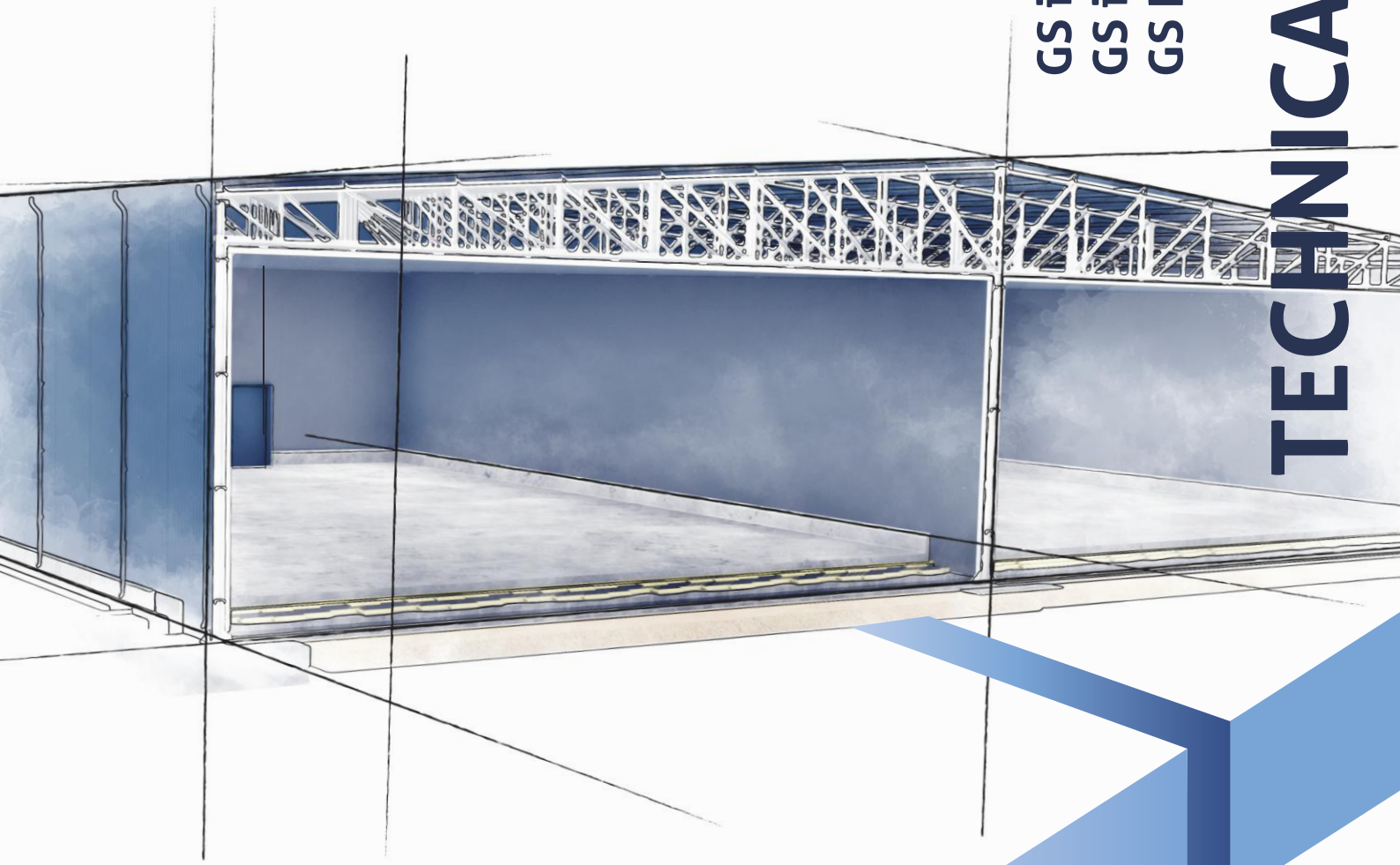
GÓR-STAL®
SANDWICH PANELS

TECHNICAL CATALOGUE

GS insPIRe® S / GS insPIRe® S MAX
GS insPIRe® U GS insPIRe® U MAX
GS PIR D / GS-PIR D MAX



CERTIFIED ISO 9001/14001 COMPANY

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II. TECHNICAL SPECIFICATIONS OF PRODUCTS:

INTRODUCTION

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

ABOUT THE COMPANY

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

PRODUCTS

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

STRUCTURE OF PANELS

Sandwich panels have one type of core ie. **polyisocyanurate (PIR) foam** with a density of **40 kg/m^3 (+/-10%)** and thermal conduction coefficient **λ=0,022 W/m·K**. (for 2020 new panels will be available ie. MAX with a core and a coefficient of **λ=0,019 W/m·K).** Isocyanurate structures of PIR foams decompose at temperatures above **300 °C.** The carbonized layer protects against heat transition through the panel, which in turn provides an effective protection against fire. Sheet metal grade **S220-S280GD DIN EN 10346** galvanized on both sides with the organic polyester lacquer with a film thickness of **25 microns** is used as cladding of sandwich panels. Due to the increased anticorrosion requirements, it is possible to make panels with metal plate dedicated for environments **C4** and **C5**, and the prevailing aggressive environments inside the buildings. It is possible to use stainless steel **1.4301** coating. Panels are protected against mechanical damage that may occur during transport or installation with a protective foil.

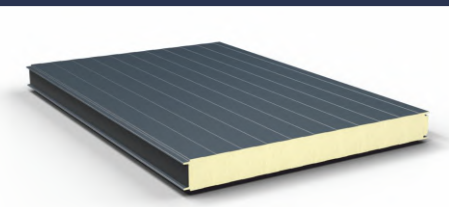
CERTIFICATES

Sandwich panel have the following certificates and technical approvals:

- Quality Management System certificate,
- CE declaration of conformity in accordance with **EN 14509,**
- Certificate of Constancy of Performance **EN 14509**, according to Regulation (EU) No **305/2011,**
- Classifications: fire resistance rating, reaction to fire, fire retardancy,
- **Hygienic Approval** - allows for use in, commercial, industrial, food processing, refrigeration facilities, residential and public buildings, including health services.

Current versions of the documents are available at: **www.gor-stal.pl**

Wall panel GS insPIRe® S



HIGH LEVEL OF FIRE RESISTANCE

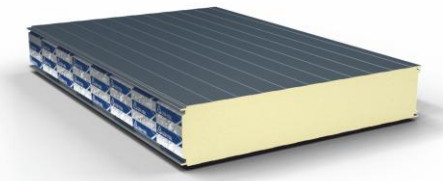
01	Type of core		Rigid polyisocyanurate foam (PIR)				
02	Density [kg/m³]		40 (+/-10%)				
03	Thickness [mm]		40	60	80	100	120
04	Weight [kg/m²]*		10,0	11,0	11,8	12,6	13,4
05	Maximum length [m]		16,5				
06	Total width [mm]		1000 / 1140 (for thick. ≥ 60 mm and lining profiling L, M and F)				
07	External lining profiling		L - Linear, M -Mikro-profiling, F - Wavy, R - Grooving, P -Flat				
08	Internal lining profiling		L - Linear, P -Flat				
09	Standard colours of external lining**		RAL 9002, RAL 9010, RAL 9006, RAL 9007, RAL7016				
10	Standard colours of internal lining**		RAL 9002, RAL 9010				
11	Cofficent $U_{d.s}$ [W/m²K]	PIR core	0,60	0,38	0,28	0,22	0,19
		PIR MAX core	-	-	-	-	0,16
12	Fire propagation/Fire classification		NRO/B-s1, d0				
13	Fire resistance***		-		EI 20		EI 30
14	Certificates, approvals, seals of approval		DWU CE according to EN 14509, Hygienic Certificate, Certificate of Business Continuity EN 14509, Fire resistance classification				

Wall panel GS insPIRe® U

HIGH LEVEL OF FIRE RESISTANCE

01	Type of core		Rigid polyisocyanurate foam (PIR)				
02	Density [kg/m³]		40 (+/-10%)				
03	Thickness [mm]		60	80	100	120	140
04	Weight [kg/m²]*		11,3	12,1	12,9	13,7	14,5
05	Maximum length [m]		16,5				
06	Total width [mm]		1000				
07	External lining profiling		L - Linear, M -Mikro-profiling, F - Wavy, R - Grooving, P - Flat				
08	Internal lining profiling		L - Linear, P - Flat				
09	Standard colours of external lining**		RAL 9002, RAL 9010, RAL 9006, RAL 9007, RAL 5010, RAL 7035, RAL 3000, RAL 6011, RAL7016, RAL 8017				
10	Standardowe kolory okładziny wewnętrznej**		RAL 9002, RAL 9010				
11	Cofficent $U_{d.s}$ [W/m²K]	PIR core	0,44	0,29	0,23	0,19	0,16
		PIR MAX core	-	0,26	0,20	0,16	0,14
12	Fire propagation/Fire classification		NRO/B-s1, d0				
13	Fire resistance***		-		EI 15		EI 30
14	Certificates, approvals, seals of approval		DWU CE according to EN 14509, Hygienic Certificate, Certificate of Business Continuity EN 14509, Fire resistance classification				

Coldstore Panel GS insPIRe® CH

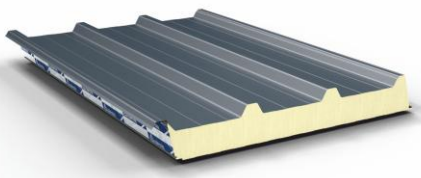


HIGH LEVEL OF FIRE RESISTANCE

more information in the Coldstore panels Catalogue or at www.gor-stal.pl

01	Type of core		Rigid polyisocyanurate foam (PIR)			
02	Density [kg/m³]		40 (+/-10%)			
03	Thickness [mm]		100	120	160	200
04	Weight [kg/m²]*		12,6	13,4	15,0	16,6
05	Maximum length [m]		16,5			
06	Total width [mm]		1000 / 1140 (for thick. ≥ 60 mm and lining profiling L, M and F)			
07	External lining profiling		L - Linear, M -Mikro-profiling, F - Wavy			
08	Internal lining profiling		L - Linear, P - Flat			
09	Standard colours of external lining**		RAL 9002, RAL 9010, RAL 9006, RAL 9007, RAL7016			
10	Standard colours of internal lining**		RAL 9002, RAL 9010			
11	Cofficent $U_{d.s}$ [W/m²K]	PIR core	0,22	0,18	0,14	0,11
		PIR MAX core	0,19	0,16	0,12	0,10
12	Fire propagation/Fire classification		NRO/B-s1, d0			
13	Fire resistance***		EI 30			
14	Certificates, approvals, seals of approval		DWU CE according to EN 14509, Hygienic Certificate, Certificate of Business Continuity EN 14509, Fire resistance classification			

Roof Panel GS PIR D

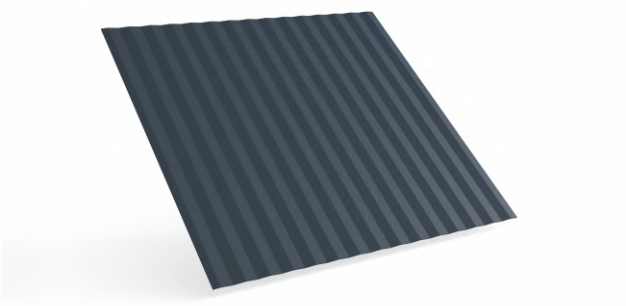


HIGH LEVEL OF FIRE RESISTANCE

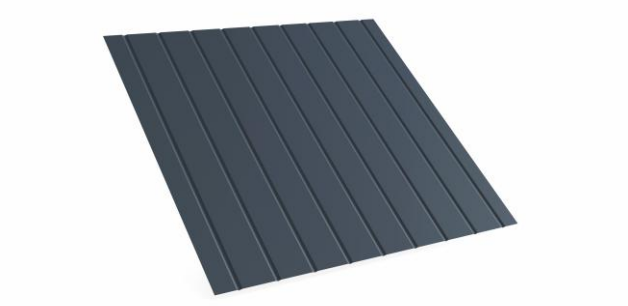
1	Type of core		Rigid polyisocyanurate foam (PIR)					
2	Density [kg/m³]		40 (+/-10%)					
3	Thickness [mm]		40/80	60/100	80/120	100/140	120/160	160/200
4	Weight [kg/m²]*		10,4	11,2	12,0	12,8	13,6	15,4
5	Maximum length [m]		16,5					
6	Total width [mm]		1000					
7	External lining profiling		T - Trapezoidal					
8	Internal lining profiling		L - Linear, G - Smooth					
9	Standard colours of external lining**		RAL 9002, RAL 9010, RAL 9006, RAL 9007, RAL 5010, RAL 7035, RAL 3000, RAL 6011, RAL7016, RAL 8017					
10	Standard colours of internal lining**		RAL 9002, RAL 9010					
11	Cofficent $U_{d.s}$ [W/m²K]	PIR core	0,55	0,37	0,27	0,22	0,18	0,14
		PIR MAX core	-	-	0,25	0,20	0,17	0,13
12	Fire propagation/Fire classification		B_{ROOF} /B-s1,d0					
13	Fire resistance***		-		REI 30, RE 120			
14	Certificates, approvals, seals of approval		DWU CE according to EN 14509, Hygienic Certificate, Certificate of Business Continuity EN 14509, Fire resistance classification					

