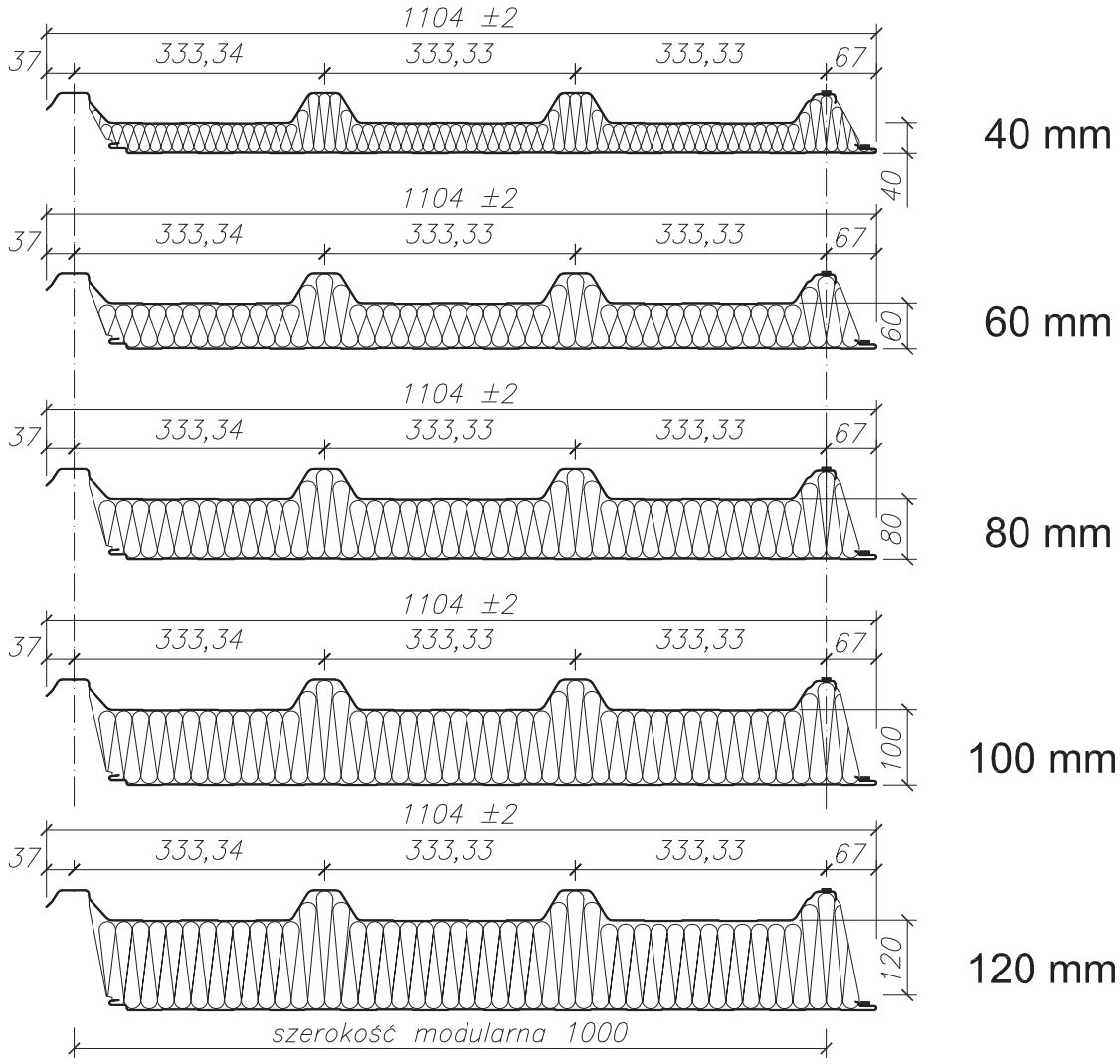
Manufacturing programme for Gorlicka D1000 panel:
Panel thicknesses
Profiles of outer and inner facing

Scale
1:10
1:1

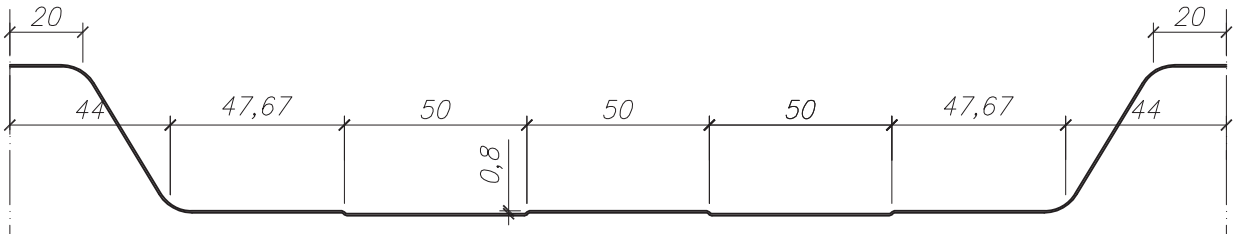
GÓR-STAL

Panel thicknesses

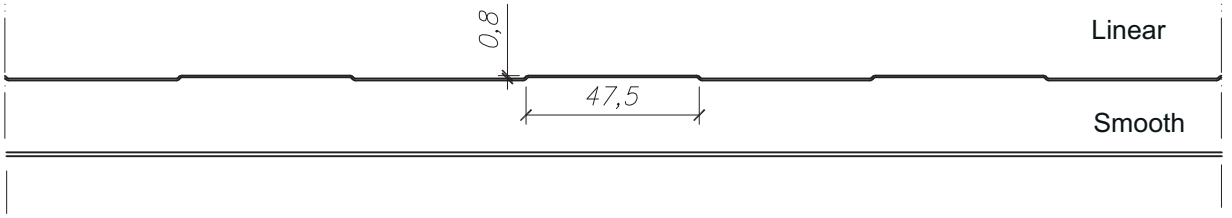


Outer facing profiles

Trapezoidal



Inner facing profiles



LOAD SPAN TABLES

Table of allowed loads for GORLICKA D1000 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 D1000 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 DISPATCH

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]	**40**	**60**	**80**	**100**	**120**
Number of panels in a pack	14	11	9	8	7

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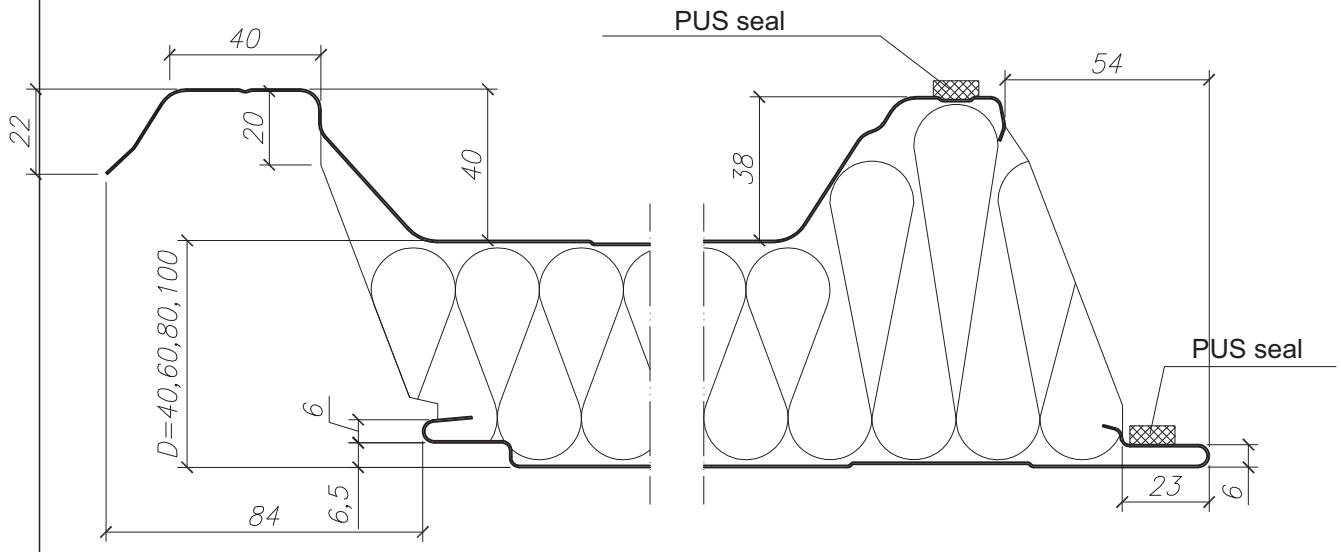
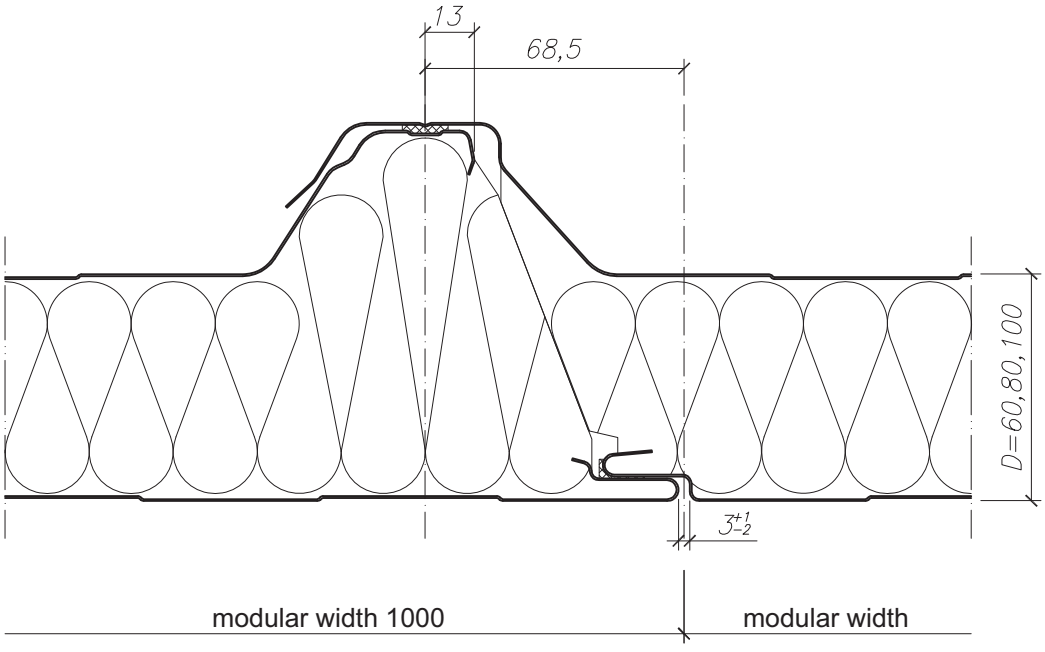
Selected details of cladding made of GORLICKA D1000 sandwich panels

Detail of cam-lock and panels' connection
Detail of panels' fastening
Detail of panels' connection in roof ridge
Detail of water evacuation in a valley
Detail of roof at attic. Slope profile
Detail of roof attic. Slope cross-section
Detail of connection to wall in monopitch roof – variant I
Detail of connection to wall in monopitch roof – variant II
Detail of eave cross-section – left side
Detail of eave cross-section – right side
Detail of water evacuation to gutter – variant I
Detail of water evacuation to gutter – variant II
Detail of panel connection to reinforced concrete or masonry wall
Detail of roof panels' connection along the length – panelcut options
Detail of skylight in roof ridge
Detail of ventilation duct (max. ø = 250) penetration through roof

Shape of cam-lock for panels



Detail of panels' connection



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Details of GORLICKA D1000 panels' connection

Scale 1:3

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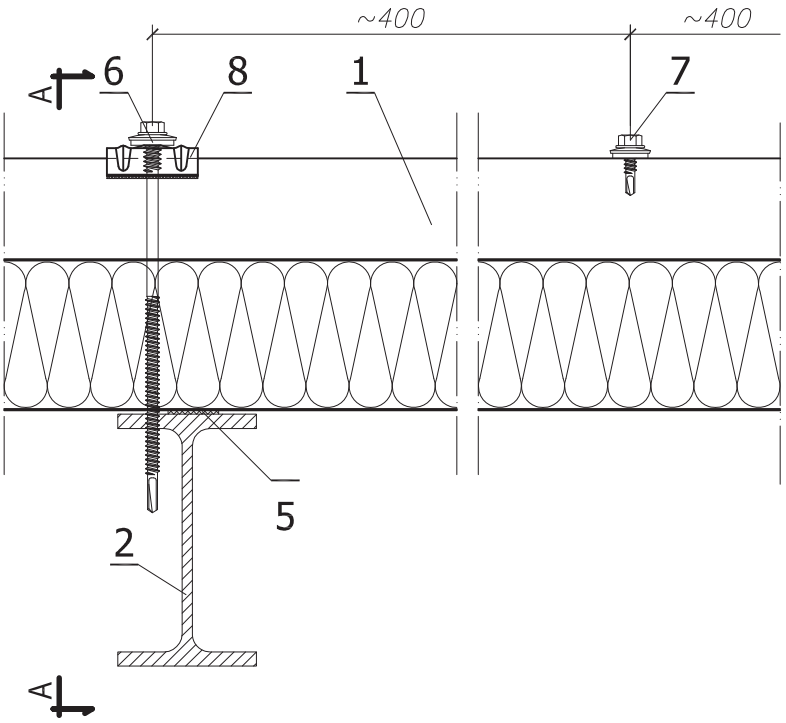
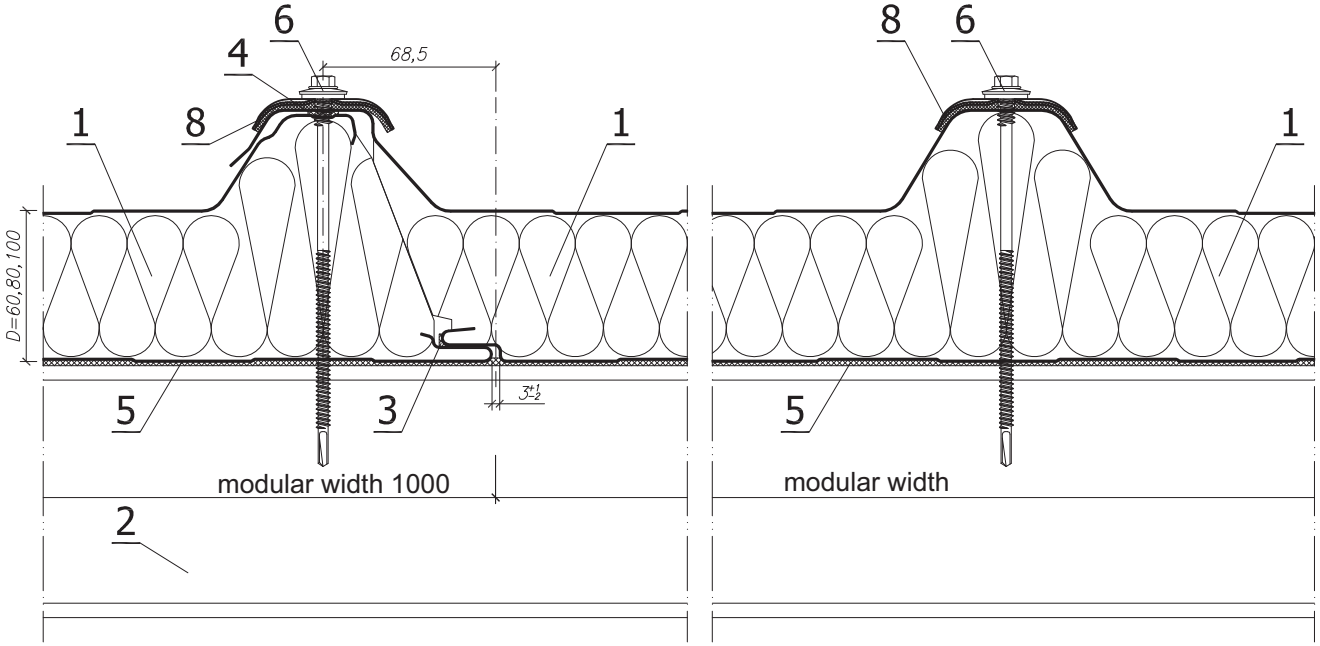