* panels with claddings 0,5/0,5 mm
** available colors depending on the thickness of the cladding, panels thicknesses and modular widths (details from the Sales Representative)
*** conditions according to fire resistance classification

PROFILATIONS

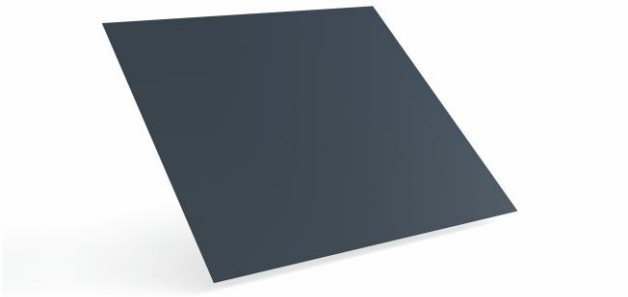


M - Mikro-profiling

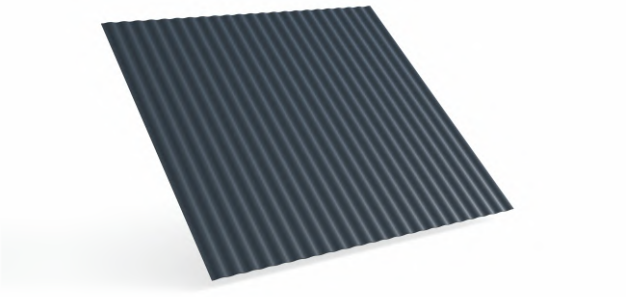


R - Grooving

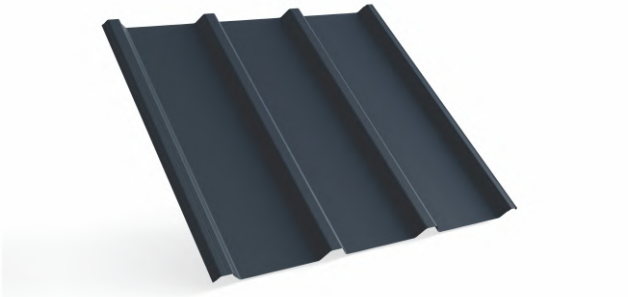
L - Linear



P - Flat



F - Wavy



T - Trapezoidal

PRODUCTION PROGRAM

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

Wall sandwich panels:
GS insPIRe® S (standard cam-lock) - thickness: 40, 60, 80, 100 i 120 mm
GS insPIRe® U (hidden cam-lock) - thickness: 60, 80, 100, 120 i 140 mm
Roof sandwich panels:
GS PIR D (roof cam-lock) - thickness: 40/80, 60/100, 80/120, 100/140, 120/160 i 160/200 mm
Coldstore panels:
GS insPIRe® CH (cold storage cam-lock) - thickness: 100, 120, 160 i 200 mm
Flashings: typical and custom made according to the client's design with a maximum length of 6m.
This publication provides detailed characteristics of sandwich panels.

GUIDELINES FOR TRANSPORTATION

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:

- a single forklift truck may be used to move a package of panels with maximum length of **8 metres**,
- panels with length exceeding **8 m** need to be unloaded using a lift with a hoisting beam,
- if unloading panels using a lift with rope slings, use spacers to prevent panels from being crushed.

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

- ensure unobstructed access on both sides of the trailer along its entire length,
- never stack panels more than two packages high
- complete support for a panel package must be provided along the entire length of the open load-carrying body,
- ensure there is sufficient clear space between panel packages, the load-carrying body and the cargo straps,
- the truck must be equipped with cargo straps. Place flexible separators underneath the cargo straps.
- When tightened, the straps must not deform the panels.

GUIDELINES FOR MOUNTING

The sandwich panel manufacturer recommends that you use flashings and cam-locks delivered with the panels as part of the light sandwich panel system. When mounting the panels, follow the guidelines provided below:

- only cut plates and flashings with a fine-toothed circular saw machine or metal cutting scissors. **Never use grinding wheels.**
- cut the panels and flashings at a properly prepared station in order not to damage the lacquer and thin coatings,
- remove the protection foil after the panels have been installed,
- after installation thoroughly clean the surface of the panels, particularly off steel filings,

Typical panel mounting solutions are presented farther in this publication.

TECHNICAL SUPPORT

We strive to deliver friendly and professional customer service. Our technical department and sales representatives assist designers, engineers and contractors in designing, ordering and selecting our products as well as installation thereof. Our customers are thus provided with active support from the design stage to the installation stage as well as prompt technical advisory service and cost calculation. The ordering and delivery process is coordinated by the **Customer Service Department (DOK).**

For more information visit our website **www.gor-stal.pl**

APPLICATION

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

PHYSICAL PROPERTIES

GS insPIRe®S wall panel is produced in the five thicknesses of the core **40, 60, 80, 100** and **120 mm.** Panel facings are made of sheet metal galvanised on both sides according to **EN 10346** with organic polyester coating **25µm** thick. Thermal insulation core of the panels is a rigid polyisocyanurate (PIR) foam with a density of **40 kg/m³ (+/-10%)**. The heat conductivity calculation value of the foam is: **λ =0,022 W/m·K** (for 2020 new panels will be available **MAX** with a core and a coefficient of **λ=0,019 W/m·K). Modular width** of plates is **1000 mm or 1140 mm.** The standard panel length is between **2.0 to 12 m.** On special request we deliver panels shorter than **2 m** and longer than **12 m,** with a maximum length of **16.5 meters.** Water and air tightness of panel joints is assured by impregnated polyurethane seals **(PUS)** applied in the manufacturing process.

Thickness [mm]	Weight [kg/m²]		Modular width [mm]	Length: typical/available [m]	Lining standard RAL colours	
	facings 0,5/0,5 mm**	facings 0,5/0,4 mm**			external linings*	internal linings*
40	10,0	9,1	1000 1140 - for thickness ≥ 60 mm and profilation L, M, F i P	2,0 - 12,0/16,5	9002, 9010	9002, 9010
60	11,0	10,2			9002, 9006, 9010, 9007 - for the module 1140	9002, 9010
80	11,8	11,0				
100	12,6	11,8				
120	13,4	12,6				

* available colors depending on the thickness of the cladding, panels thicknesses and modular widths (details from the Sales Representative)
** **typical lining thicknesses; also available 0.6 and 0.7 mm (details from our Sales Representative)**

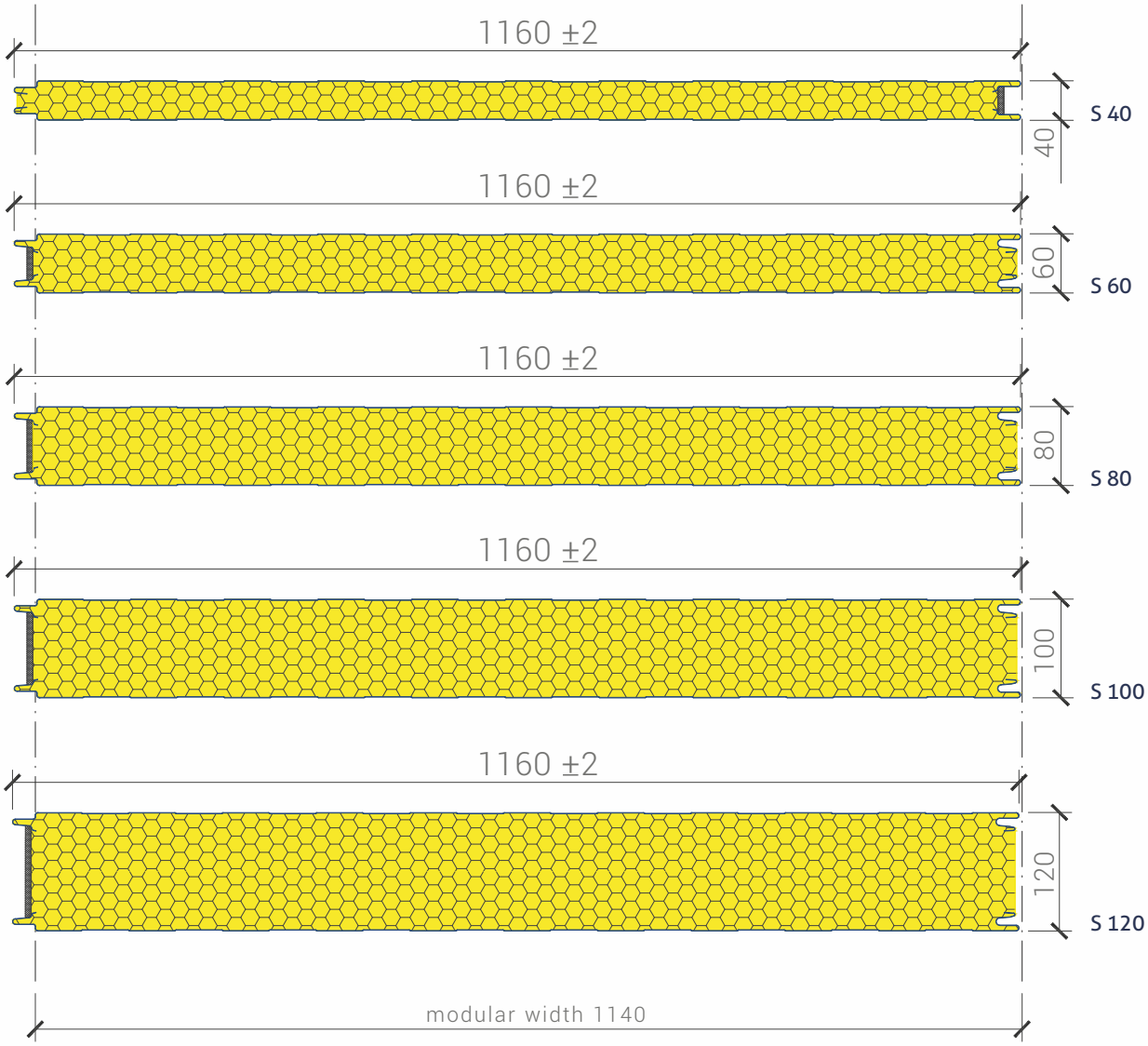
Thermal performance of panels depends on the thickness of the core and is expressed as a coefficient of heat transfer through a space dividing element (shown in the table below). Acoustic parameters were determined on the basis of **EN ISO 10140-3** and **EN-ISO 354**. Coldstore plates can be used as partitions of the requirements of sound insulation no greater than those specified below. Resistance to chemical corrosion - sandwich panels can be used in environments with atmosphere corrosiveness category C1, C2, C3 according to **EN ISO 12944-2**.

TECHNICAL PARAMETERS OF PIR CORE

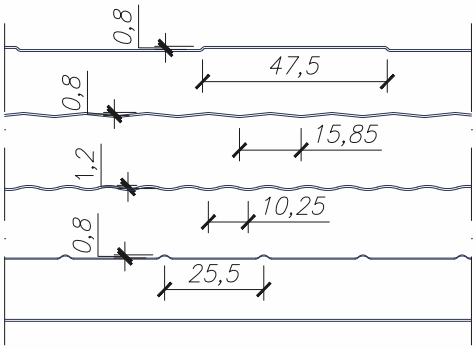
Thickness [mm]	Heat-transfer coefficient U [W/m²·K]	Acoustic insulation	Reaction to fire	Fire resistance	NRO
	EN 14509	EN ISO 717-1	EN 13501-1	EN 13501-2	PN-B-02867
40	0,60*/ -	R_W = 23 dB R_{a1} = 21 dB R_{a2} = 20 dB	B-s1, d0	-	„NRO"
60	0,38*/ -				
80	0,28*/ 0,24**			EI 20	
100	0,22*/ 0,19**				
120	0,19*/0,16**			EI 30	

* U-factor for panels with conventional cores with coefficient λ=0,022 W/m·K
** U-factor for panels with conventional PIR MAX cores with coefficient λ=0,019 W/m·K

PANEL THICKNESS

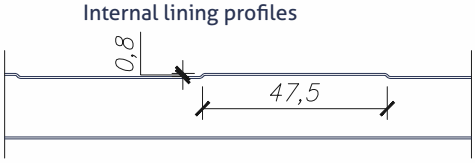


External lining profiles



L - Linear
M - Mikro-profiling
F - Wavy*
R - Grooving**
P - Flat

Internal lining profiles



L - Linear
P - Flat

* - Profiling used for new orders as of February 2020. In the case when ordering panels for existing casings, please state this fact when placing the order and provide the previous order number as a reference.