A-A cross-section

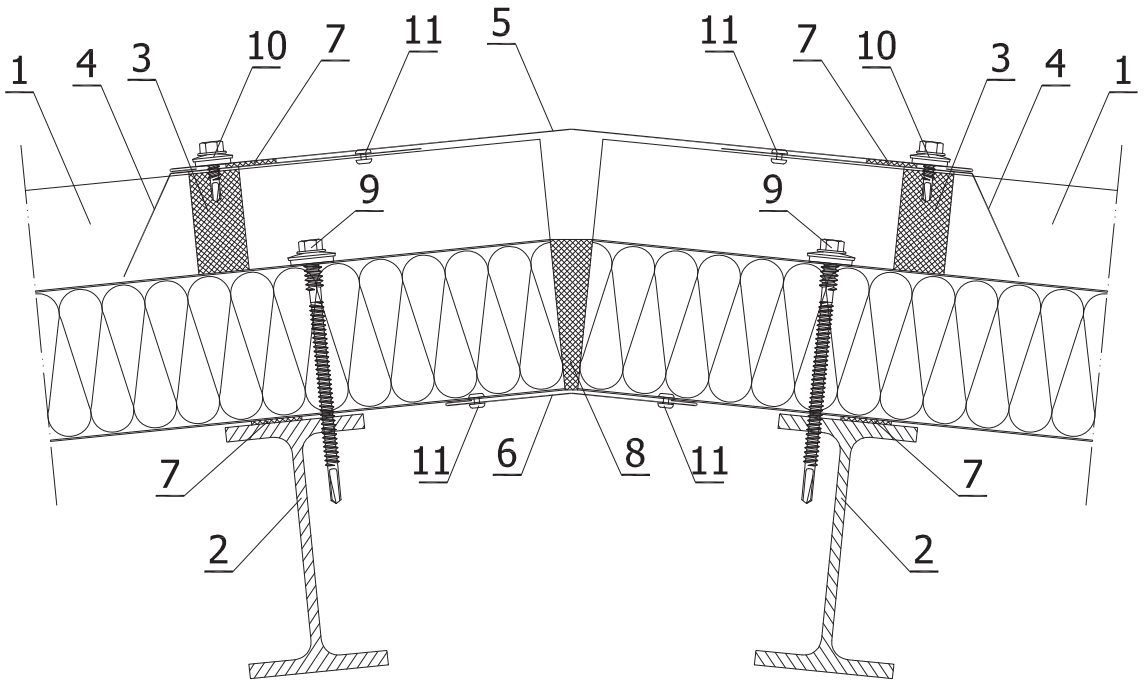


LEGEND:
1. GORLICKA D1000 roof panel
2. Purlin acc. to structure design
3. Factory-installed PUS seal
4. PUS seal applied on the fastening
5. Polyethylene, self-adhesive sealing tape (PES)
6. Self-drilling connector for sandwich panels
7. Self-drilling connector for steel sheet
8. Calotte - spacer

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

Scale 1:3

Detail of panels' connection in roof ridge



LEGEND:
1. GORLICKA D1000 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

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Detail of water evacuation in a valley

Scale 1:3

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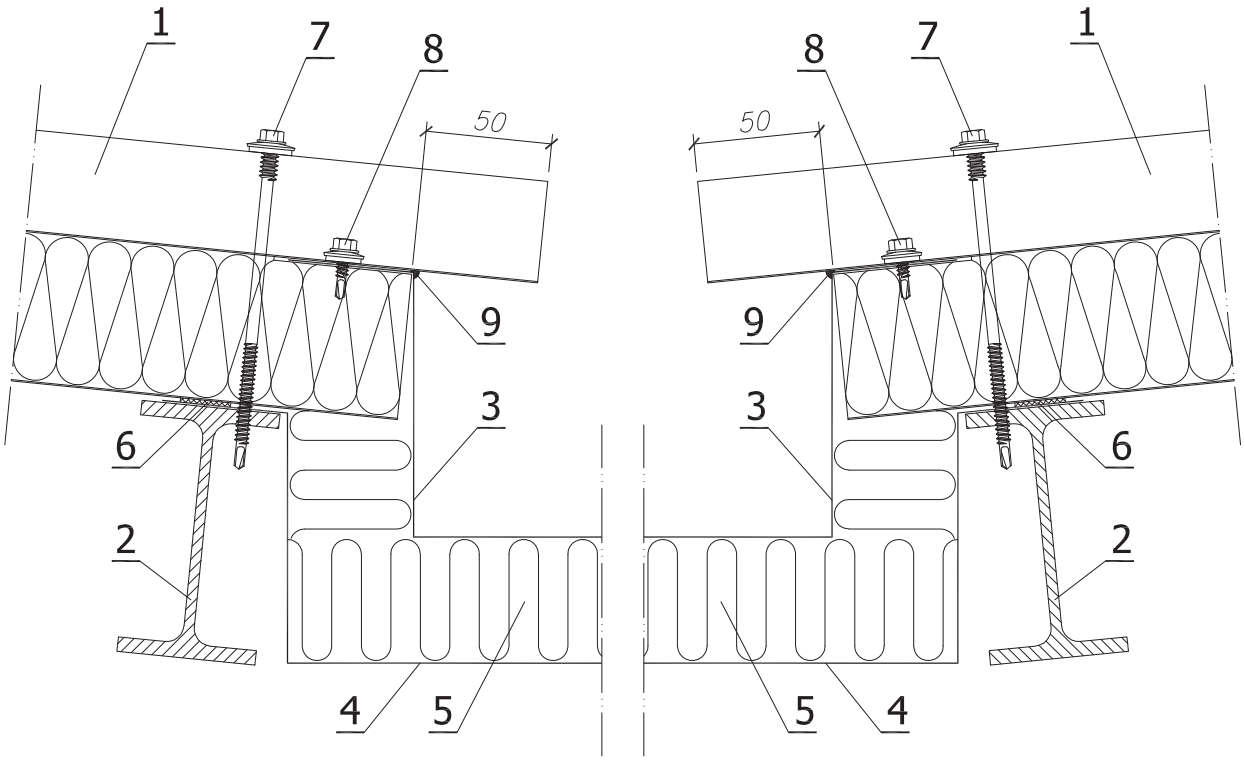
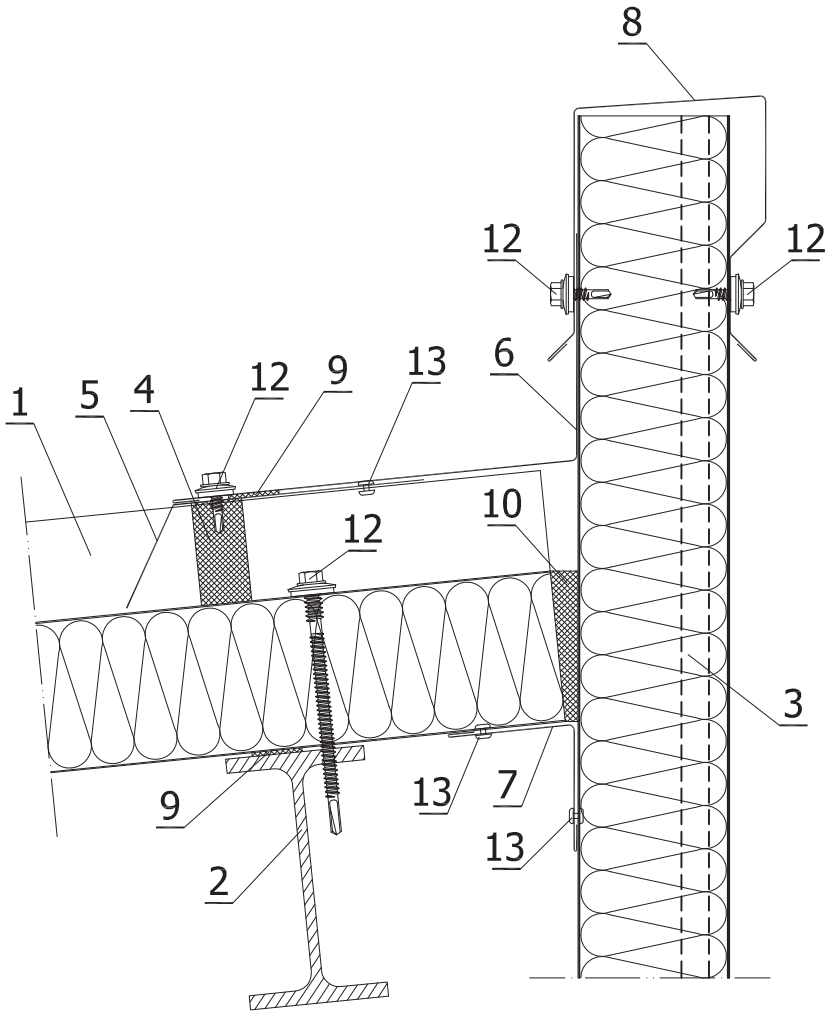


LEGEND:
1. GORLICKA D1000 roof panel
2. Purlin acc. to structure design
3. Individual inner gutter profile
4. Individual outer gutter profile
5. Thermal insulation carried out on the fastening
6. Polyethylene, self-adhesive sealing tape (PES)
7. Self-drilling connector for sandwich panels
8. Self-drilling connector for steel sheet
9. Butyl sealing compound

Scale 1:3

Detail of roof at attic
Slope profile



LEGEND:
1. GORLICKA D1000 roof panel
2. Purlin acc. to structure design
3. GORLICKA U1000 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

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Detail of roof at attic
Slope cross-section

Scale
1:3

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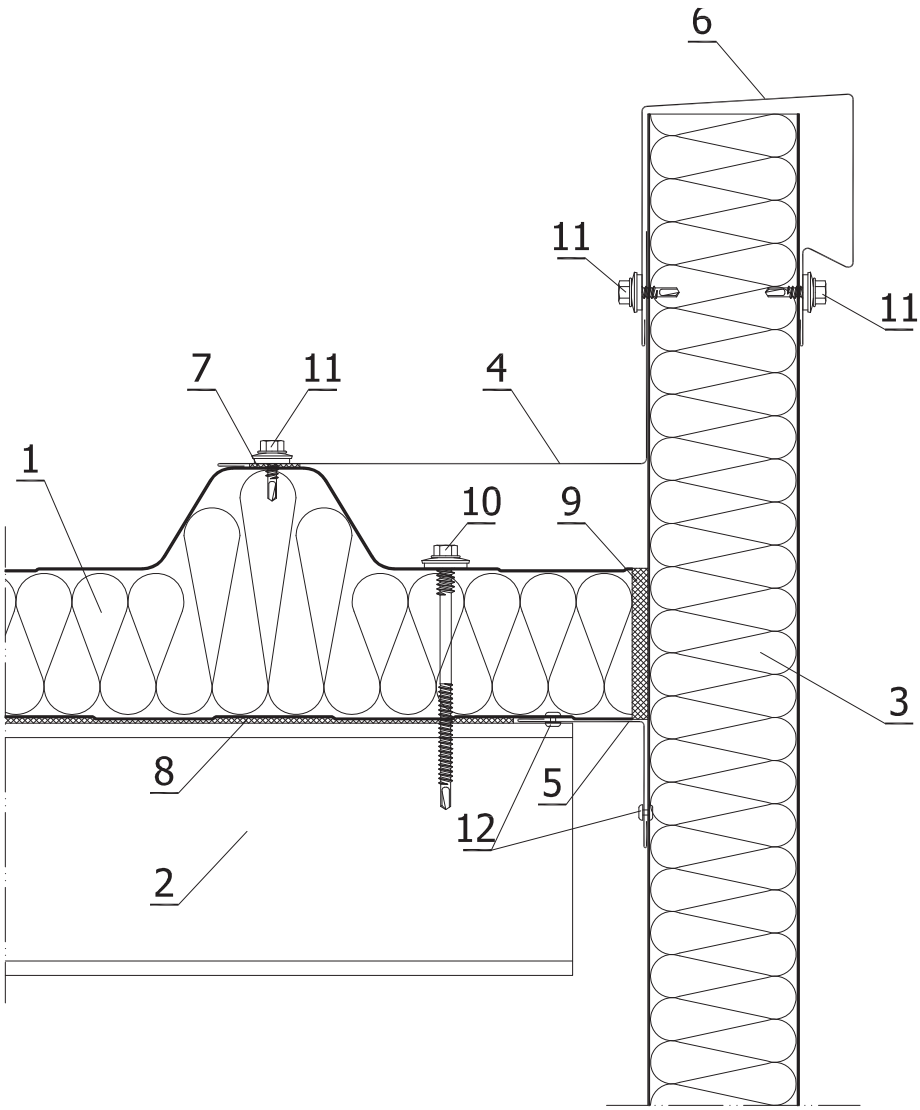
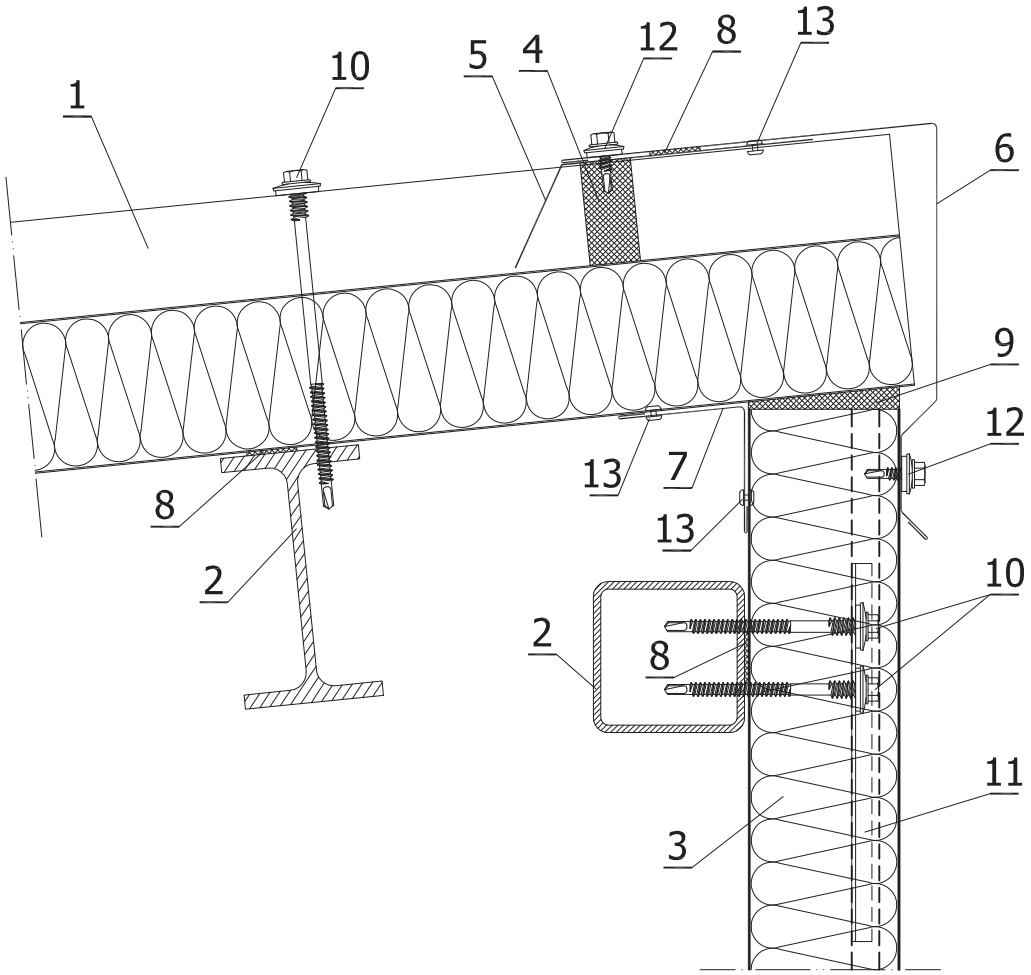