**- for module 1140 performed after prior arrangement (details from Sales Representative)

TABLE OF ALLOWED LOADS FOR GS insPIRe® S SANDWICH PANEL

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

Panel thickness	The load due to:	The maximum load [kN/m²] 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	3,152	2,455	1,695	1,240	0,946	0,746	0,603	0,497	0,417	0,355
	SGU (q_k)	3,369	2,509	1,793	1,112	0,577	0,261	0,077	-	-	-	-
60	SGN (q_d)	4,232	3,152	2,511	2,086	1,785	1,426	1,124	0,908	0,749	0,629	0,535
	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	1,384	1,214	1,002	0,840	0,715
	SGU (q_k)	3,369	2,509	1,999	1,661	1,421	1,241	1,102	0,991	0,900	0,737	0,576
100	SGN (q_d)	4,232	3,152	2,511	2,086	1,785	1,559	1,384	1,245	1,130	1,035	0,895
	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
120	SGN (q_d)	4,232	3,152	2,511	2,086	1,785	1,559	1,384	1,245	1,130	1,035	0,895
	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 **GS insPIRe® S sandwich panel** with **0.5 mm** facing in bright colours, mounted as a **multi-span** element, in direction to and from support.

Panel thickness	The load due to:	The maximum load [kN/m²] 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)	2,523	1,878	1,501	1,251	1,035	0,773	0,600	0,479	0,392	0,327	0,276
	SGU (q_k)	2,063	1,533	1,223	1,018	0,873	0,764	0,679	0,606	0,482	0,389	0,316
60	SGN (q_d)	2,483	1,845	1,475	1,231	1,057	0,927	0,826	0,739	0,602	0,501	0,423
	SGU (q_k)	2,040	1,513	1,207	1,005	0,862	0,755	0,672	0,606	0,551	0,506	0,467
80	SGN (q_d)	2,452	1,817	1,451	1,212	1,042	0,915	0,816	0,736	0,671	0,616	0,570
	SGU (q_k)	2,021	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	0,603	0,502
	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
120	SGN (q_d)	2,241	1,654	1,325	1,114	0,964	0,656	0,408	0,265	0,179	0,125	0,090
	SGU (q_k)	1,885	1,389	1,109	0,929	0,802	0,706	0,632	0,572	0,523	0,481	0,438

Load tables are prepared according to **PN-EN 14 509** for panels with PIR 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 : **www.gor-stal.pl**

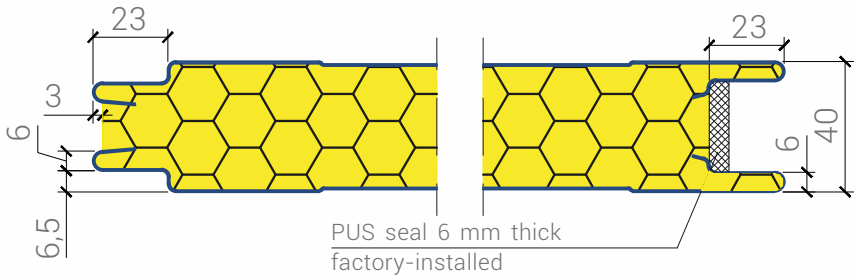
PACKING

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

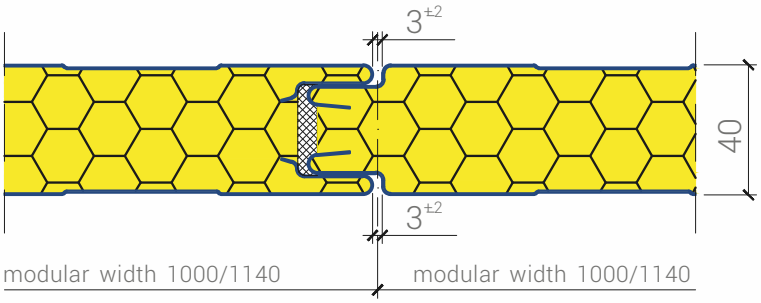
Panel thickness [mm]	40	60	80	100	120
Maximum number of panels in one batch	25	19	14	11	9

Selected details of cladding made of GS insPIRe® S sandwich panels

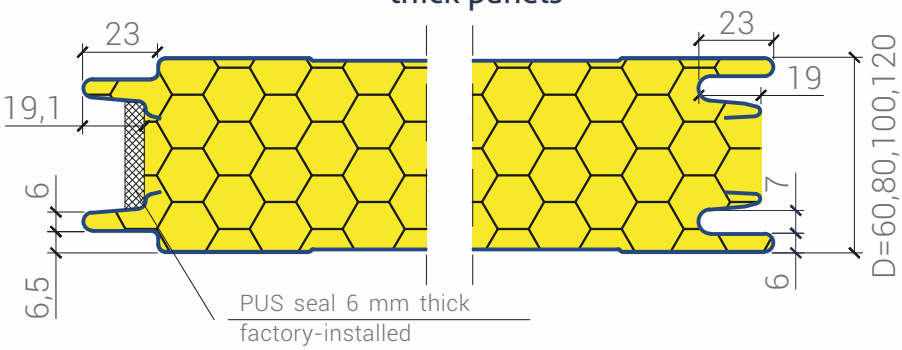
Shape of cam-lock for 40 mm thick panels



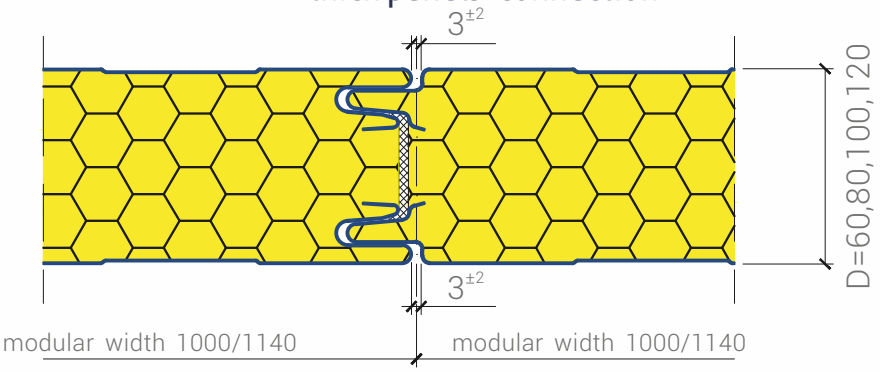
Detail of 40 mm thick panels connection



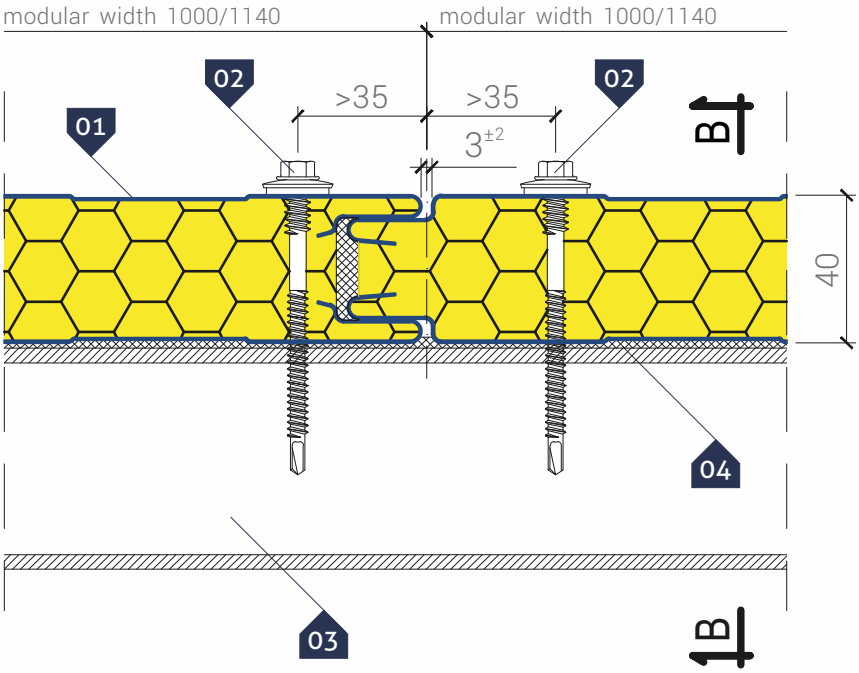
Shape of cam-lock for 60, 80, 100 and 120 mm thick panels



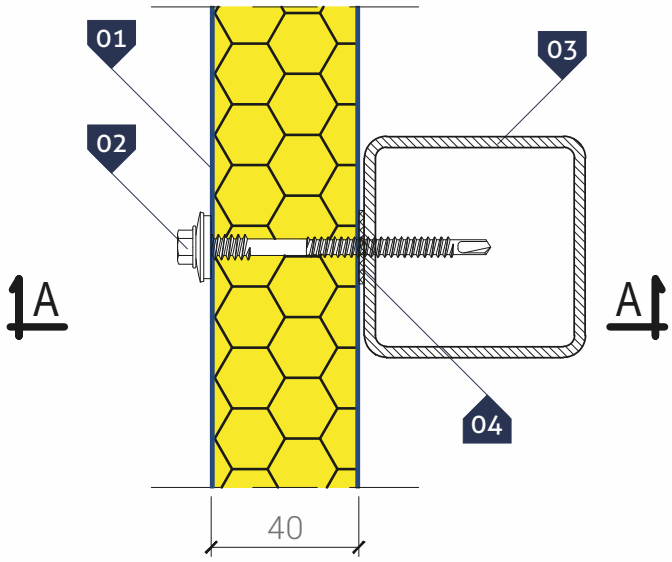
Detail of 60, 80, 100 and 120 mm thick panels' connection



A-A cross-section



B-B cross-section

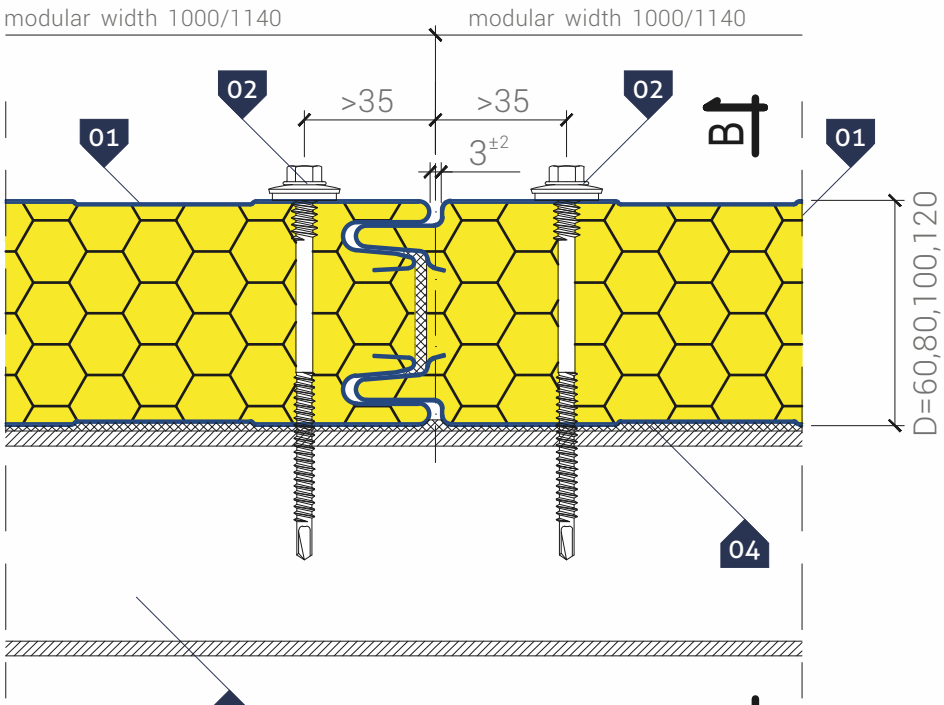


KEY:
01. **GS insPIRe® S** wall panel
02. Self-drilling connector for sandwich panels
03. Transom acc. to structure design
04. Polyethylene, self-adhesive sealing tape **(PES)***

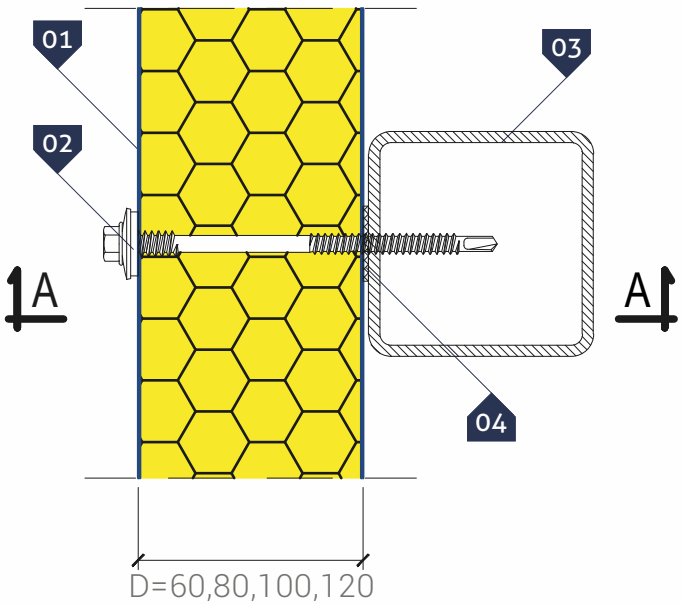
NOTE: fasten each panel along its length to a structure with a minimum of three cam-locks (this applies to full-width panels).

* - a recommended item

A-A cross-section



B-B cross-section

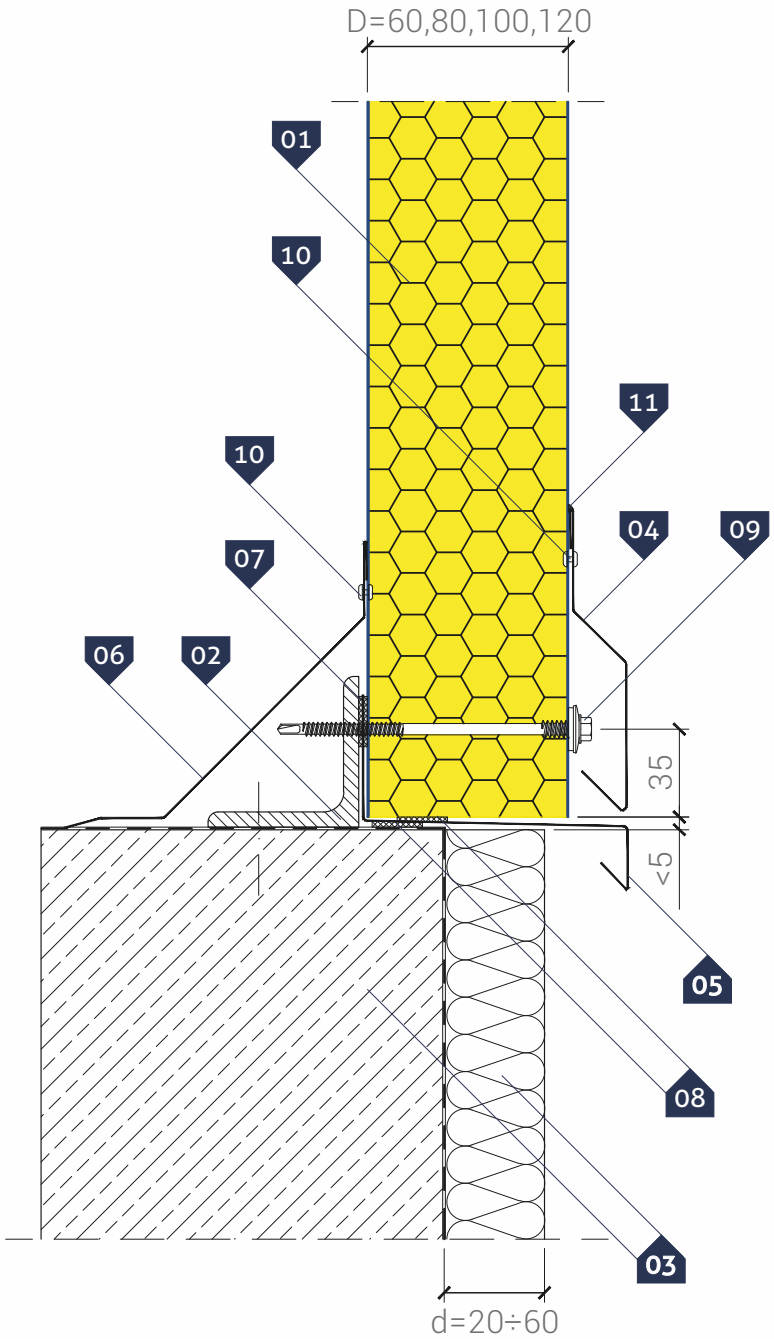


KEY:

01. **GS insPIRe® S** wall panel
02. Self-drilling connector for sandwich panels
03. Transom acc. to structure design
04. Polyethylene, self-adhesive sealing tape **(PES)***

NOTE: fasten each panel along its length to a structure with a minimum of three cam-locks (this applies to full-width panels).

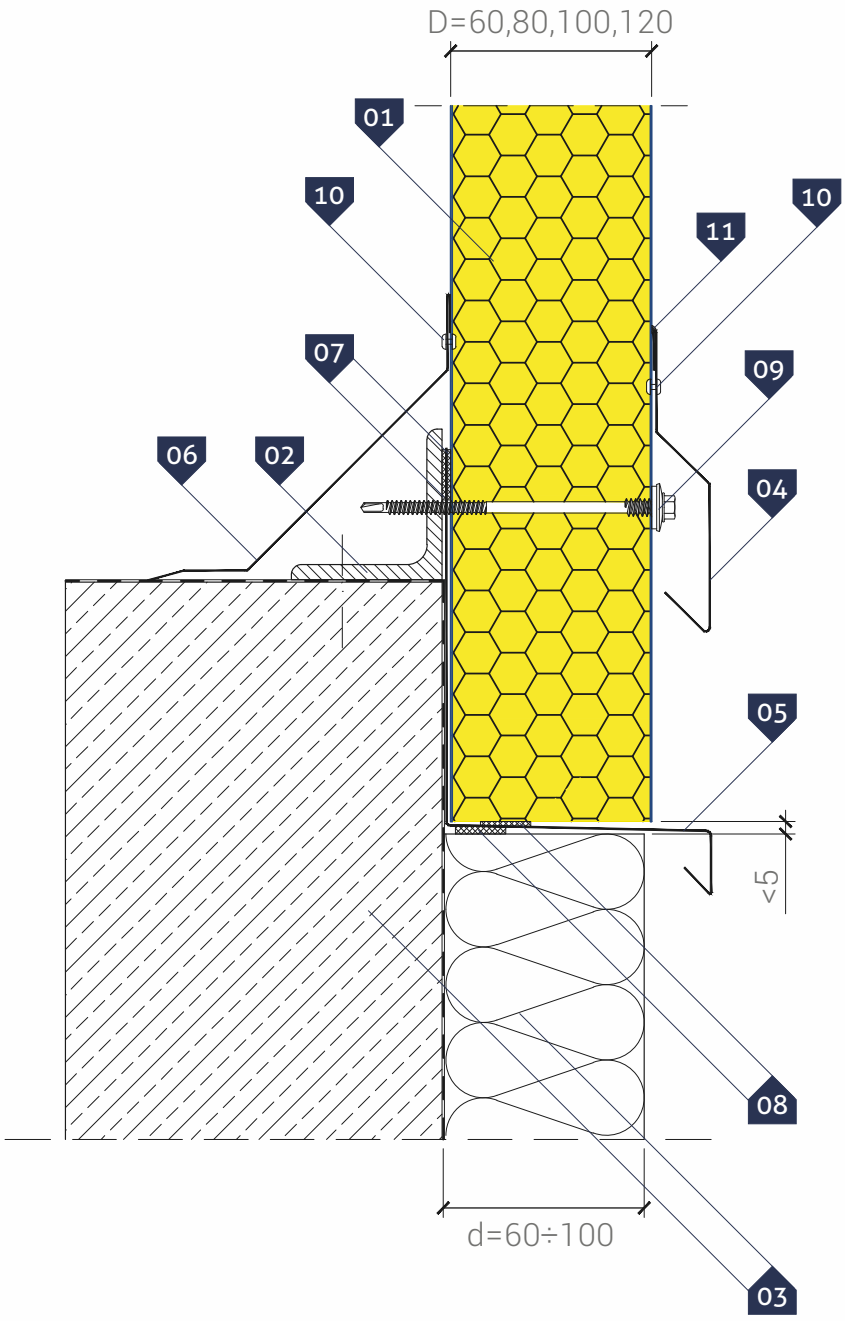
* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Steel section acc. to structure design
03. Ground beam with insulation and thermal insulation acc. to detailed design
04. Drip edge **OB-10** (option)
05. Eaves **OB-13**
06. Covering flashing **OB-08**
07. Polyethylene, self-adhesive sealing tape **(PES)***
08. Impregnated polyurethane gasket **(PURS)** or polyurethane fitting mounting foam
09. Self-drilling connector for sandwich panels
10. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
11. Neutral silicone sealant

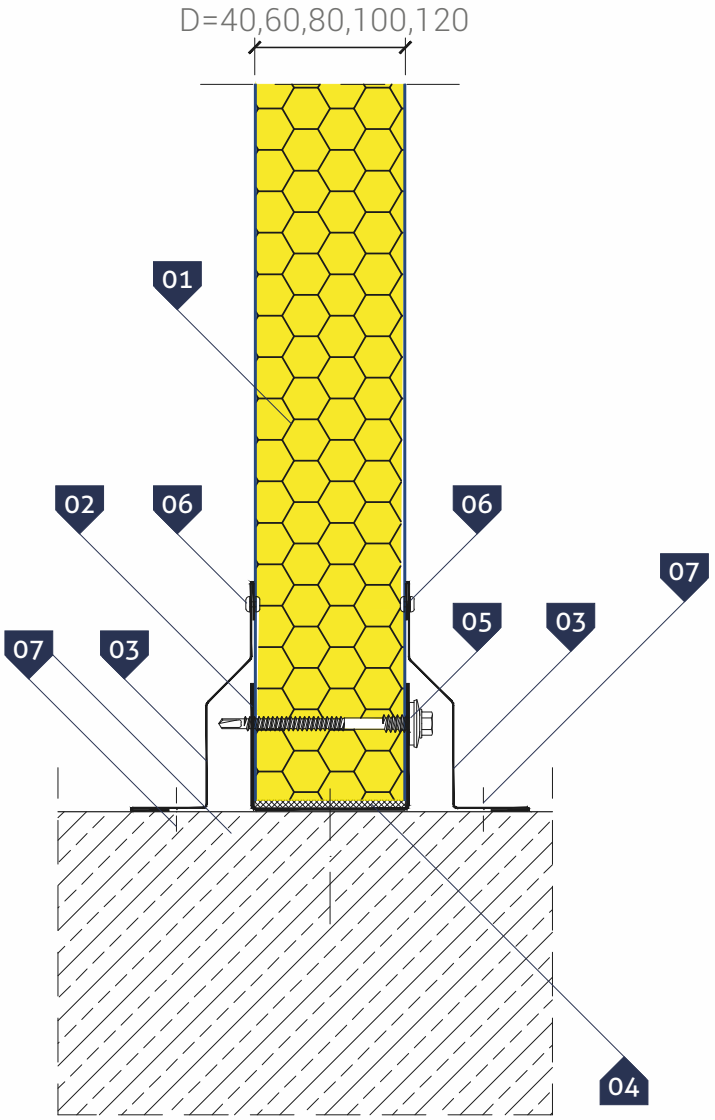
* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Steel section acc. to structure design
03. Ground beam with insulation and thermal insulation acc. to detailed design
04. Drip edge **OB-10** (option)
05. Eaves **OB-13** (extended)
06. Covering flashing **OB-08**
07. Polyethylene, self-adhesive sealing tape **(PES)***
08. Impregnated polyurethane gasket (PURS) or polyurethane fitting mounting foam
09. Self-drilling connector for sandwich panels
10. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
11. Neutral silicone sealant