LEGEND:
1. GORLICKA D1000 roof panel
2. Purlin acc. to structure design
3. GORLICKA S1000 wall panel
4. Roof covering flashing OB-29
5. Inner corner flashing OB-02
6. Attic flashing OB-35
7. Butyl sealing tape
8. Polyethylene, self-adhesive sealing tape (PES)
9. Polyurethane caulking foam
10. Self-drilling connector for sandwich panels
11. Self-drilling connector for steel sheet
12. Tight blind rivet 4.8 x 9.5

Scale 1:3

Detail of connection to wall in monopitch roof Variant I



LEGEND:
1. GORLICKA D1000 roof panel
2. Structure acc. to structure design
3. GORLICKA U1000 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

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Detail of connection to wall in monopitch roof
Variant II

Scale
1:3

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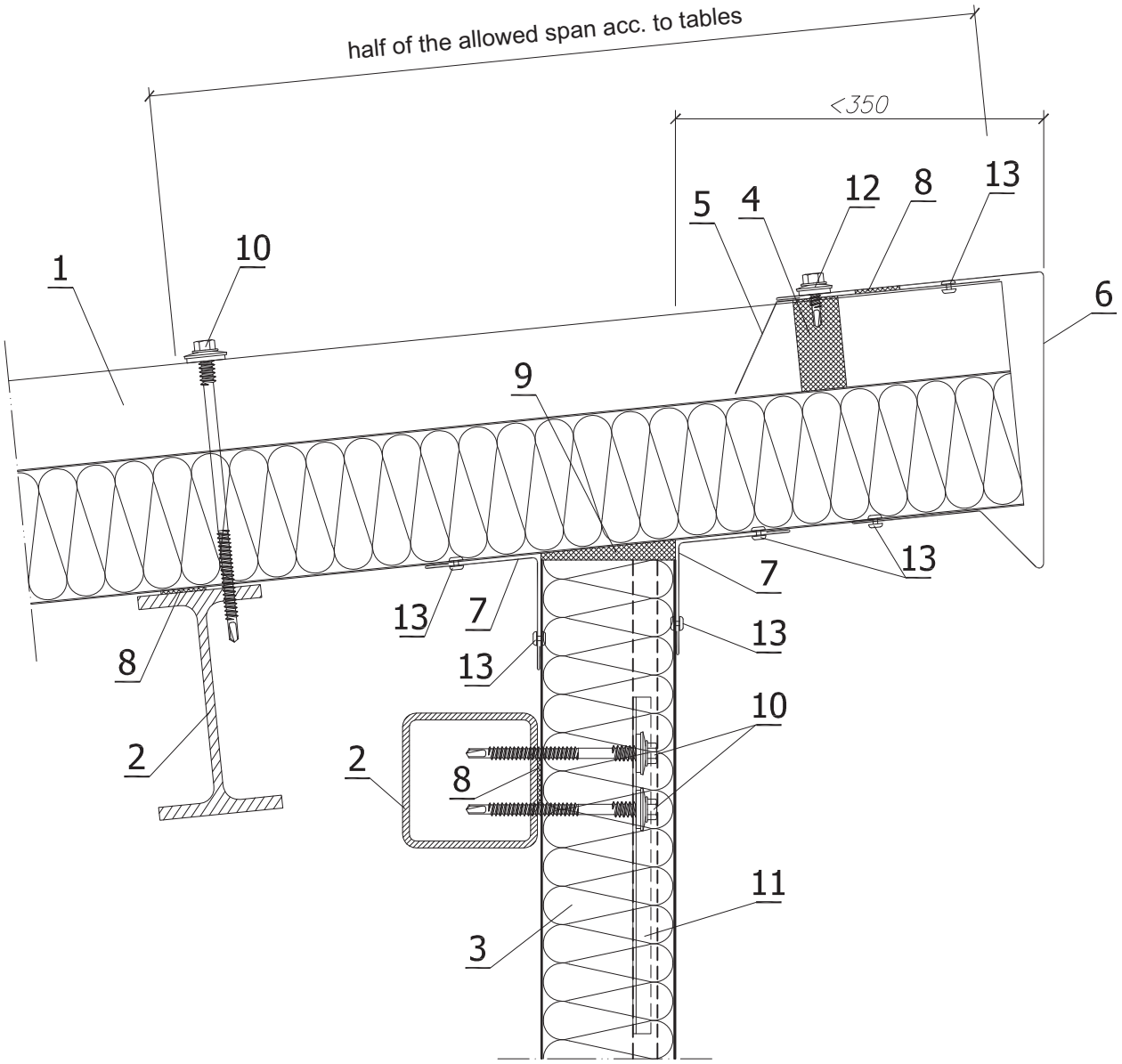
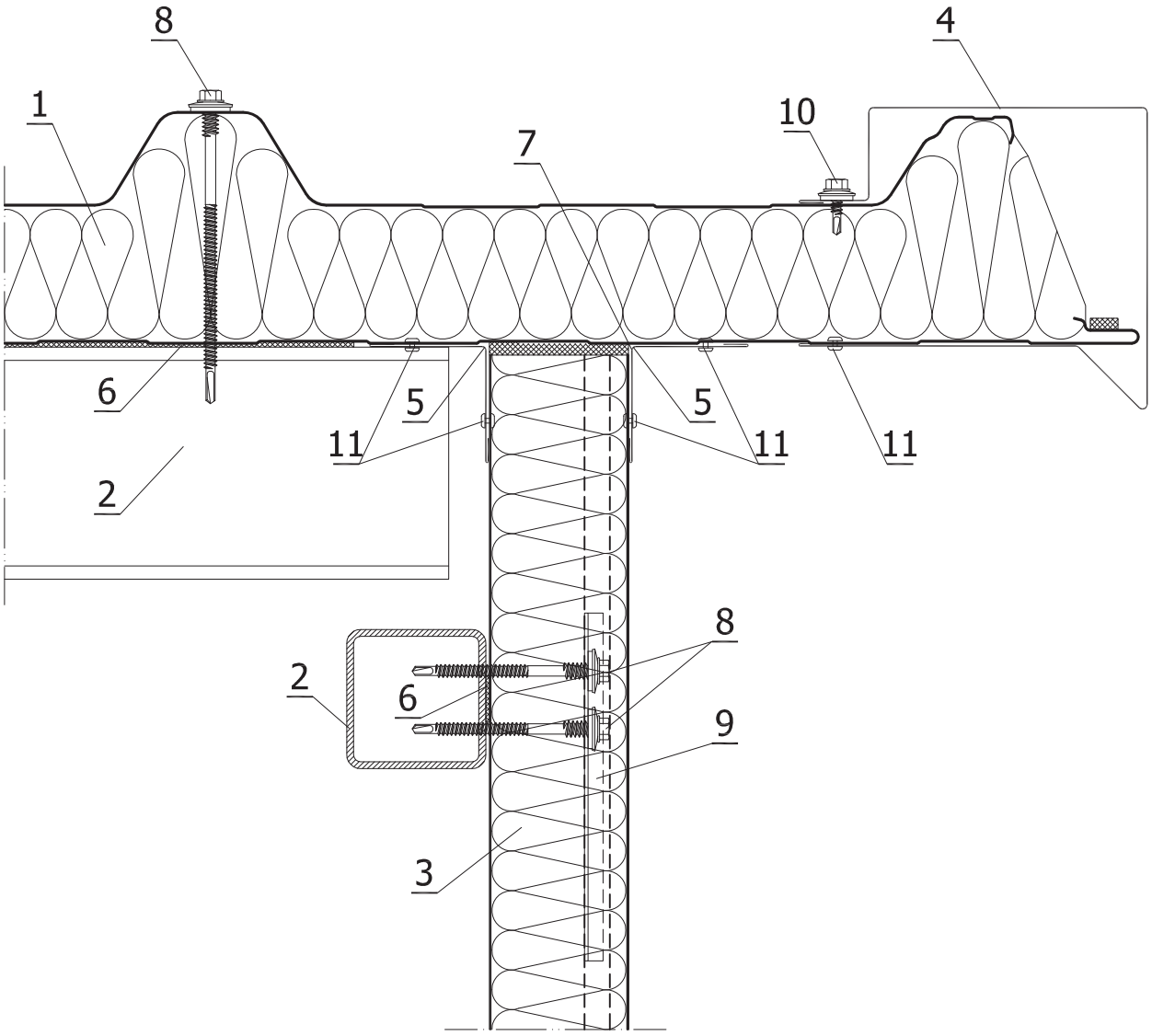


LEGEND:
1. GORLICKA D1000 roof panel
2. Structure acc. to structure design
3. GORLICKA U1000 wall panel
4. Profiled seal (PE)
5. Profiled flashing OB-28
6. Top flashing OB-31
7. Inner corner flashing OB-02
8. Polyethylene, self-adhesive sealing tape (PES)
9. Polyurethane caulking foam
10. Self-drilling connector for sandwich panels
11. PM1 spacer
12. Self-drilling connector for steel sheet
13. Tight blind rivet 4.8 x 9.5

Scale 1:3

Detail of eave cross-section
Left side



LEGEND:
1. GORLICKA D1000 roof panel
2. Structure acc. to structure design
3. GORLICKA U1000 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

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Detail of eave cross-section
Right side

Scale
1:3

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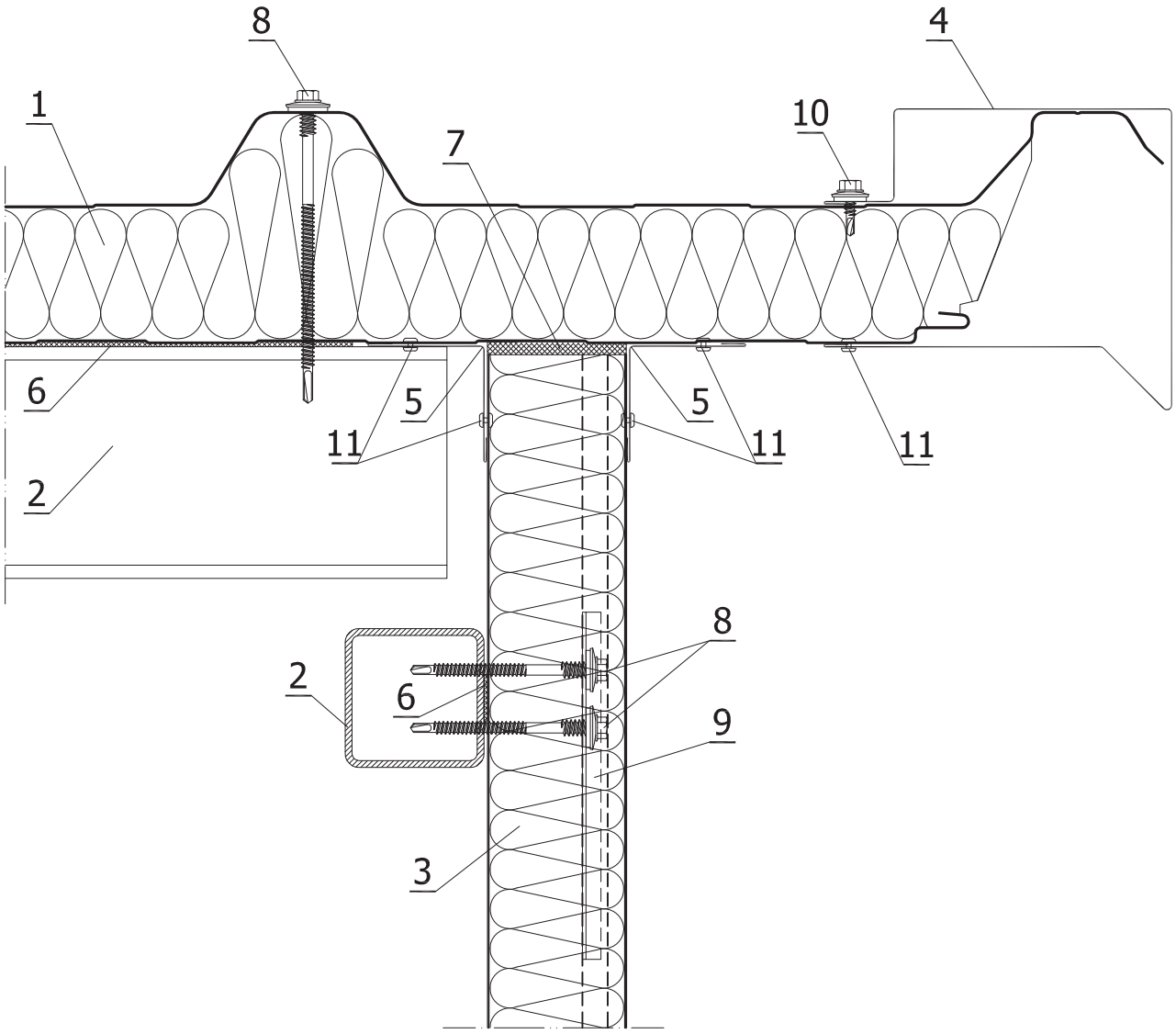
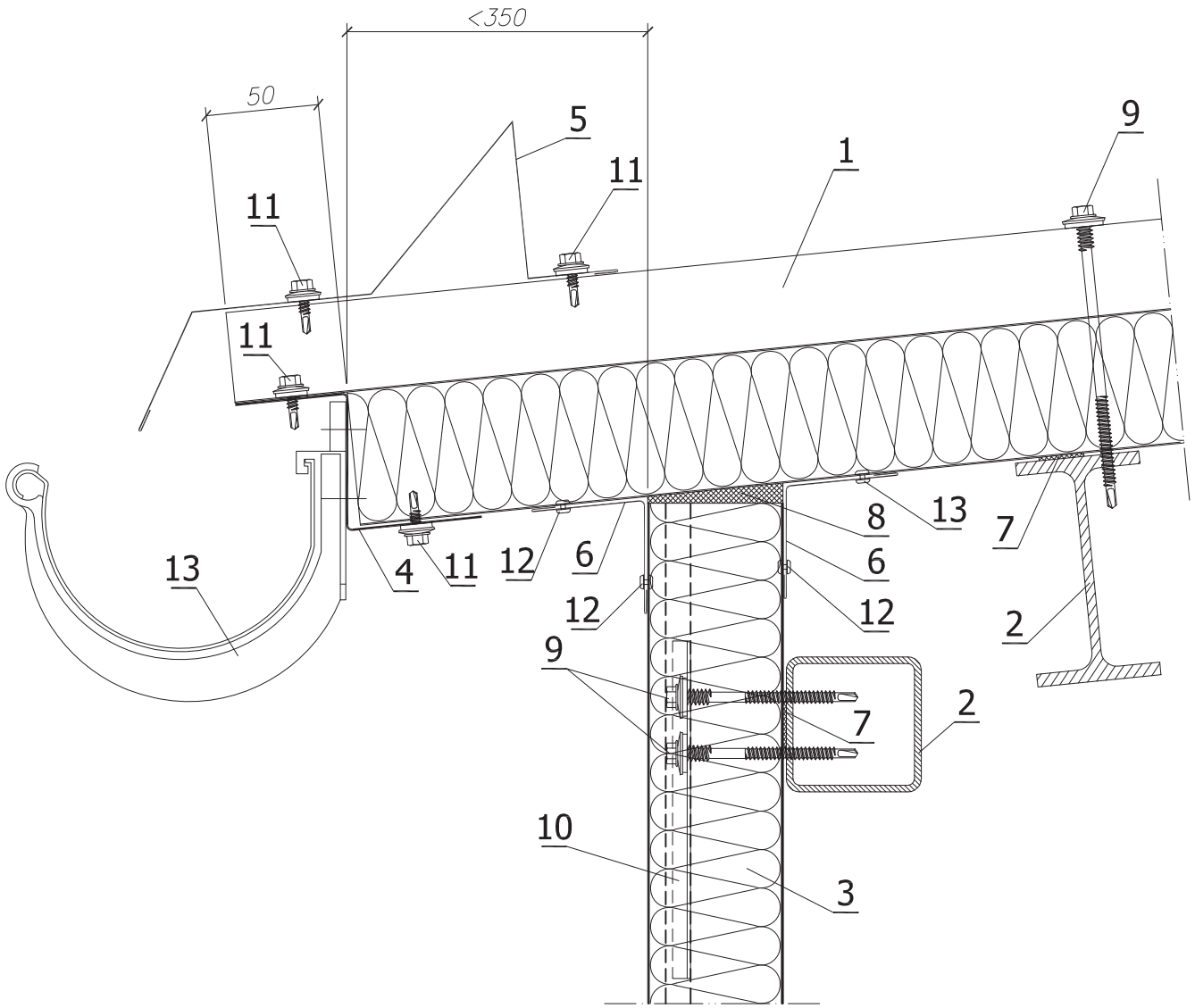


LEGEND:
1. GORLICKA D1000 roof panel
2. Structure acc. to structure design
3. GORLICKA U1000 wall panel
4. Covering flashing OB-24
5. Corner flashing OB-02
6. Polyethylene, self-adhesive sealing tape (PES)
7. Polyurethane caulking foam
8. Self-drilling connector for sandwich panels
9. PM1 spacer
10. Self-drilling connector for steel sheet
11. Tight blind rivet 4.8 x 9.5

Scale 1:3

Detail of water evacuation to gutter
Variant I



LEGEND:
1. GORLICKA D1000 roof panel
2. Structure acc. to structure design
3. GORLICKA U1000 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

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Detail of water evacuation to gutter
Variant II

Scale
1:3

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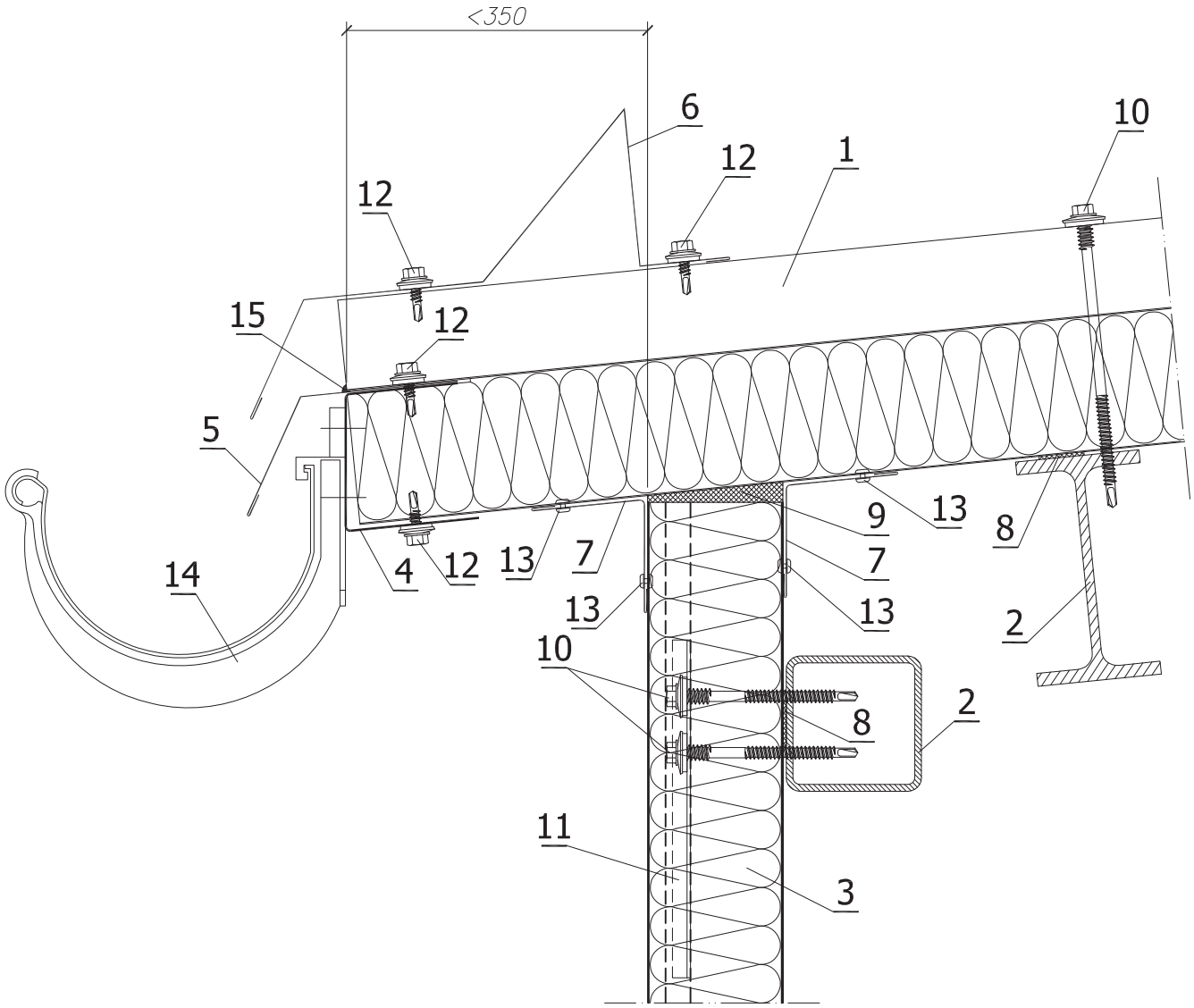
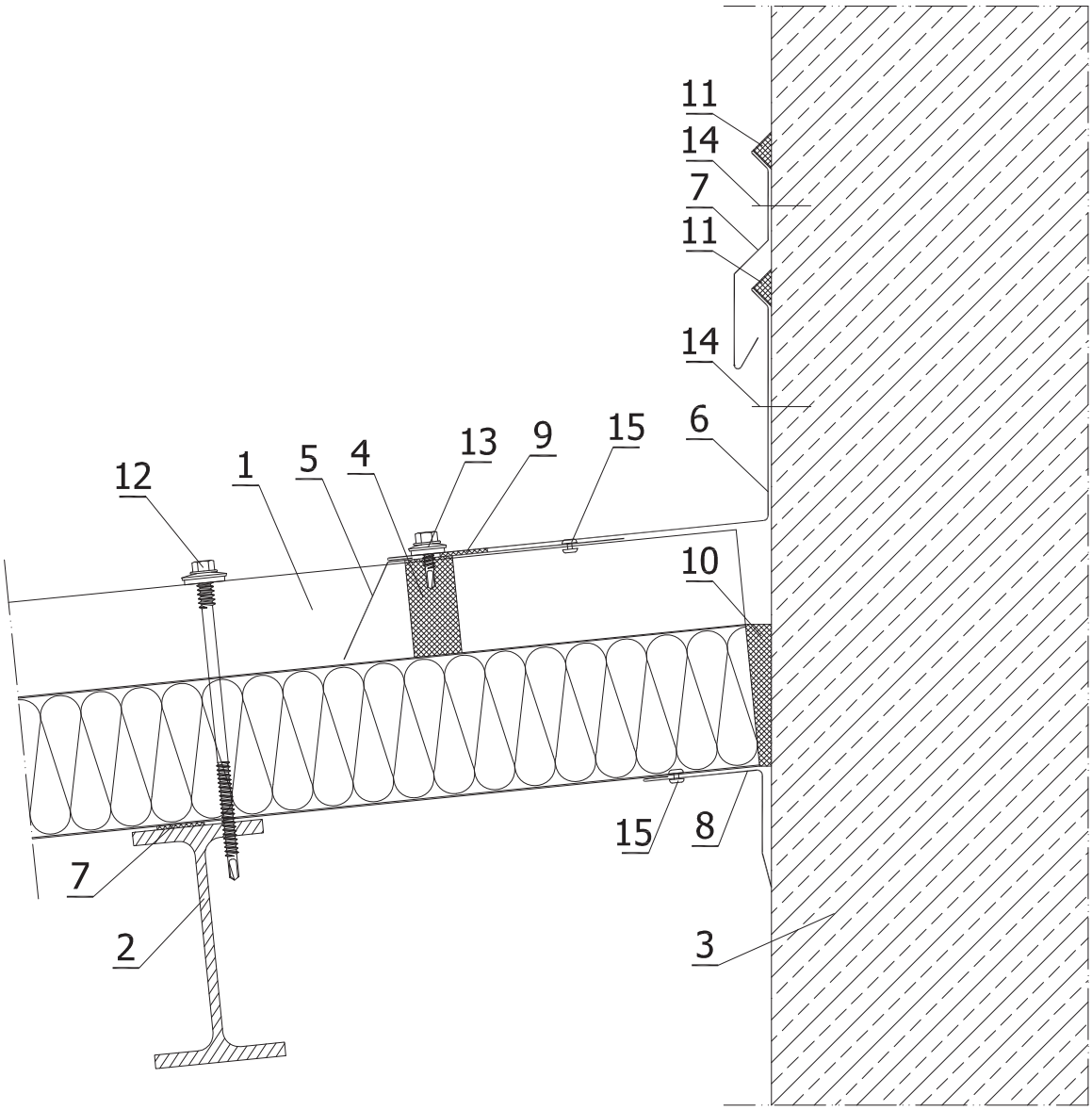


LEGEND:
1. GORLICKA D1000 roof panel
2. Structure acc. to structure design
3. GORLICKA U1000 wall panel
4. Under-gutter channel-section OB-25
5. Drip edge OB-33
6. Snow guard OB-27
7. Corner flashing OB-02
8. Polyethylene, self-adhesive sealing tape (PES)
9. Polyurethane caulking foam
10. Self-drilling 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

Scale 1:3

Detail of panel connection to reinforced concrete or masonry wall



LEGEND:
1. GORLICKA D1000 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

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Detail of roof panels' connection along the length
Panelcut options

Scale
1:3
1:16

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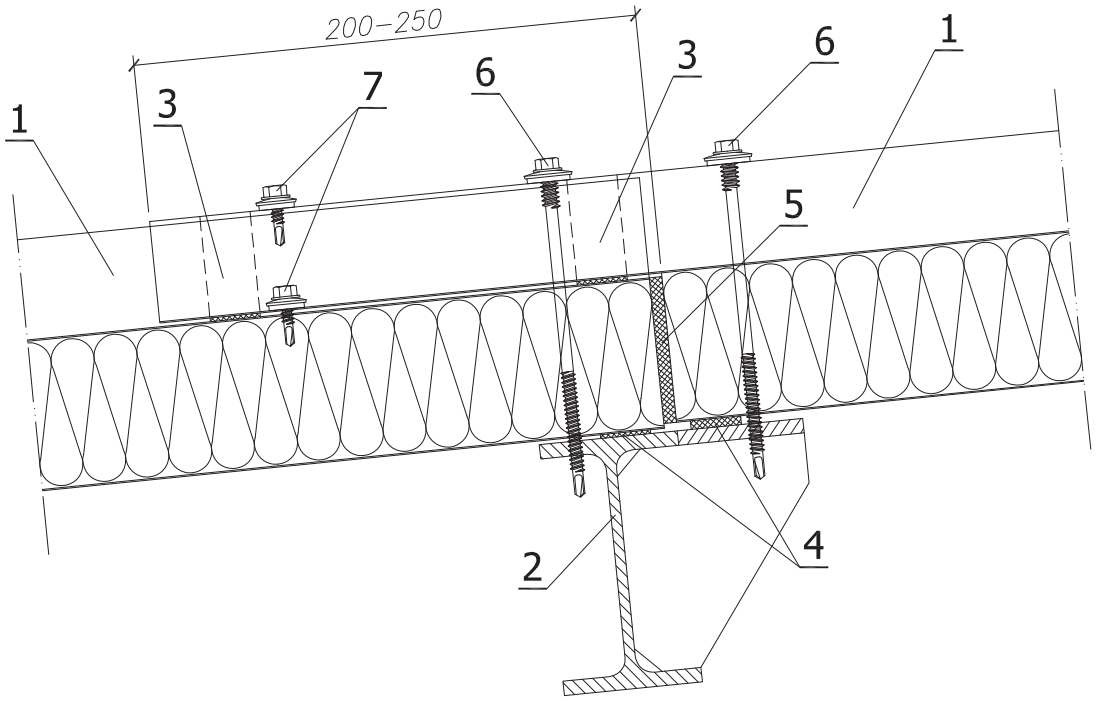
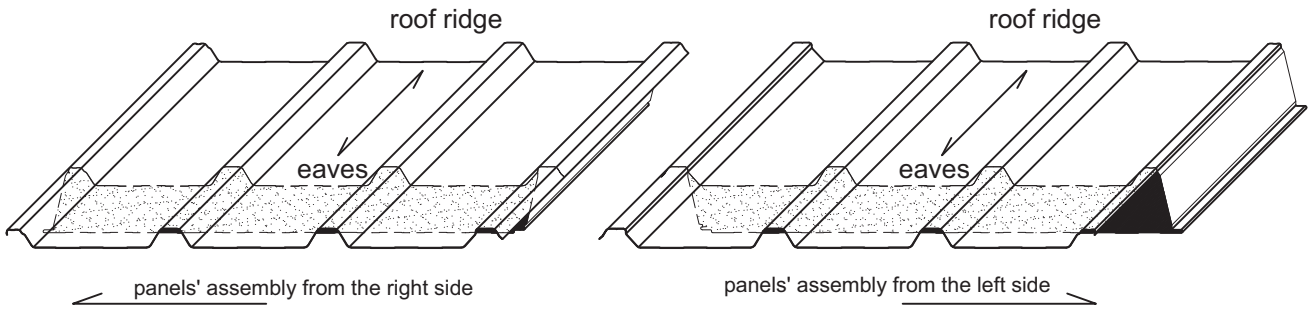