* - a recommended item



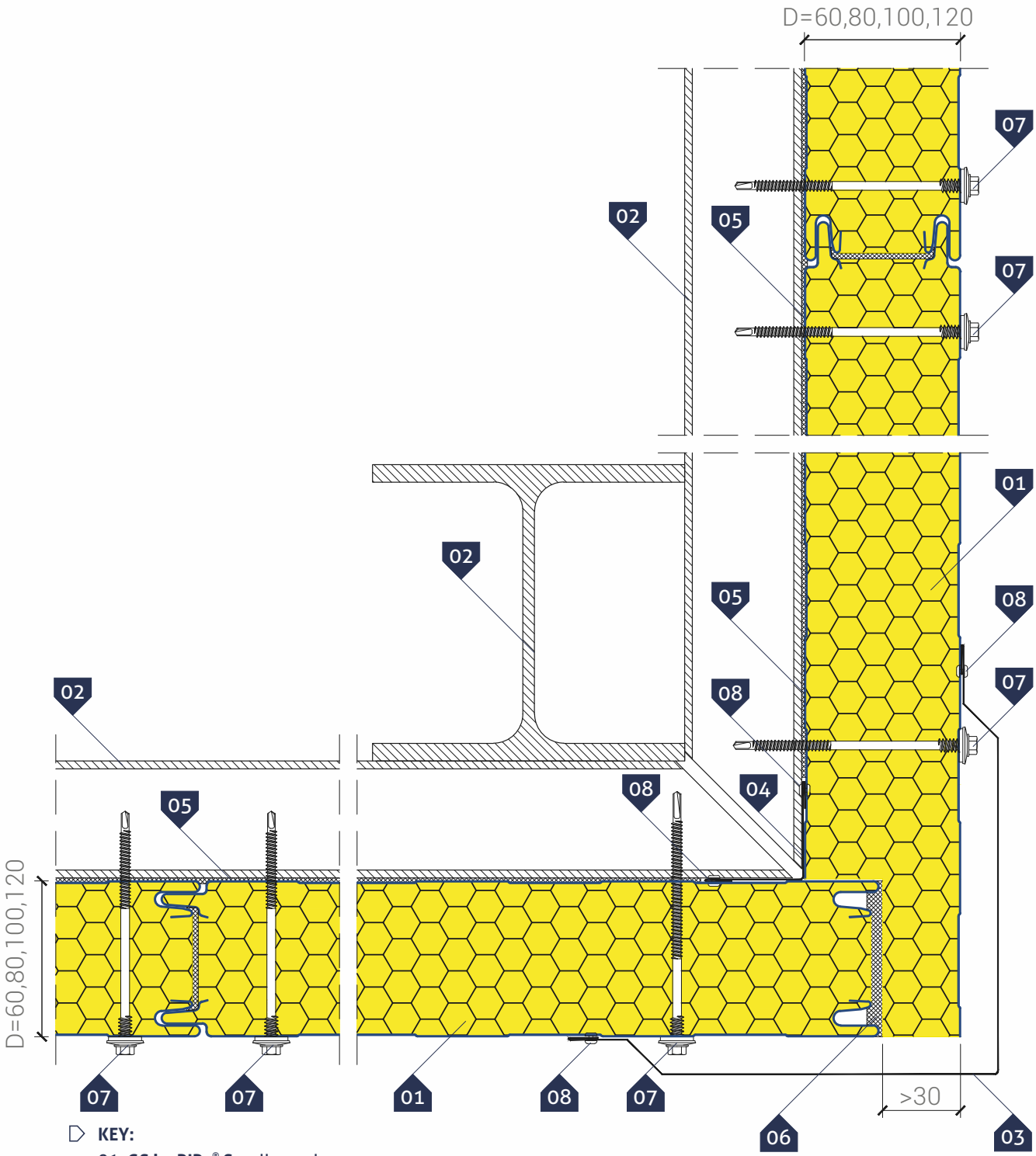
KEY:

01. **GS insPIRe® S** wall panel
02. Edge channel section **OB-42**
03. Covering flashing **OB-05**
04. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
05. Self-drilling connector for sandwich panels
06. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
07. Steel expansion joint for fast assembly

GS insPIRe® S wall sandwich panel (Standard cam-lock)

VERTICAL ARRANGEMENT of panels
Detail of panel connection in a corner
Type I

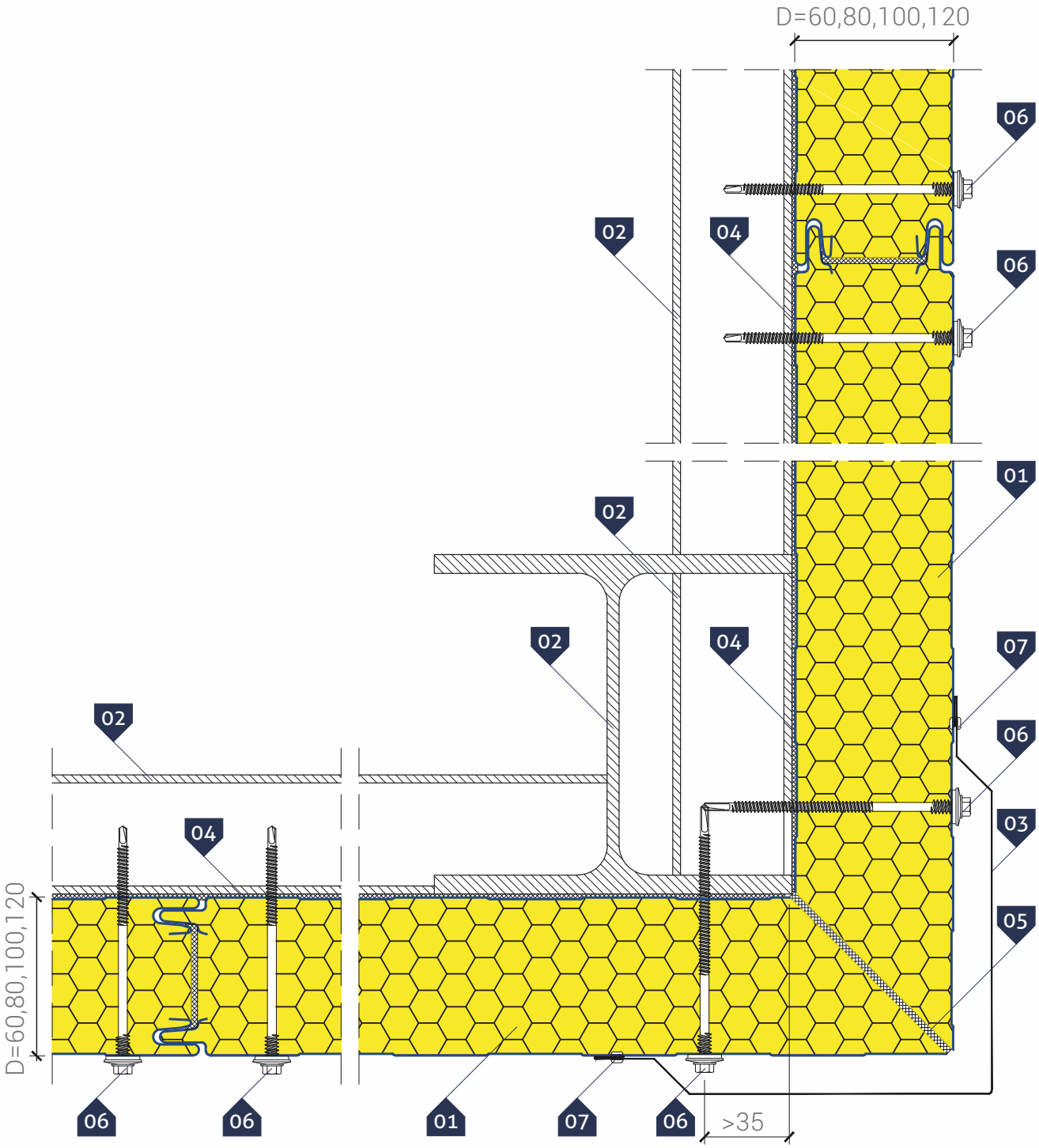
GÓR-STAL® SANDWICH PANELS



KEY:

01. **GS insPIRe® S** wall panel
02. Steel post and transom acc. to structure design
03. Corner flashing **OB-03**
04. Corner flashing **OB-02**
05. Polyethylene, self-adhesive sealing tape **(PES)***
06. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
07. Self-drilling connector for sandwich panels
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

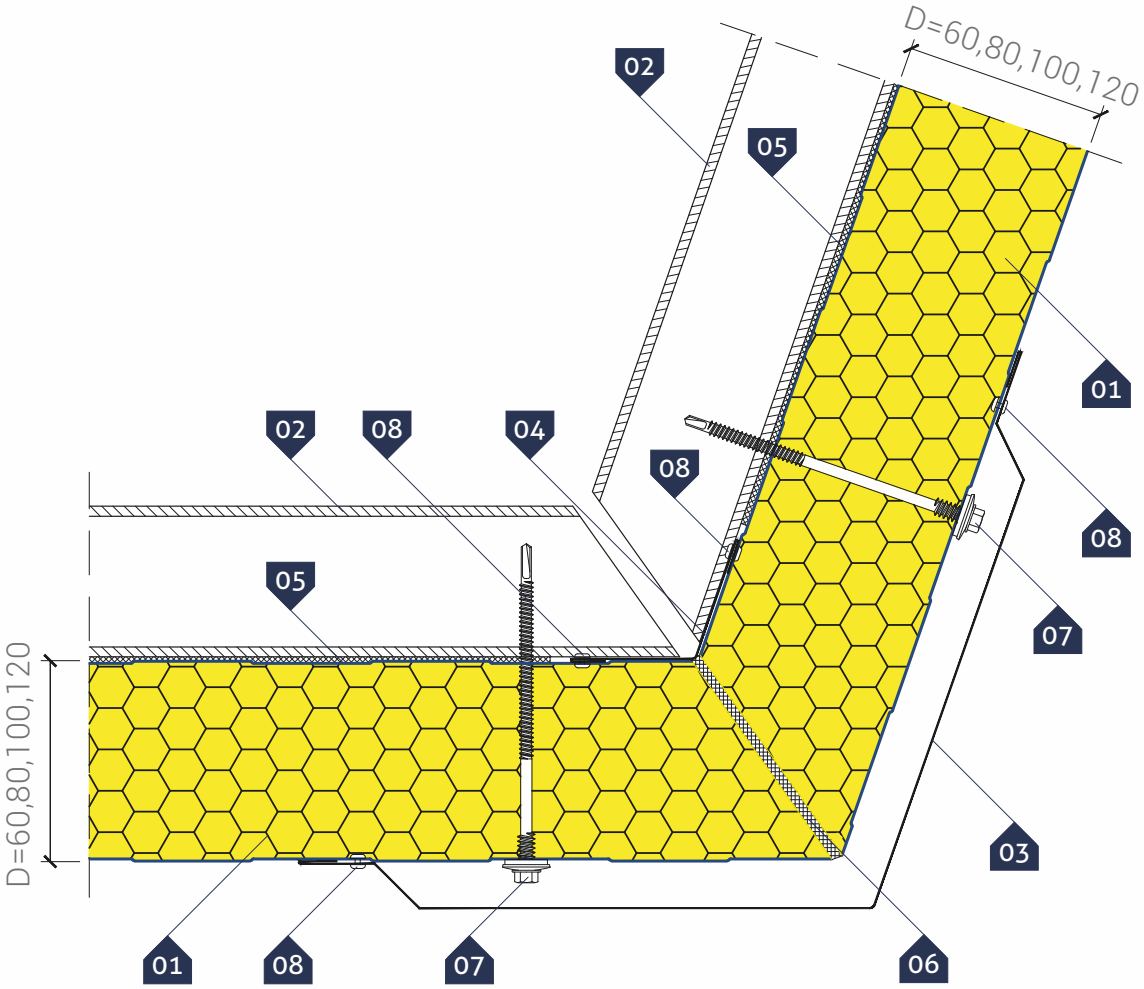
* - a recommended item



Key:

01. **GS insPIRe® S** wall panel
02. Steel post and transom acc. to structure design
03. Corner flashing **OB-03**
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Polyurethane caulking foam
06. Self-drilling connector for sandwich panels
07. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