LEGEND:
1. GORLICKA D1000 roof panels
2. Purlin acc. to structure design
3. Butyl sealing compound
4. Polyethylene, self-adhesive sealing tape (PES)
5. Polyurethane caulking foam
6. Self-drilling connector for sandwich panels
7. Self-drilling connector for steel sheet

Panelcut options

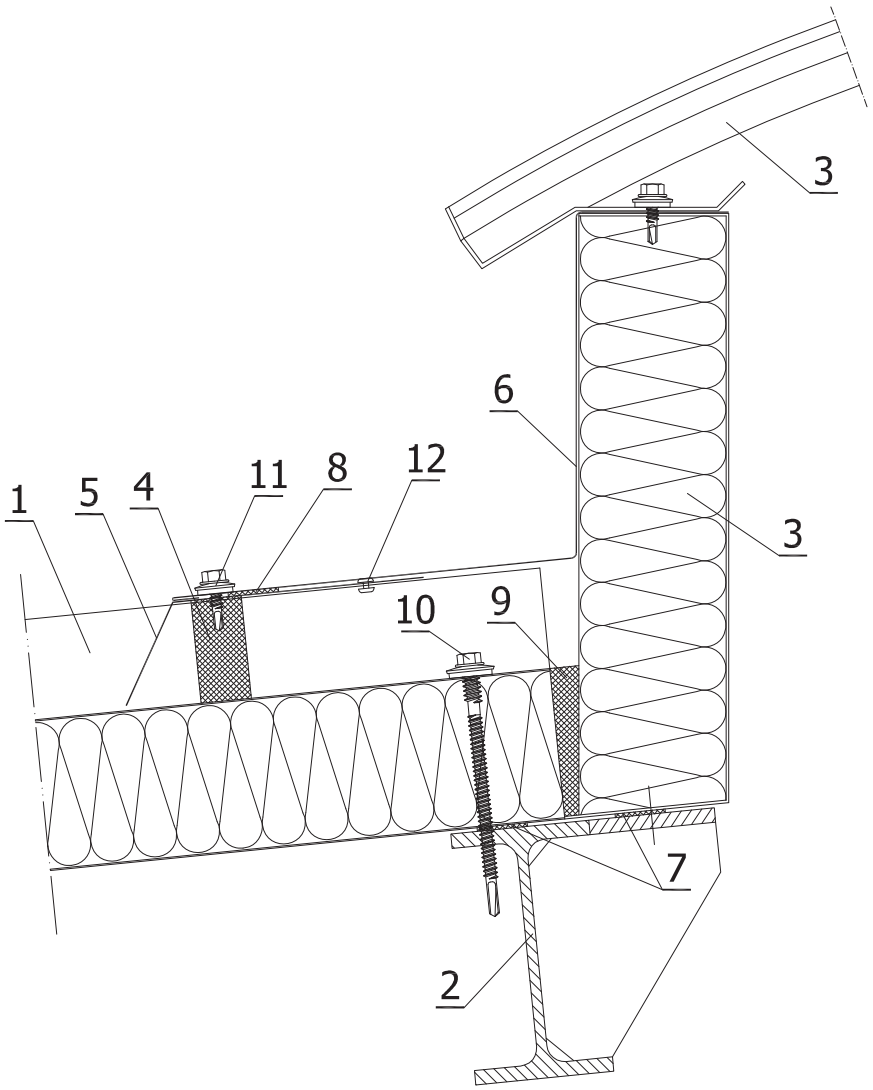


RIGHT panelcut

LEFT panelcut

Scale 1:3

Detail of skylight in roof ridge



LEGEND:
1. GORLICKA D1000 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

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Detail of ventilation duct (max. ø = 250) penetration through roof

Scale 1:5

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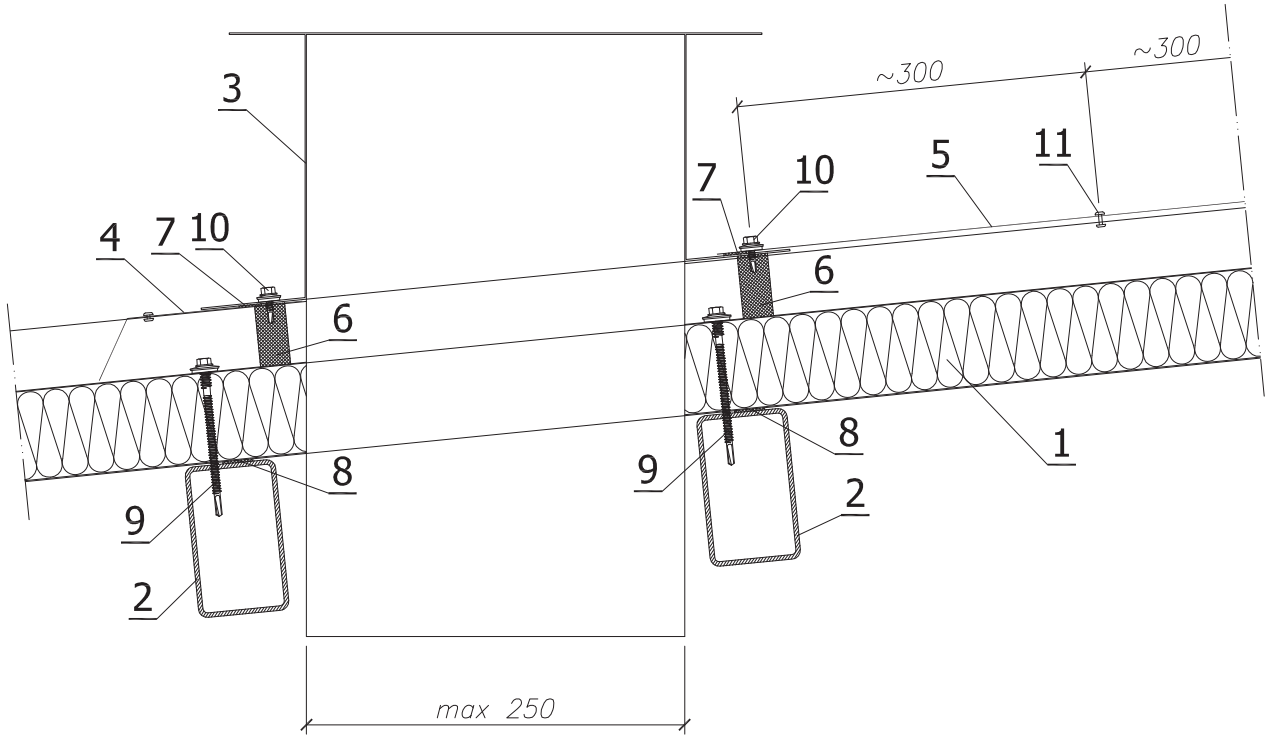

LEGEND:
1. GORLICKA D1000 roof panel
2. Supporting structure (if necessary for strength reasons)
3. Wind-driven roof vent base (mounted in the centre of a panel)
4. Profiled flashing OB-28
5. Individual flashing at roof ridge flashing
6. Profiled seal (PE)
7. Butyl sealing compound
8. Polyethylene, self-adhesive 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

Light cladding system of sandwich panels is supplemented with flashing, connectors and sealing tapes.

FLASHING

Gór-stal company is equipped with a roll former, providing flashing up to 1.25 mm thick, maximum 6 m long, in standard colours as in the catalogue or custom-made. Sheet colours and thicknesses available are presented in the table below.
For transportation purposes, flashings are protected with a membrane on the top layer.

Sheet thickness [mm]	Sheet weight [kg/m^2]	Standard flashing length [m]	Available flashing length [m]	Standard sheet colours in RAL palette
0,50	4,00	6,0	1,0 - 6,0	1015 9002 9006 9007 9010 5010
0,70	6,00			
1,00	8,00			galvanized

SEALS

We provide sealing tapes presented in this catalogue technical solutions: self-adhesive polyurethane (PUS, PURS) seals, polyethylene seal (PUS) and butyl seals, available also in other dimensions at Client's' request.

CONNECTORS

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]
assembly of sandwich panels to steel and wooden structures	self-drilling screw with spacers – minimum length as per table below
assembly of sandwich panels to reinforced concrete structures	screws for concrete base with seals 6.3/6.0 x 80-210
assembly of flashings to sandwich panel	screw 4.2 x 16-25
	tight rivet 4.8 x 9.5
assembly of flashings to thin-wall structures in a building	screw 4.8 x 19-25
	tight rivet 4.8 x 15.1
aesthetic finish	caps in panel colour

Sandwich panel type and thickness [mm]		Connector dimensions [mm]
wall panel S1000	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
wall panel U1000	60	screw 6.3/5.5 x 65-90
	80	screw 6.3/5.5 x 90-130
	100	screw 6.3/5.5 x 125-150
roof panel D1000	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
	120/160	screw 6.3/5.5 x 180-215

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ul. Przemysłowa 11
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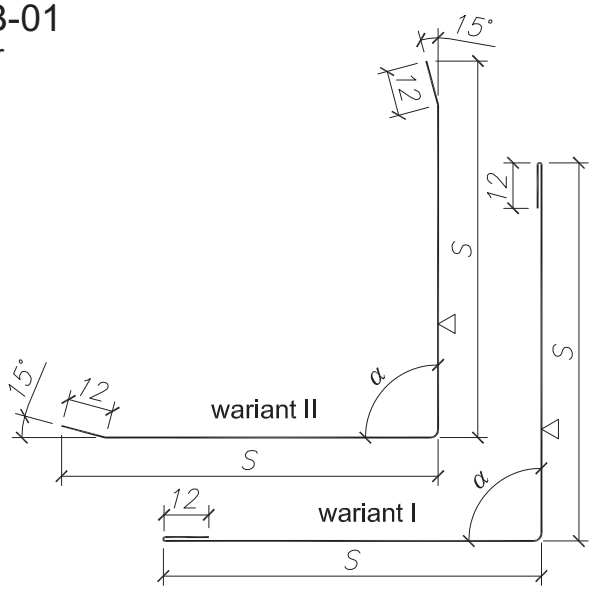
Flashing OB-01

outer corner

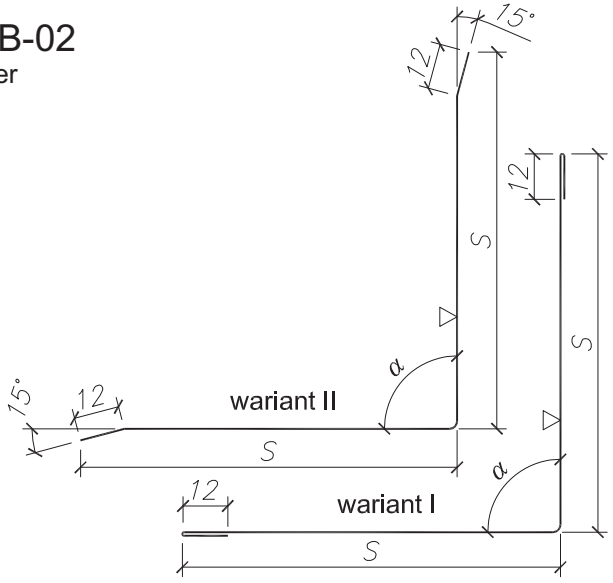
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-01/25	25	90	6000	1.77
2	OB-01/50	50			2.97
3	OB-01/75	75			4.17
4	OB-01/100	100			5.37
5	OB-01/150	150			7.77
6	OB-01/200	200			10.17
7	OB-01/250	250			12.57
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
8	OB-01/ S=..... / α= ..... / L=.....				
9	OB-01/ S1=..... /S2=..... / α= ..... / L=.....				



Flashing OB-02

inner corner

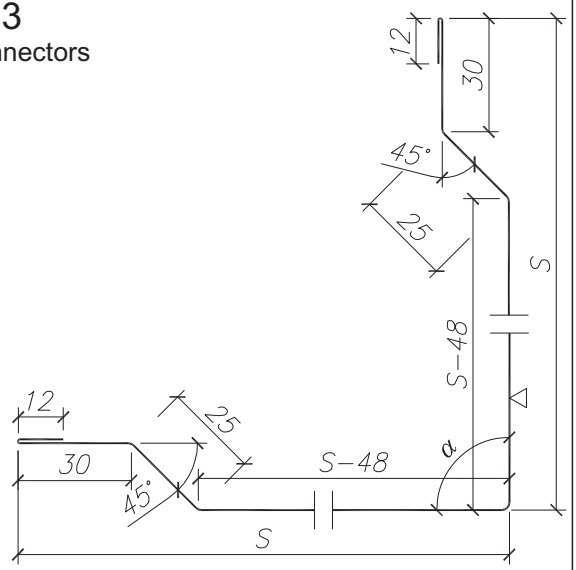
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-02/25	25	90	6000	1.77
2	OB-02/50	50			2.97
3	OB-02/75	75			4.17
4	OB-02/100	100			5.37
5	OB-02/150	150			7.77
6	OB-02/200	200			10.17
7	OB-02/250	250			12.57
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
8	OB-02/ S=..... / α= ..... / L=.....				
9	OB-02/ S1=..... /S2=..... / α= ..... / L=.....				



Flashing OB-03

outer corner, covering connectors

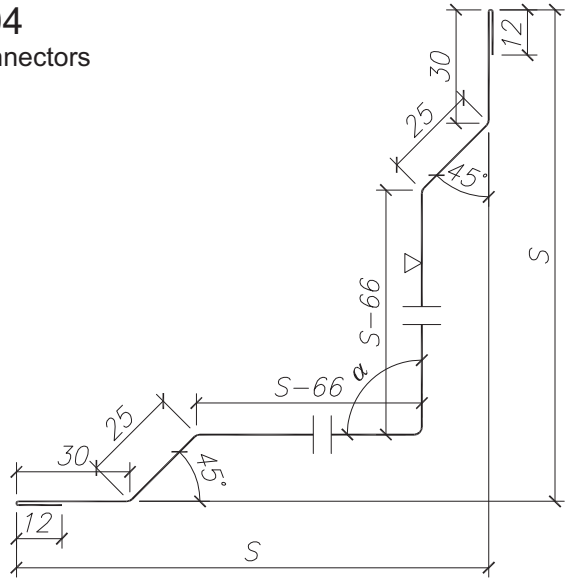
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-03/160	160	90	6000	8.59
2	OB-03/180	180			9.55
3	OB-03/200	200			10.51
4	OB-03/220	220			11.47
5	OB-03/240	240			12.43
6	OB-03/260	260			13.39
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
7	OB-03/ S=..... / α= ..... / L=.....				
8	OB-03/ S1=..... /S2=..... / α= ..... / L=.....				



Flashing OB-04

inner corner, covering connectors

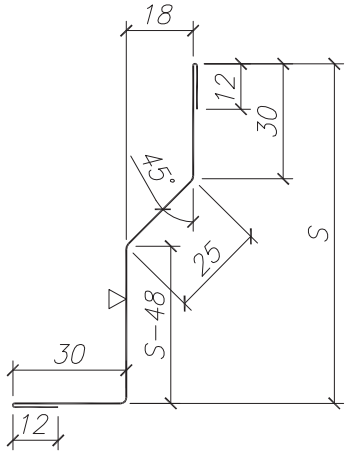
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-04/100	100	90	6000	4.85
2	OB-04/120	120			5.80
3	OB-04/150	150			7.25
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
4	OB-04/ S=..... / α= ..... / L=.....				
5	OB-04/ S1=..... /S2=..... / α= ..... / L=.....				



Flashing OB-05

inner corner, covering at flooring

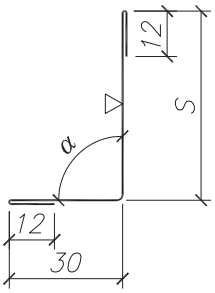
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-05/90	90	-	6000	3.62
2	OB-05/120	120			4.34
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
3	OB-05/ S=..... / L=.....				



Flashing OB-06

inner corner, covering at flooring

L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-06/50	50	92	6000	2.49
2	OB-06/75	75			3.09
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
3	OB-06/ S=..... / α= ..... / L=.....				



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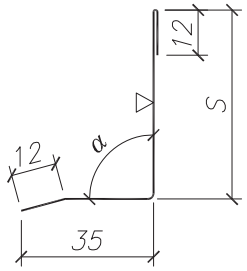
Flashing OB-07

covering corner

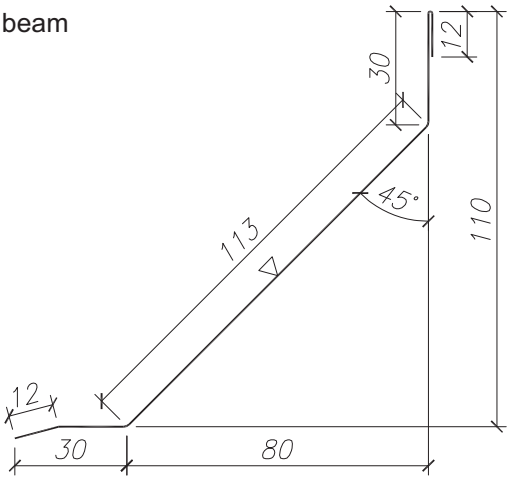
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-07/50	50	90	6000	2.33
2	OB-07/75	75			2.93
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
3	OB-07/ S=..... / α= ..... / L=.....				



Flashing OB-08

inner corner, covering at grade beam

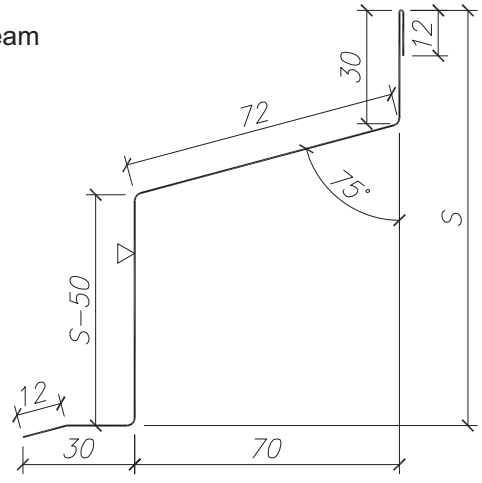
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-08	-	-	6000	3.72



Flashing OB-09

inner corner, covering at grade beam

L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-09/110	110	-	6000	4.92
2	OB-09/150	150			5.88
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
3	OB-09/ S=..... / L=.....				



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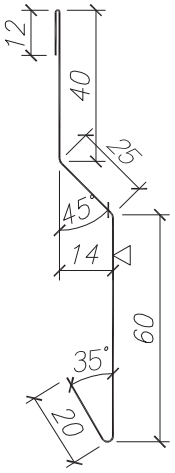
Flashing OB-10

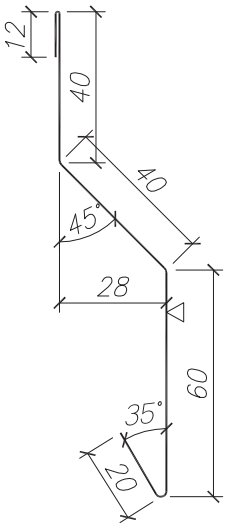
narrow wall drip edge



L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-10	-	-	6000	3.65

Flashing OB-11

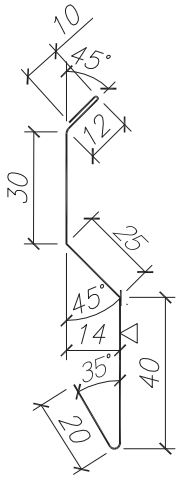
wide wall drip edge



L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-11	-	-	6000	4.13

Flashing OB-12

wall drip edge



L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-12	-	-	6000	3.17

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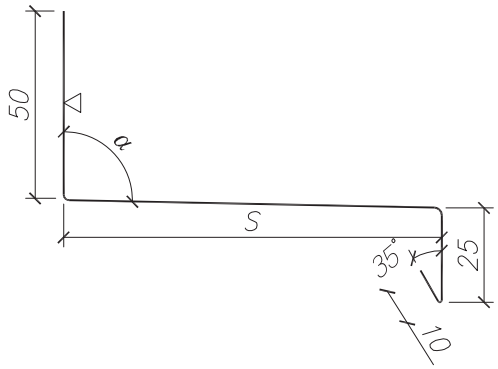
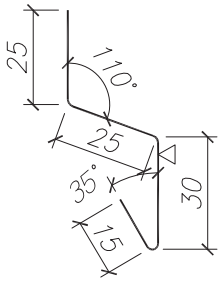
Flashing OB-13
eaves

L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
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
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
5	OB-13/ S=..... / α= ..... / L=.....				



Flashing OB-14
small eaves

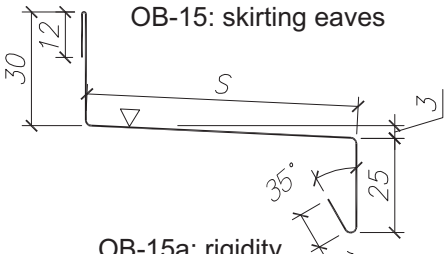
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-14	-	-	6000	2.28



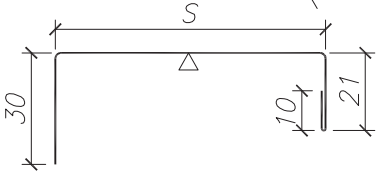
Flashing OB-15 - skirting eaves
OB-15 + Ob15a - skirting eaves with rigidity

L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-15/70	70	-	6000	3.53
2	OB-15/90	90			4.00
3	OB-15/110	110			4.48
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
4	OB-15/ S=..... / L=.....				
Typowa - z blachy gr. 0.5 mm					
5	OB-15a/70	70	-	6000	3.14
6	OB-15a/90	90			3.62
7	OB-15a/110	110			4.10
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
6	OB-15a/ S=..... / L=.....				

OB-15: skirting eaves



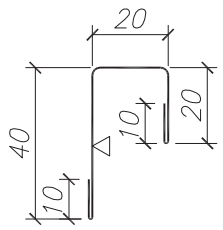
OB-15a: rigidity



Flashing OB-16

under-gutter rigid flashing

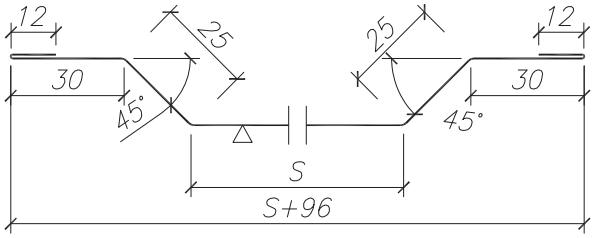
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-16/20	20	-	6000	2.40
2	OB-16/30	30			2.64
3	OB-16/40	40			2.88
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
4	OB-16/ S=..... / L=.....				



Flashing OB-17

covering panels' connection

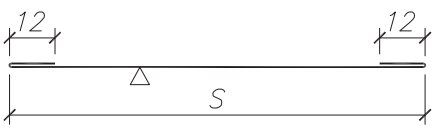
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-17/40	40	-	6000	4.18
2	OB-17/60	60			4.66
3	OB-17/80	80			5.14
4	OB-17/100	100			5.38
5	OB-17/120	120			6.09
6	OB-17/140	140			6.57
7	OB-17/160	160			7.05
8	OB-17/180	180			7.53
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
9	OB-17/ S=..... / L=.....				



Flashing OB-18

covering

L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-18/50	50	-	6000	1.77
2	OB-18/75	75			2.37
3	OB-18/100	100			2.97
4	OB-18/120	120			3.45
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
5	OB-18/ S=..... / L=.....				



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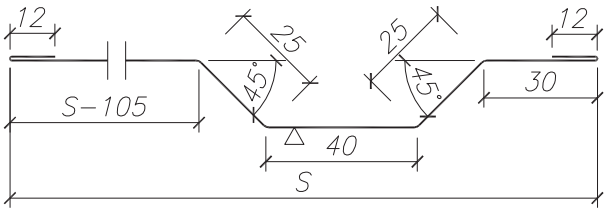
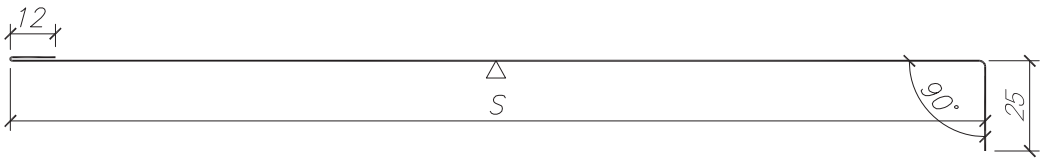
Flashing OB-19
covering

L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-19/175	175	-	6000	5.13
2	OB-19/195	195			5.62
3	OB-19/215	215			6.09
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
4	OB-19/ S=..... / L=.....				

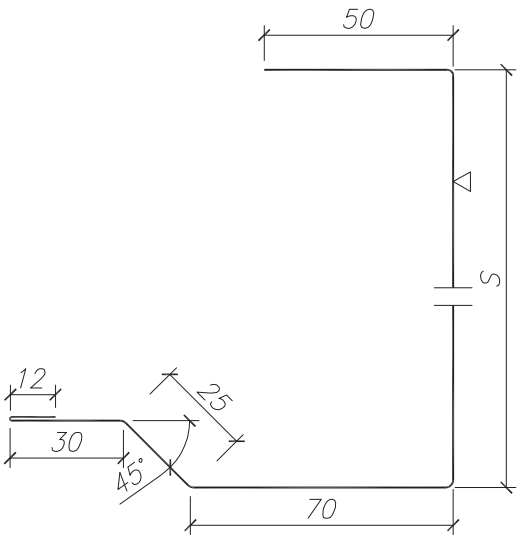


Flashing OB-20
covering door lintel



L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
1	OB-20/ S=..... / L=.....				

Flashing OB-21
covering door post



L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
1	OB-21/ S=..... / L=.....				

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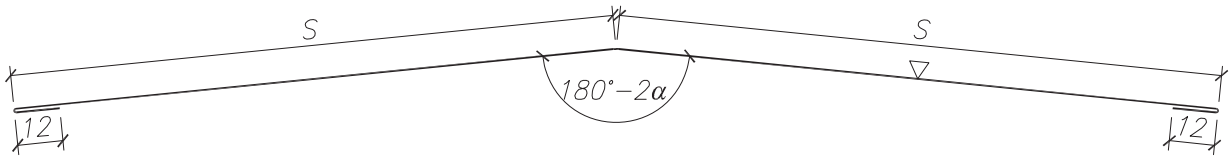
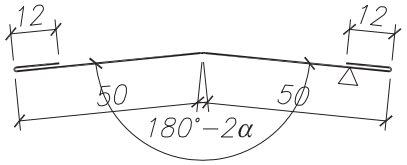
Flashing OB-22
top roof ridge



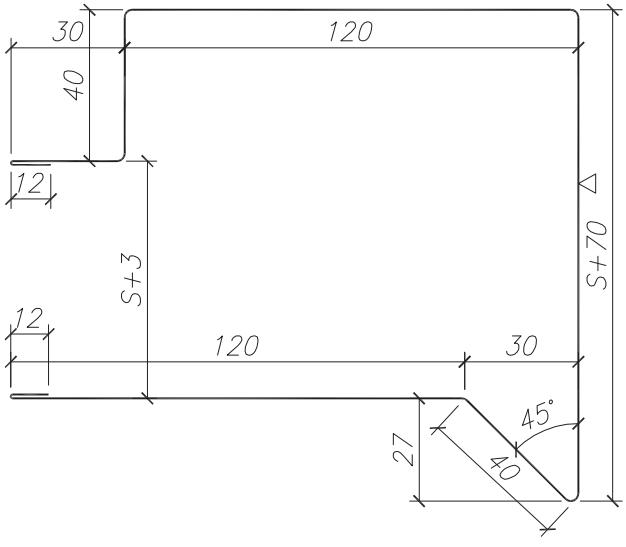
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-22/160	160	wg zamówienia	6000	8.25
2	OB-22/200	200			10.17
3	OB-22/250	250			12.57
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
4	OB-22/ S=..... / L=6000				

Flashing OB-23
bottom roof ridge



L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-23/50	50	5.71	6000	2.97
2	OB-23/50	50	11.30		2.97
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
3	OB-23/ S=..... / L=6000				

Flashing OB-24
side drip edge



L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-24/40	40	-	6000	11.62
2	OB-24/60	60			12.10
3	OB-24/80	80			12.58
4	OB-24/100	100			13.06
5	OB-24/120	120			13.54
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
6	OB-24/ S=..... / L=.....				