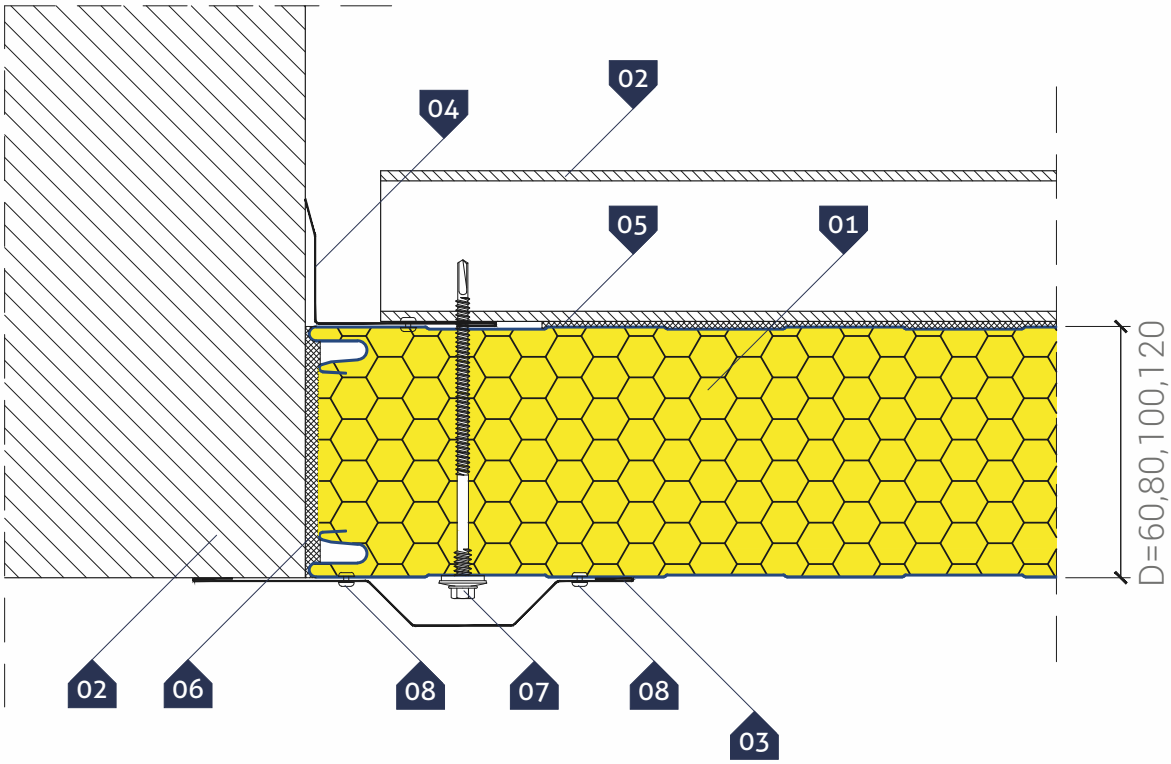
* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Transom acc. to structure design
03. Corner flashing **OB-03**
04. Corner flashing **OB-02**
05. Polyethylene, self-adhesive sealing tape **(PES)***
06. Polyurethane caulking foam
07. Self-drilling connector for sandwich panels
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

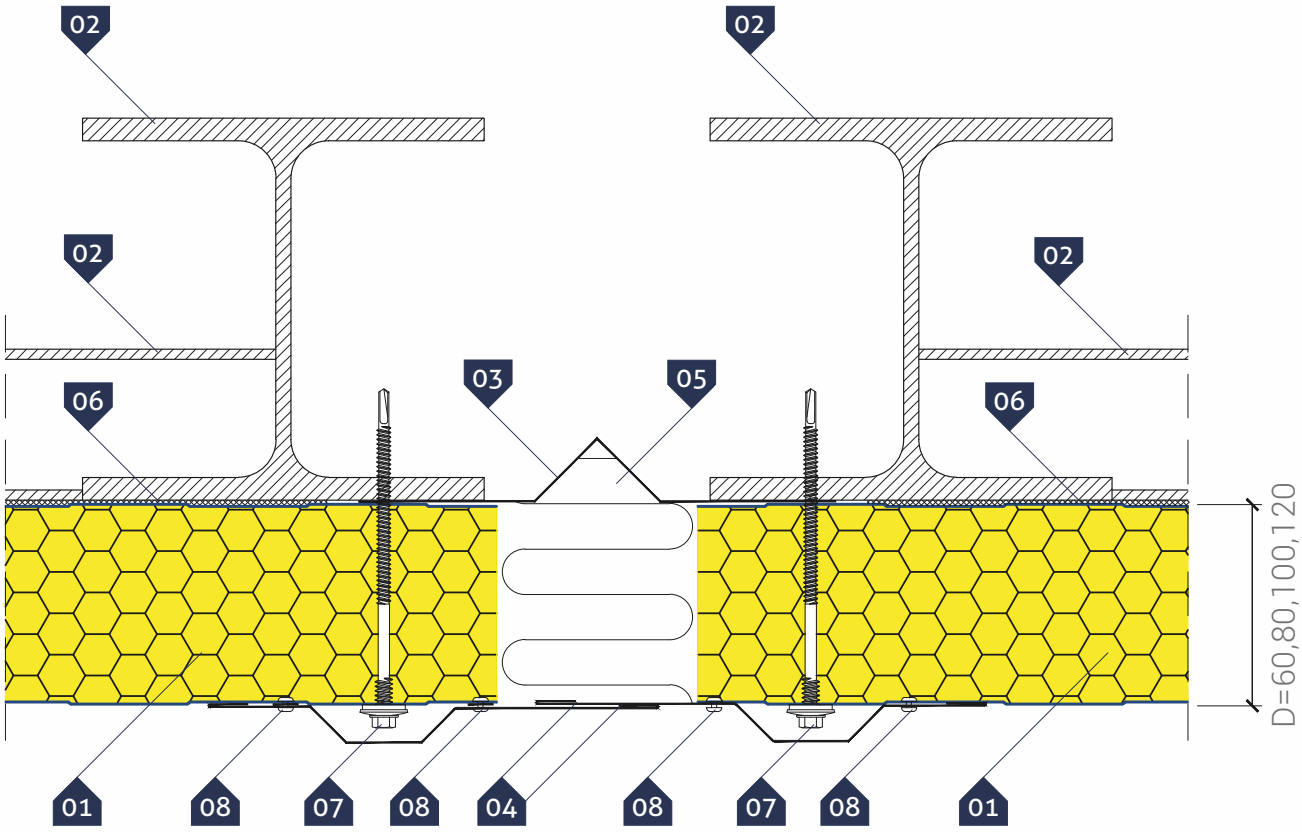
* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Blockwall and transom acc. to structure design
03. Covering flashing **OB-19**
04. Inner corner flashing **OB-07**
05. Polyethylene, self-adhesive sealing tape **(PES)***
06. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
07. Self-drilling connector for sandwich panels
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

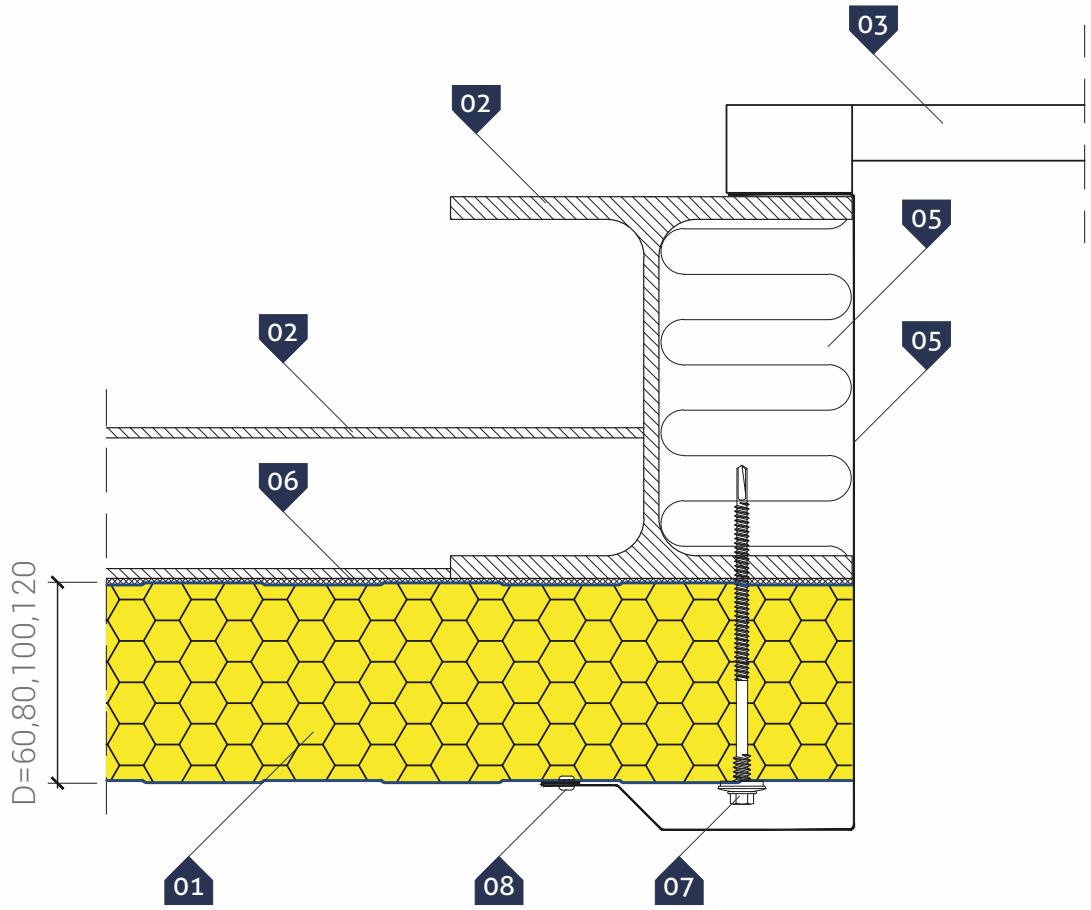
* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Steel post and transom acc. to structure design
03. Individual expansion joint flashing
04. Covering flashing **OB-17**
05. Thermal insulation on the fastening
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Polyethylene, self-adhesive sealing tape
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

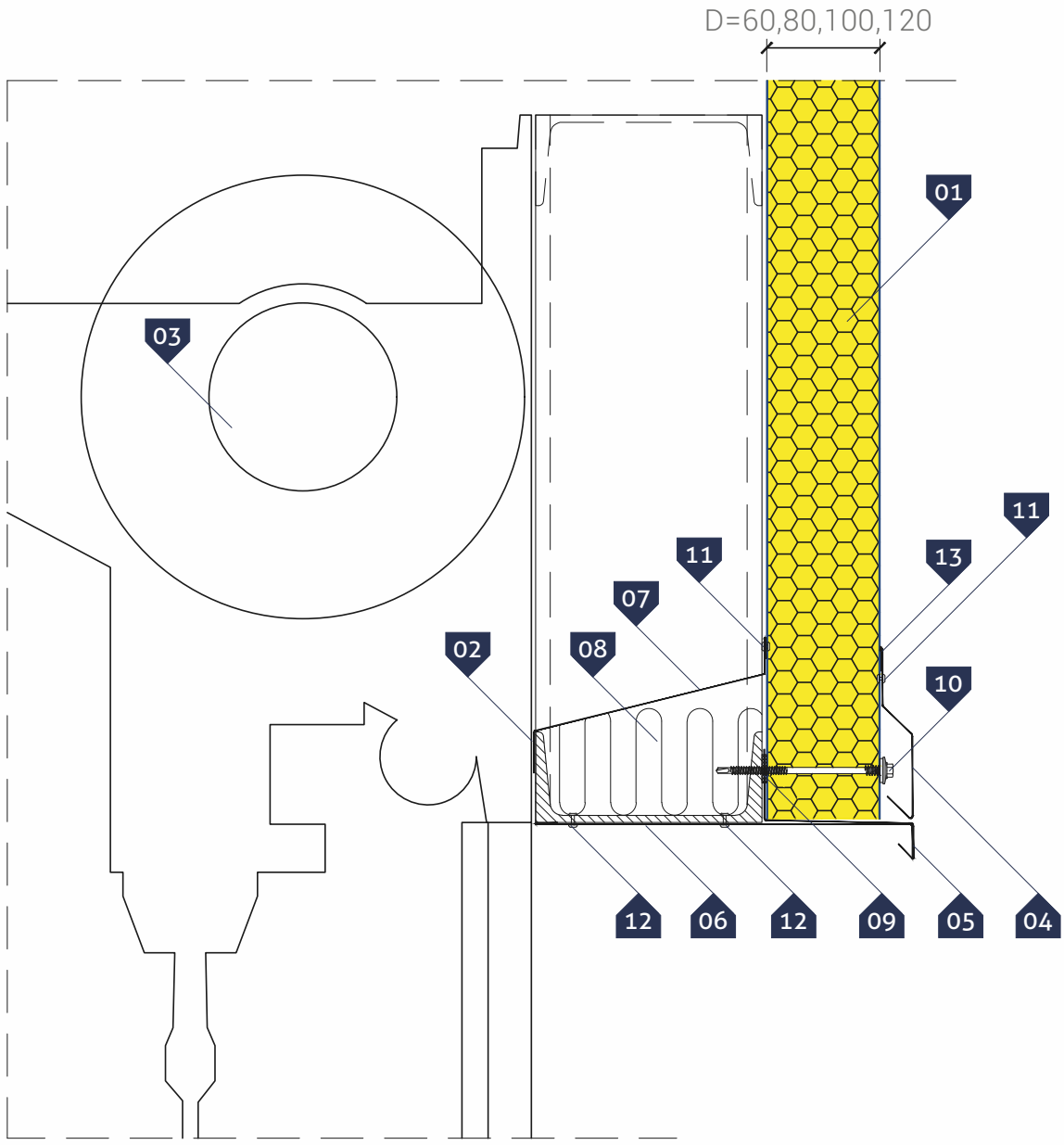
* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Steel post and transom acc. to structure design
03. Industrial door
04. Door flashing **OB-21**
05. Thermal insulation on the fastening
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Self-drilling connector for sandwich panels
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