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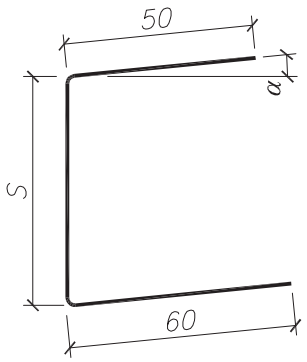
Flashing OB-25

under-gutter channel section

L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy ocynkowanej gr.1 mm					
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

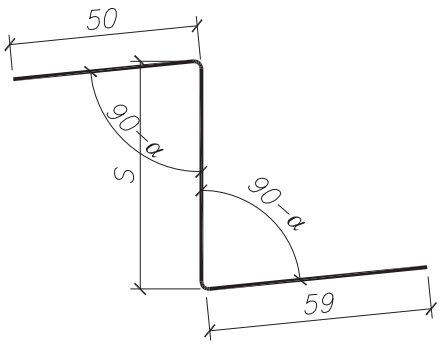


NOTE! The steep roofs (α > 10°) need individual project

Flashing OB-26

under-gutter Z-bar

L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy ocynkowanej gr.1 mm					
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

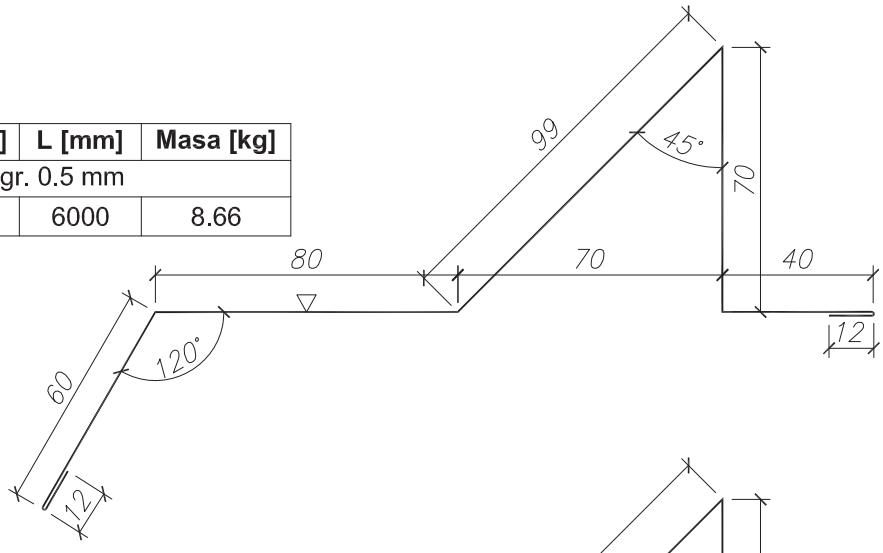


NOTE! The steep roofs (α > 10°) need individual project

Flashing OB-27

snow guard - drip edge

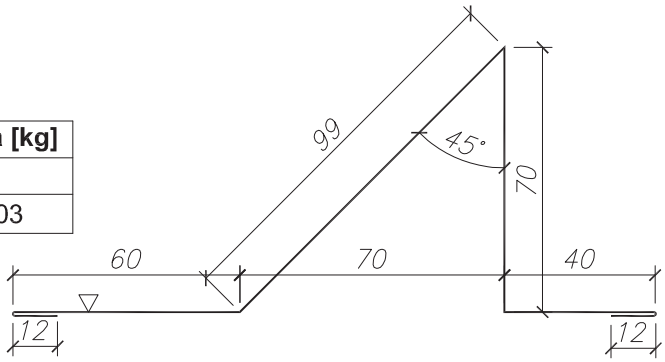
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-27	-	-	6000	8.66



Obróbka OB-27A

bariera śniegowa połaciowa

L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-27A	-	-	6000	7.03



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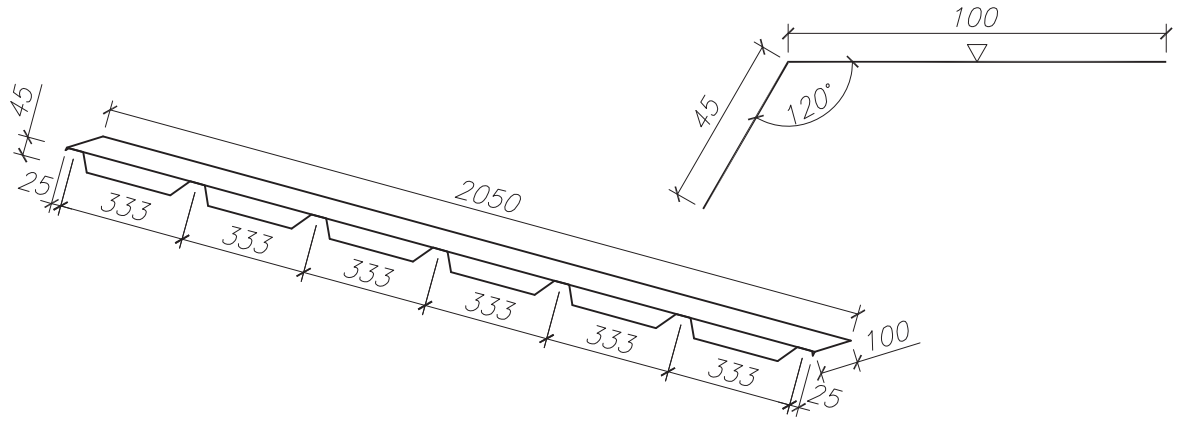
Flashing OB-28

roof ridge bird spike

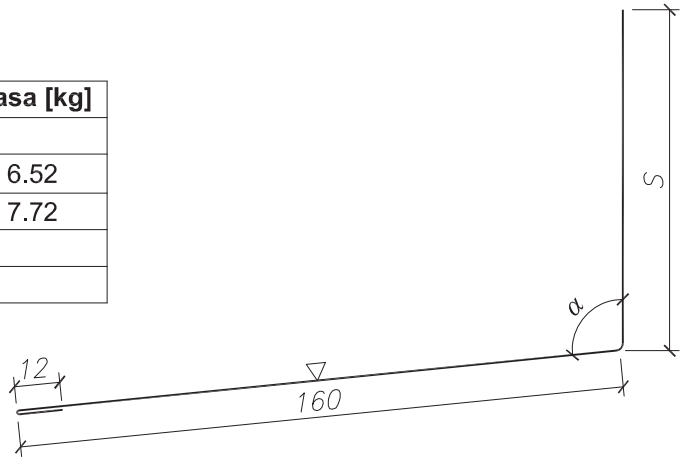


L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-28	-	-	2050	1.19

Flashing OB-29

roof covering flashing

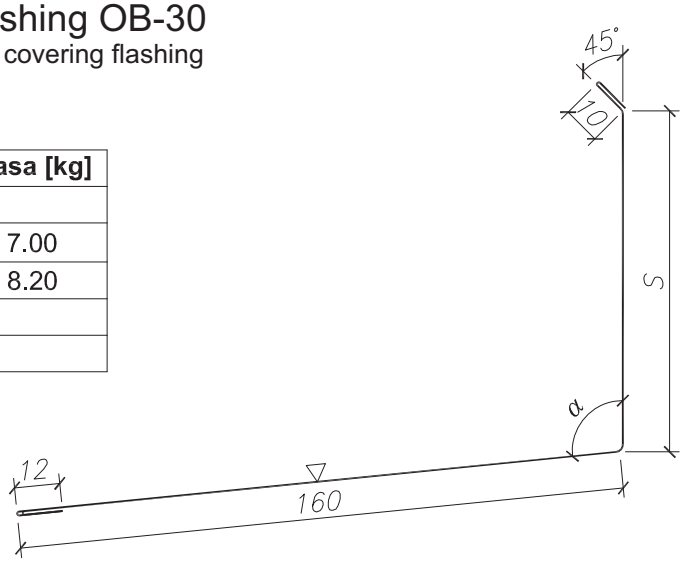
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-29/100	100	α	6000	6.52
2	OB-29/150	150			7.72
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
3	OB-29/ S=..... / α= ..... / L=.....				



Flashing OB-30

roof covering flashing

L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-30/100	100	α	6000	7.00
2	OB-30/150	150			8.20
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
3	OB-30/ S=..... / α= ..... / L=.....				



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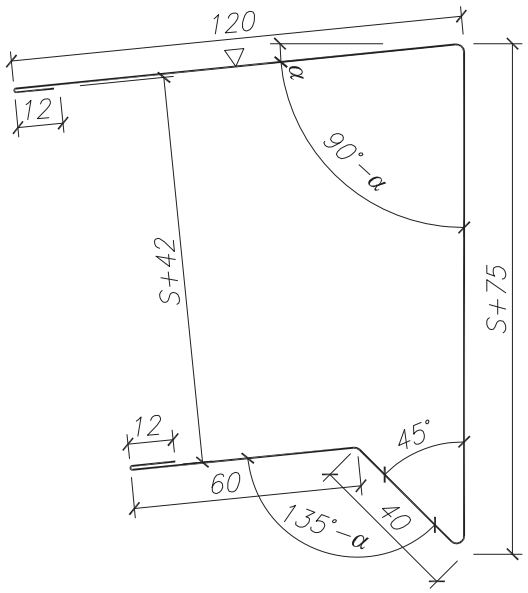
Flashing OB-31

roof top

L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-31/40	40	α	6000	8.85
2	OB-31/60	60			9.33
3	OB-31/80	80			9.81
4	OB-31/100	100			10.29
5	OB-31/120	120			10.53
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
6	OB-31/ S=..... /α=..... / L=.....				

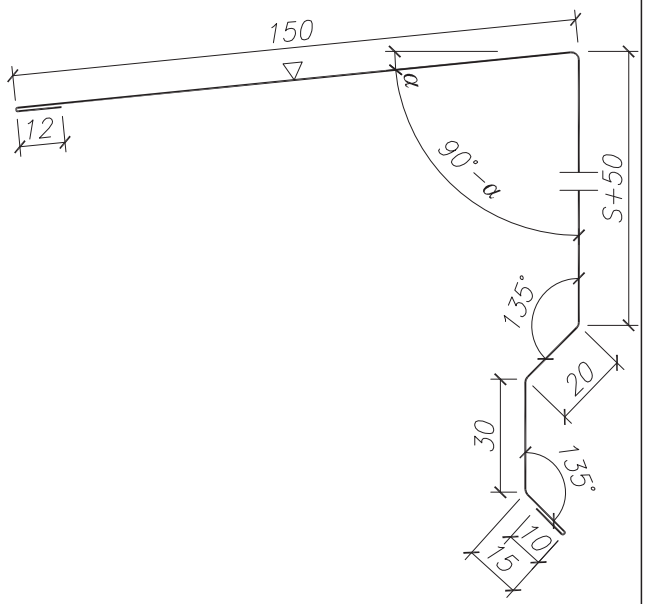
NOTE! The steep roofs (α > 10°) need individual project



Flashing OB-32

roof top

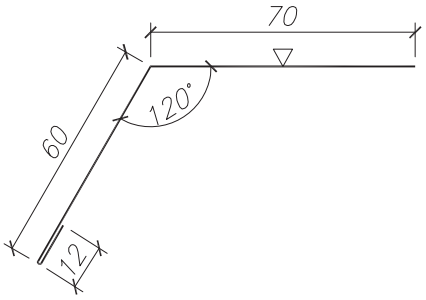
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-32/40	40	α	6000	7.84
2	OB-32/60	60			8.32
3	OB-32/80	80			8.80
4	OB-32/100	100			9.29
5	OB-32/120	120			
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
6	OB-32/ S=..... /α=..... / L=.....				



Flashing OB-33

drip edge

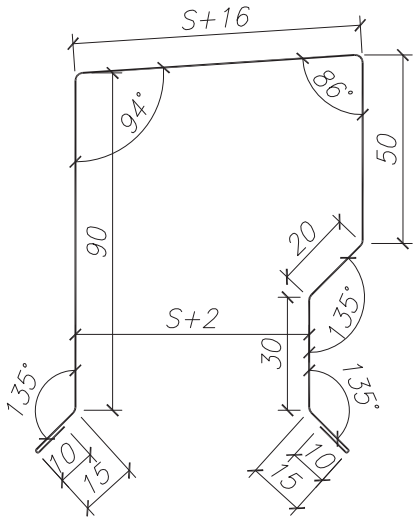
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-33	-	120	6000	3.40
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
2	OB-33/ S=..... / L=.....				



Flashing OB-34

attic – variant I

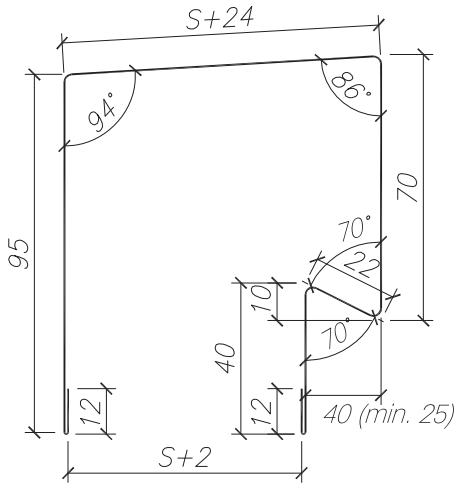
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-34/40	40	-	6000	7.10
2	OB-34/60	60			7.58
3	OB-34/80	80			8.06
4	OB-34/100	100			8.54
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
5	OB-34/ S=..... /α=..... / L=.....				



Flashing OB-35

attic – variant II

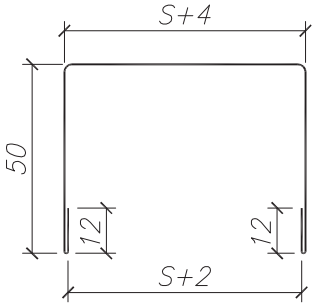
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-35/40	40	-	6000	7.56
2	OB-35/60	60			8.04
3	OB-35/80	80			8.52
4	OB-35/100	100			9.00
Nietypowa z balchy gr. 0.5					
5	OB-35/ S=..... /α=..... / L=.....				



Flashing OB-36

edge channel section

L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
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
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
8	OB-36/ S=..... / L=.....				



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ul. Przemysłowa 11
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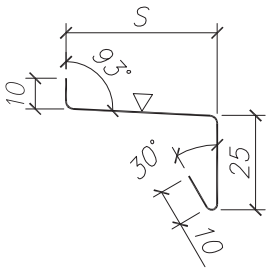
Flashing OB-37

window cill

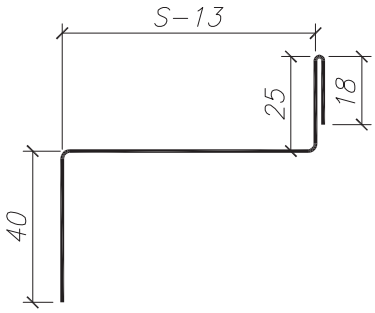
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy gr. 0.5 mm					
1	OB-3740	40	93	6000	2.04
2	OB-37/60	60			2.52
3	OB-37/80	80			3.00
4	OB-37/100	100			3.48
Nietypowa z balchy gr. 0.5 lub 0.7 mm					
5	OB-37/ S=..... / L=.....				



Flashing OB-38

edge bar for S1000 panels

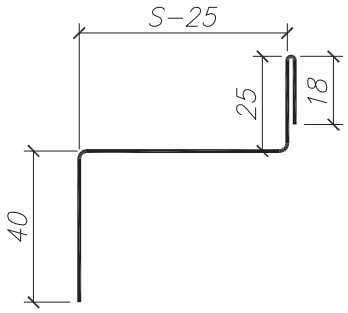
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy ocynkowanej gr. 1 mm					
1	OB-38/60	60	-	6000	6,24
2	OB-38/80	80			7,20
3	OB-38/100	100			8,16



Flashing OB-39

edge bar for U1000 panels

L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy ocynkowanej gr. 1 mm					
1	OB-39/60	60	-	6000	5,66
2	OB-39/80	80			6,62
3	OB-39/100	100			7,58

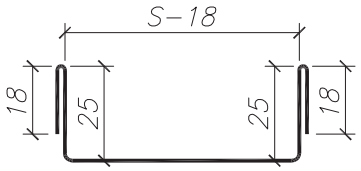


GÓR-STAL

Flashing OB-40

edge bar

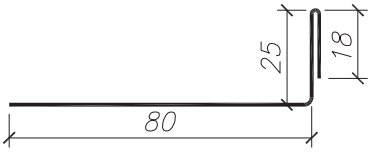
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy ocynkowanej gr. 1 mm					
1	OB-40/60	60	-	6000	6,14
2	OB-40/80	80			7,10
3	OB-40/100	100			8,06



Flashing OB-41

edge bar

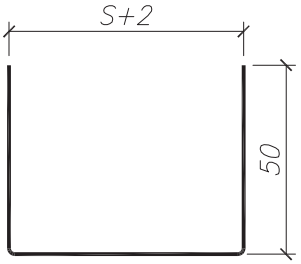
L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy ocynkowanej gr. 1 mm					
1	OB-41/60	60	-	6000	4,94
2	OB-41/80	80			5,90
3	OB-41/100	100			6,86



Flashing OB-42

edge channel section

L.p.	Symbol	S [mm]	α [°]	L [mm]	Masa [kg]
Typowa - z blachy ocynkowanej gr. 1 mm					
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
Nietypowa z balchy ocynkowanej gr. 1 mm					
8	OB-42/ S=..... / L=.....				



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Phone/Fax (018) 353 98 00
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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: (18) 353 98 00

Account No: 79 1140 1081 0000 5859 5500 1001

Agent:

GÓR-STAL

Commercial Terms	
Payment method:	
Advance (%):	payable until:
Maturity;	
Credit limit:	
Remarks:	

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

Agent:

REMARKS:

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

	Plate type: GORLICKA S 1000, GORLICKA U 1000, GORLICKA D 1000, GORLICKA CH 1000, GORLICKA S 1000 GS-PIR, GORLICKA U 1000 GS-PIR, GORLICKA D 1000 GS-PIR, GORLICKA CH 1000 GS-PIR	**Plate thickness [mm]:** 40 60 80 100 / 60 80 100 / 40 60 80 100 120 / 100 120 160 200 / 40 60 80 100 / 60 80 100 / 40 60 80 100 120 / 100 120 160 200	**Plate profile:** L - linear, M - microprofiled, F - wavy, R - grooving, T- trapezoidal		**Plate width [mm]:** 1000, 1100, 1140	**Colour RAL**		**Quantity**		**Net price: Unit/value**	
			ext.	int.		ext.	int.	L [m]	pcs.	EUR/m^2	EUR
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
11.											
12.											
13.											
14.											
15.											
IN TOTAL:								[m^2]:		EUR:	

GÓR·STAL

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: (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 α = 90°
Shape of flashing acc. to technological catalogue

Ordering Party's signature

Symbol	S [mm]	α [°]	Sheet thickness [mm]	Length[mm]	Quantity [szt.]	Total weight [kg]	Colour RAL
OB. - 01							
OB. - 02							
OB. - 03							
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. - 18		-					
OB. - 19		-					
OB. - 20		-					
OB. - 21		-					
OB. - 22							
OB. - 23							
OB. - 24		-					
OB. - 25							
OB. - 26							
OB. - 27	-	-					
OB. - 28	-	-					
OB. - 29							
OB. - 30							
OB. - 31							
OB. - 32							
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				
	Steel G12				
	Wood/Concrete				
Flashing bolts					
Rivets					
Gasket	PE				
Gasket	PES				
Gasket	PUS				
Gasket					
Saddle washer	35-35	-			
Washer	PM1	-			
Covering caps	-----				
Connector	ALF				

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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: (18) 353 98 00

Account No: 79 1140 1081 0000 5859 5500 1001

Agent:

GÓR-STAL

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

App. 3 for P-07

GÓR-STAL GORLICE

DECLARATION OF PERFORMANCE

GORLICKA STANDARD PU

CE

1.	Unique identification code of the product type	GORLICKA STANDARD PU
2.	Number of type, batch or serial number to identify the construction product	Refer to the product label, and the label on the boards
3.	The use of the construction product in accordance with the harmonized technical specification	Sandwich panels GORLICKA STANDARD are designed for exterior wall cladding and internal walls in skeleton structure buildings
4.	The name and contact address of the manufacturer	GÓR – STAL sp. z o.o. ul. Przemysłowa 11 38 - 300 Gorlice
5.	The system or systems of assessment and verification of constancy of performance of construction product	System 3
6.	Reference and date of issue of the harmonized standard to identify individuals (body and / or TAB)	PN-EN 14509:2010P INSTYTUT TECHNIKI BUDOWLANEJ in Warsaw determines the type of product in the system 3 FIRES, sro, Osloboditeľov 282, 05935 Batizovce, Slovakia carry out the fire resistance tests

7. The declared performances

The essential characteristics	The performance of		Harmonized technical specification	
The mechanical properties	- Metal genre	S220GD, S250GD, S280GD	PN-EN 14509:2010P	PN-EN 10326:2006
	- Thickness of the metal	0,50 [mm]		PN-EN 10143:2008
	- Tensile strength perpendicular to the plate	≥ 100 [kPa]		PN-EN 1607:1999
	- Shear strength (core)	≥ 130 [kPa]		PN-EN 12090:2000
	- Compressive stressat (core)	≥ 120 [kPa]		PN-EN 826:1998
The dimensional tolerance		for D≤100 mm ± 2 mm for D>100 mm ± 2%		PN-EN 14509 + D:2010P
The heat transfer coefficient		≤ 0,022 [W/m•K]		PN-EN 12667:2002
Reaction to fire classification		B – s2, d0		PN-EN 13501-1 + A1:2010
Classification of the fire resistance		For the panel with a thickness 100 mm EI 15/E60		PN-EN 13501-2 + A1:2009
The spread of fire		non fire-spreading		PN-90/B-02867
The air permeability		0,0		PN-EN 12114:2003
The acoustic insulation		26 (-3;-5)		PN-EN 20140-3:1999 ; PN-EN ISO 717-1:1999
The sound absorption		0,1		PN-EN ISO 354:2005 ; PN-EN ISO 11654:1999
Core density		40 ± 3 [kg/m3]		PN-EN 1602:1999

8. Performance of the product referred to in paragraphs 1 and 2 are consistent with the declared in section 7.
This declaration of performance is issued under the sole responsibility of the manufacturer specified in section 4.

„ GÓR-STAL " Sp. z o.o.
38-300 Gorlice, ul.Przemysłowa 11
tel. 018 353 98 00
REGON 852712117 NIP 738-19-45-154

DYREKTOR ZARZĄDZAJĄCY
Jacek Jaśnica

Gorlice, 01.07.2013
Place and date of

signature and seal of the authorized person

App. 2 for P-07

GÓR-STAL GORLICE

DECLARATION OF PERFORMANCE

GORLICKA UKRYTA PU

CE

1.	Unique identification code of the product type	GORLICKA UKRYTA
2.	Number of type, batch or serial number to identify the construction product	Refer to the product label, and the label on the boards
3.	The use of the construction product in accordance with the harmonized technical specification	Sandwich panels GORLICKA UKRYTA are designed for exterior wall cladding and internal walls in skeleton structure buildings
4.	The name and contact address of the manufacturer	GÓR – STAL sp. z o.o. ul. Przemysłowa 11 38 - 300 Gorlice
5.	The system or systems of assessment and verification of constancy of performance of construction product	System 3
6.	Reference and date of issue of the harmonized standard to identify individuals (body and / or TAB)	PN-EN 14509:2010P INSTYTUT TECHNIKI BUDOWLANEJ in Warsaw determines the type of product in the system 3 FIRES, sro, Osloboditeľov 282, 05935 Batizovce, Slovakia carry out the fire resistance tests

7. The declared performances

The essential characteristics	The performance of		Harmonized technical specification	
The mechanical properties	- Metal genre	S220GD, S250GD, S280GD	PN-EN 14509:2010P	PN-EN 10326:2006
	- Thickness of the metal	0,50 ; 0,55 ; 0,6 [mm]		PN-EN 10143:2008
	- Tensile strength perpendicular to the plate	≥ 100 [kPa]		PN-EN 1607:1999
	- Shear strength (core)	≥ 130 [kPa]		PN-EN 12090:2000
	- Compressive stressat (core)	≥ 120 [kPa]		PN-EN 826:1998
The dimensional tolerance		for D≤100 mm ± 2 mm for D>100 mm ± 2%		PN-EN 14509 + D:2010P
The heat transfer coefficient		≤ 0,022 [W/m•K]		PN-EN 12667:2002
Reaction to fire classification		B – s2, d0		PN-EN 13501-1 + A1:2010
Classification of the fire resistance		For the panel with a thickness 100 mm E15/EW15		PN-EN 13501-2 + A1:2009
The spread of fire		non fire-spreading		PN-90/B-02867
The air permeability		0,0		PN-EN 12114:2003
The acoustic insulation		26 (-3;-5)		PN-EN 20140-3:1999 ; PN-EN ISO 717-1:1999
The sound absorption		0,1		PN-EN ISO 354:2005 ; PN-EN ISO 11654:1999
Core density		40 ± 3 [kg/m3]		PN-EN 1602:1999

8. Performance of the product referred to in paragraphs 1 and 2 are consistent with the declared in section 7.

This declaration of performance is issued under the sole responsibility of the manufacturer specified in section 4.

„ GÓR-STAL " Sp. z o.o.
38-300 Gorlice, ul.Przemysłowa 11
tel. 018 353 98 00
REGON 852712117 NIP 738-19-45-154

DYREKTOR/ZARZĄDZAJĄCY
Jacek Jaśnica

Gorlice, 01.07.2013

Place and date of

signature and seal of the authorized person

App. 7 for P-07

GÓR-STAL GORLICE

DECLARATION OF PERFORMANCE

GORLICKA DACHOWA 1000 PU

CE

1.	Unique identification code of the product type	GORLICKA DACHOWA 1000
2.	Number of type, batch or serial number to identify the construction product	Refer to the product label, and the label on the boards
3.	The use of the construction product in accordance with the harmonized technical specification	Sandwich panels GORLICKA DACHOWA are designed for use as part of the roof cover
4.	The name and contact address of the manufacturer	GÓR – STAL sp. z o.o. ul. Przemysłowa 11 38 - 300 Gorlice
5.	The system or systems of assessment and verification of constancy of performance of construction product	System 3
6.	Reference and date of issue of the harmonized standard to identify individuals (body and / or TAB)	PN-EN 14509:2010P INSTYTUT TECHNIKI BUDOWLANEJ in Warsaw determines the type of product in the system 3 FIRES, sro, Osloboditeľov 282, 05935 Batizovce, Slovakia carry out the fire resistance tests

7. The declared performances

The essential characteristics	The performance of		Harmonized technical specification	
The mechanical properties	- Metal genre	S220GD, S250GD, S280GD	PN-EN 14509:2010P	PN-EN 10326:2006
	- Thickness of the metal	0,50 ; 0,55 ; 0,6 [mm]		PN-EN 10143:2008
	- Tensile strength perpendicular to the plate	≥ 100 [kPa]		PN-EN 1607:1999
	- Shear strength (core)	≥ 130 [kPa]		PN-EN 12090:2000
	- Compressive stressat (core)	≥ 120 [kPa]		PN-EN 826:1998
The dimensional tolerance		for D≤100 mm ± 2 mm for D>100 mm ± 2%		PN-EN 14509 + D:2010P
The heat transfer coefficient		≤ 0,022 [W/m•K]		PN-EN 12667:2002
Classification of the fire resistance		For the panel with a thickness 80 mm REI 15/ RE 30		PN-EN 13501-2 + A1:2009
Resistance to external fire performance of roofs		Broof (t1)		PN-EN 13501-5 + A1:2010
The waterproof		A		PN-EN 12865:2004
The air permeability		0,0		PN-EN 12114:2003
The acoustic insulation		26 (-3;-4)		PN-EN 20140-3:1999 ; PN-EN ISO 717-1:1999
The sound absorption		0,1		PN-EN ISO 354:2005 ; PN-EN ISO 11654:1999
Core density		40 ± 3 [kg/m3]		PN-EN 1602:1999

8. Performance of the product referred to in paragraphs 1 and 2 are consistent with the declared in section 7.
This declaration of performance is issued under the sole responsibility of the manufacturer specified in section 4.

„GÓR-STAL" Sp. z o.o.
38-300 Gorlice, ul.Przemysłowa 11
tel. 018 353 98 00
REGON 852712117 NIP 738-19-45-154

DYREKTOR ZARZĄDZAJĄCY

Jacek Jaśnica

Gorlice, 1.01.2014
Place and date of

signature and seal of the authorized person

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

ORYGINAŁ

HYGIENIC CERTIFICATE

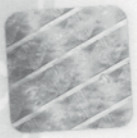
Wyrób / product: **Płyta warstwowa GORLICKA GR 1000S, GR 1000u, GR 1000CH, GR 1000D z rdzeniem ze sztywnej pianki poliuretanowej w okładzinach z blachy stalowej ocynkowanej powlekanej powłokami organicznymi.**

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 wnętrz 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

Kierownik
Zakładu Higieny Komunalnej
dr Bożena Krogulska

Opracował: mgr. inż. Szymon Jamro, Wydanie II, Gorlice 03.2008r.
Aktualizacja: F.U.H. BOKKA Maciej Kluba, 05.2015r.

GÓR-STAL
PŁYTY WARSTWOWE

GÓR-STAL sp. z o.o.
ul. Przemysłowa 11, 38-300 Gorlice
tel./fax: +48 18 353 98 00
e-mail: info@gor-stal.pl

www.gor-stal.pl