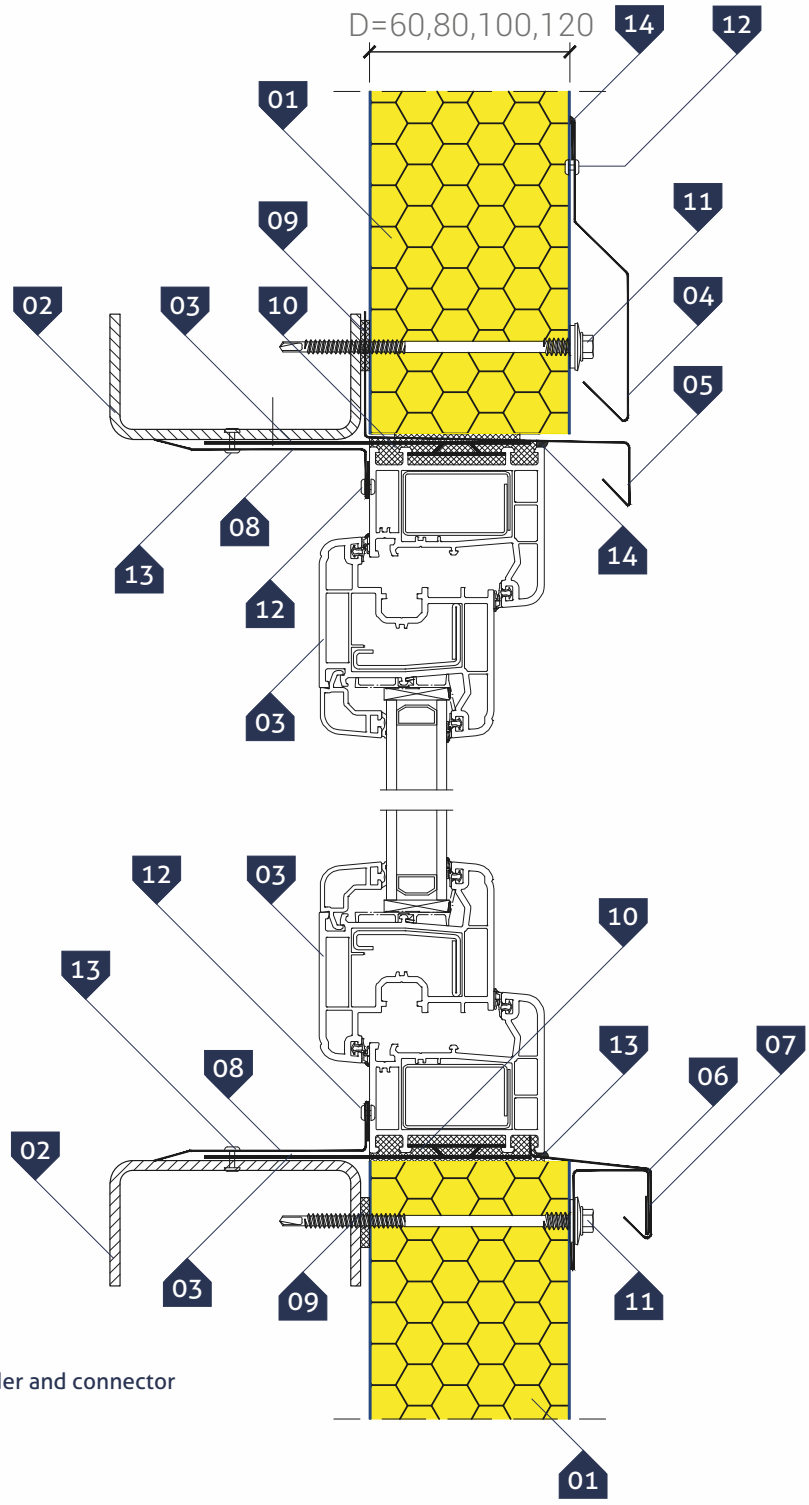
* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Transom acc. to structure design
03. Roller shutter door
04. Drip edge **OB-10**
05. Drip edge **OB-13**
06. Covering flashing **OB-20**
07. Individual covering flashing
08. Thermal insulation on the fastening
09. Polyethylene, self-adhesive sealing tape **(PES)***
10. Self-drilling connector for sandwich panels
11. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
12. Blind rivet **4,8 x 15,1** (for the structure)
13. Neutral silicone sealant

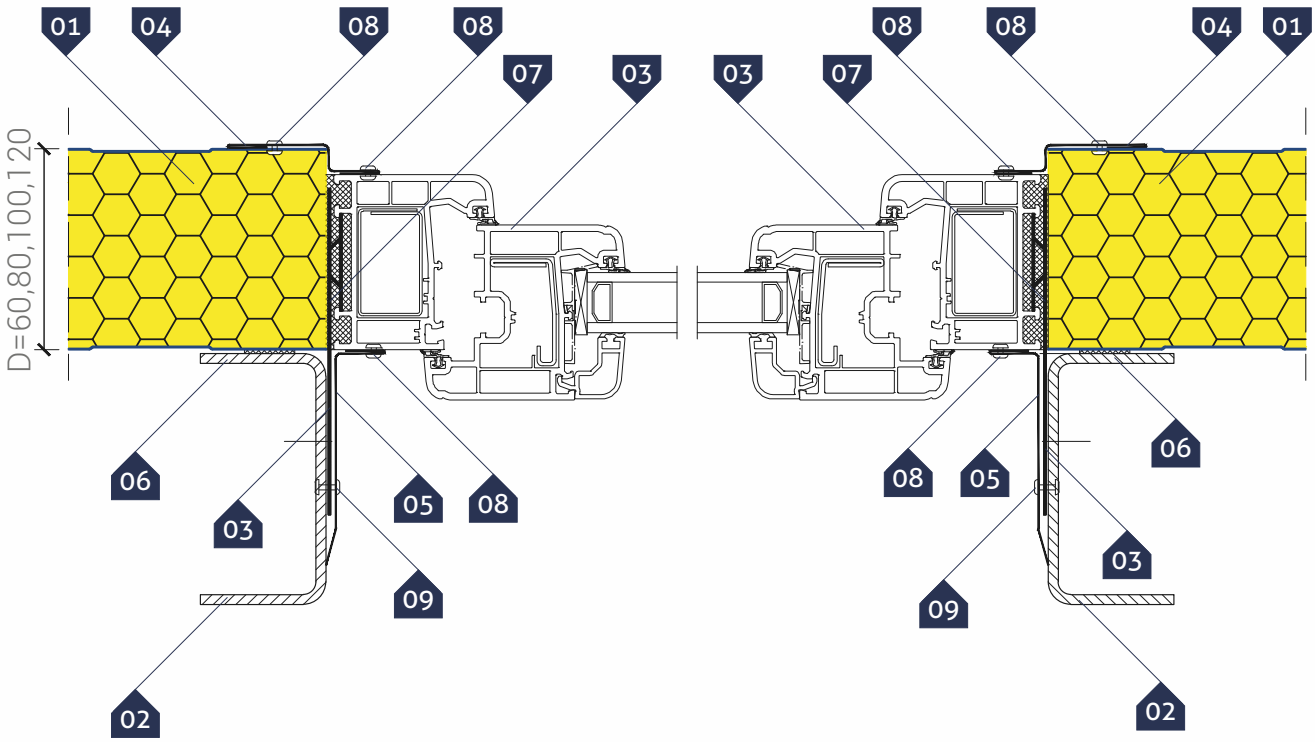
* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Transom acc. to structure design
03. **PCV** or **aluminium** window with a holder and connector
04. Drip edge **OB-10**
05. Drip edge **OB-13**
06. Cill OB. **OB-37**
07. Rigid flashing **OB-16**
08. Individual internal corner
09. Polyethylene, self-adhesive sealing tape **(PES)***
10. Polyethylene caulking foam
11. Self-drilling connector for sandwich panels
12. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
13. Blind rivet **4,8 x 15,1** (for the structure)
14. Neutral silicone sealant

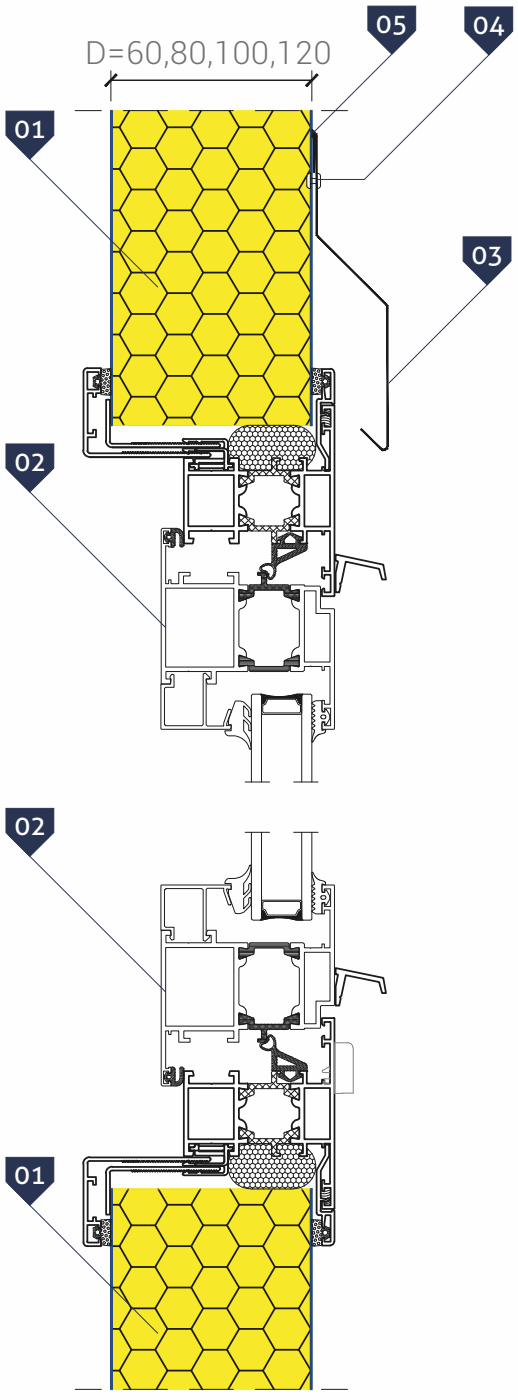
* - a recommended item



KEY:

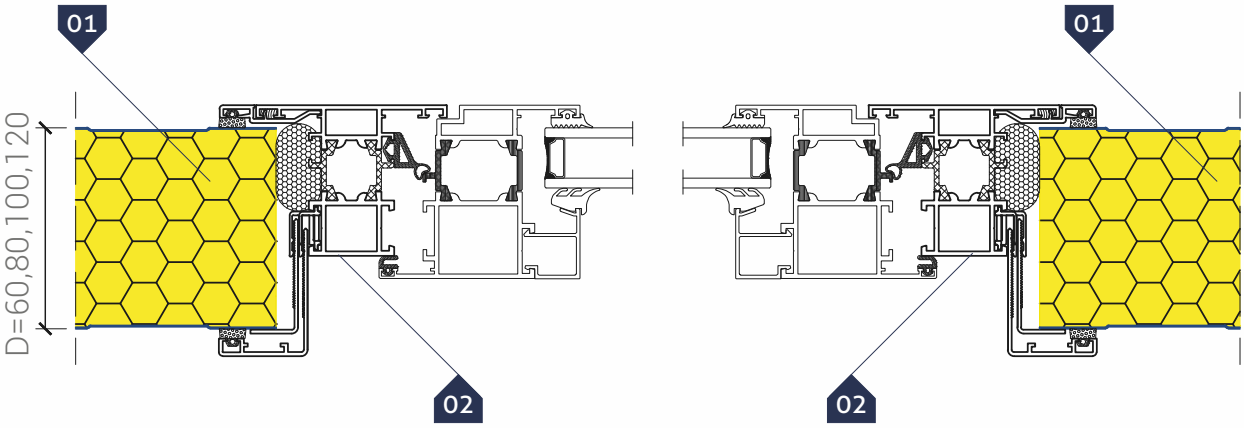
01. **GS insPIRe® S** wall panel
02. Transom acc. to structure design
03. **PVC** or **aluminium** window with a holder and connector
04. Individual covering flashing
05. Individual internal corner
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Polyethylene caulking foam
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
09. Blind rivet **4,8 x 15,1** (for the structure)

* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. **PVC** or **aluminium** window with a fastening profile
03. Drip edge **OB-11** (option)
04. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
05. Neutral silicone sealant



KEY:

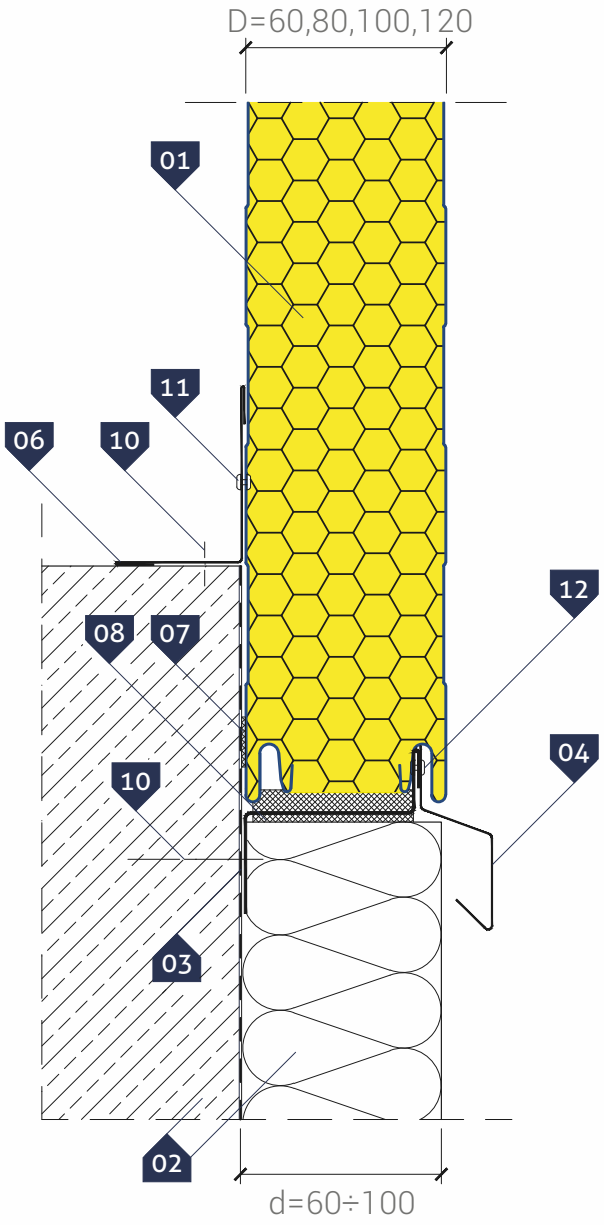
01. **GS insPIRe® S** wall panel
02. **PVC** or **aluminium** window with a fastening profile

GS insPIRe® S wall sandwich panel (Standard cam-lock)

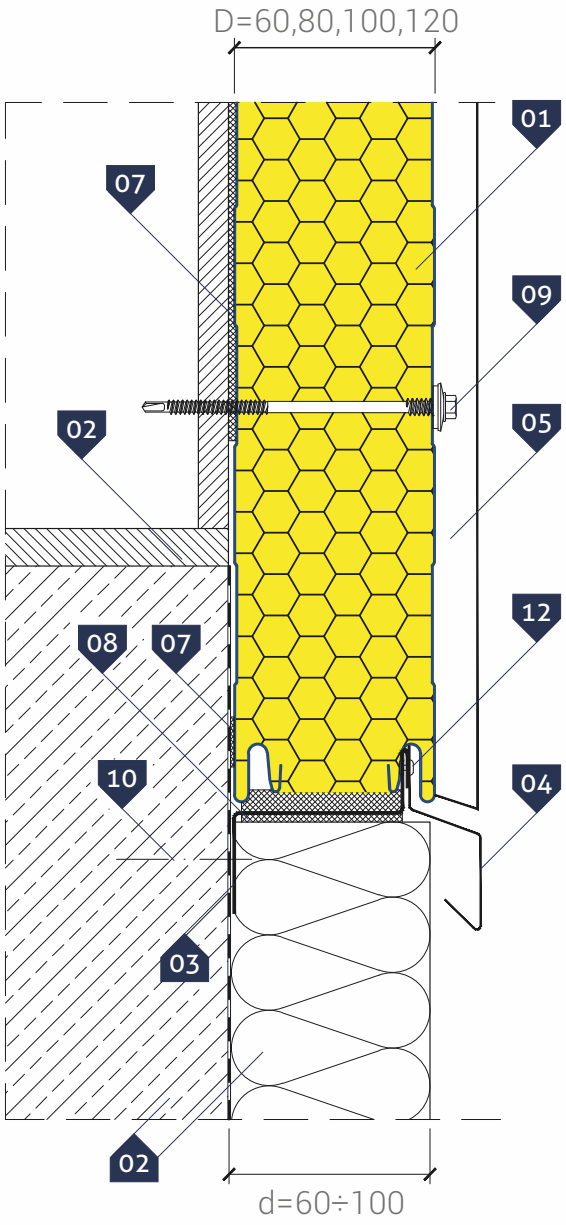
HORIZONTAL ARRANGEMENT of panels
Details of panel connection to ground beam
Type I

GÓR-STAL® SANDWICH PANELS

In the span



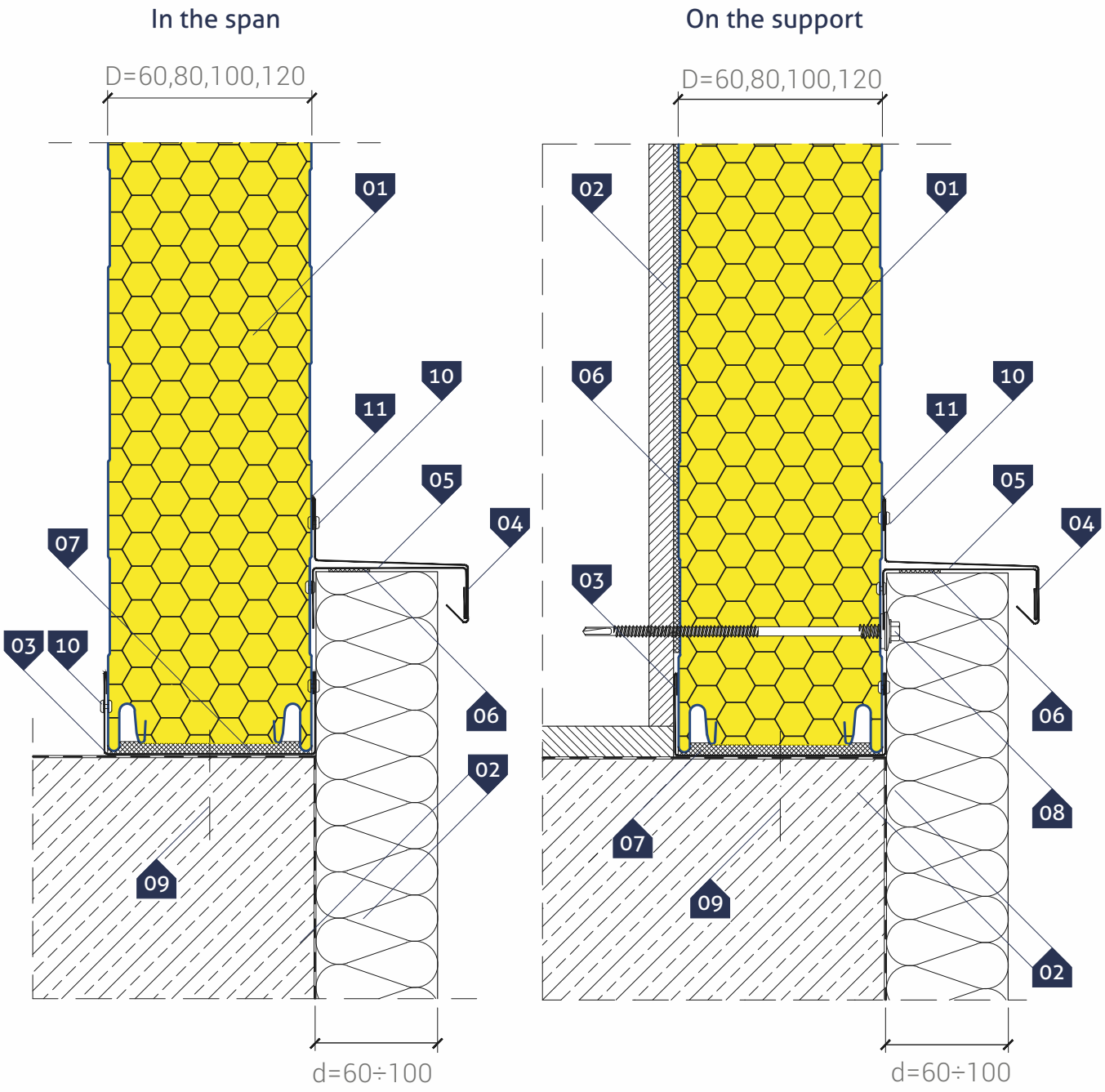
On the support



KEY:

01. **GS insPIRe® S** wall panel
02. Structural elements acc. to detailed design and thermal insulation carried out after assembly of panel
03. Edge Z-bar **OB-38**
04. Drip edge **OB-14**
05. Covering flashing for panel junction
06. Corner flashing **OB-06**
07. Polyethylene, self-adhesive sealing tape **(PES)***
08. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
09. Self-drilling connector for sandwich panels
10. Steel expansion joint for quick assembly
11. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
12. Rivet **4.0 x 8.0**

* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Structural elements acc. to detailed design and thermal insulation carried out after assembly of panel
03. Flashing **OB-42**
04. Drip edge **OB-15**
05. Rigid flashing **OB-15a**
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
08. Self-drilling connector for sandwich panels
09. Steel expansion joint for quick assembly
10. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
11. Neutral silicone sealant

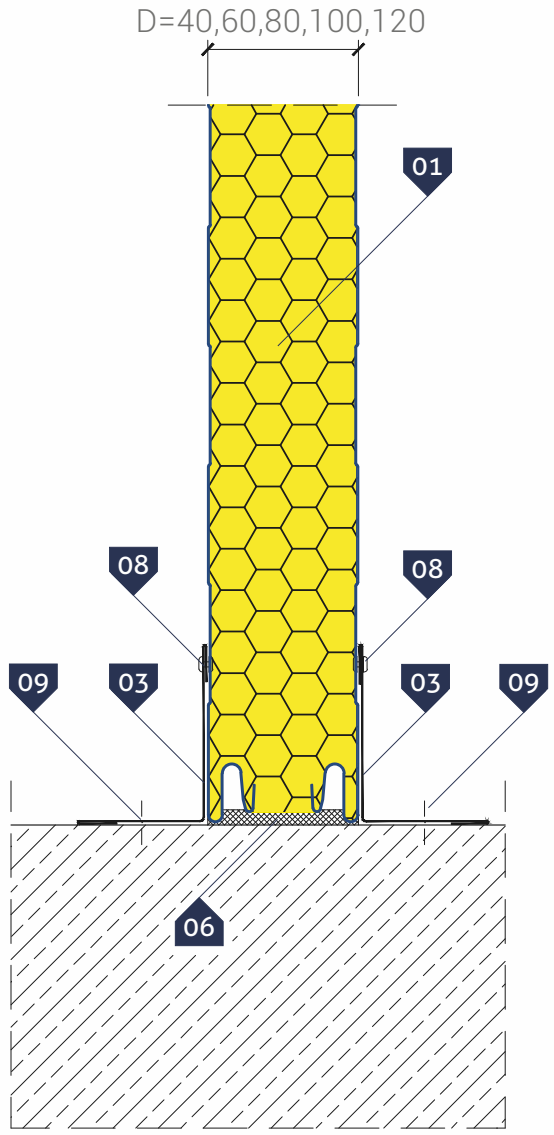
* - a recommended item

GS insPIRe® S wall sandwich panel (Standard cam-lock)

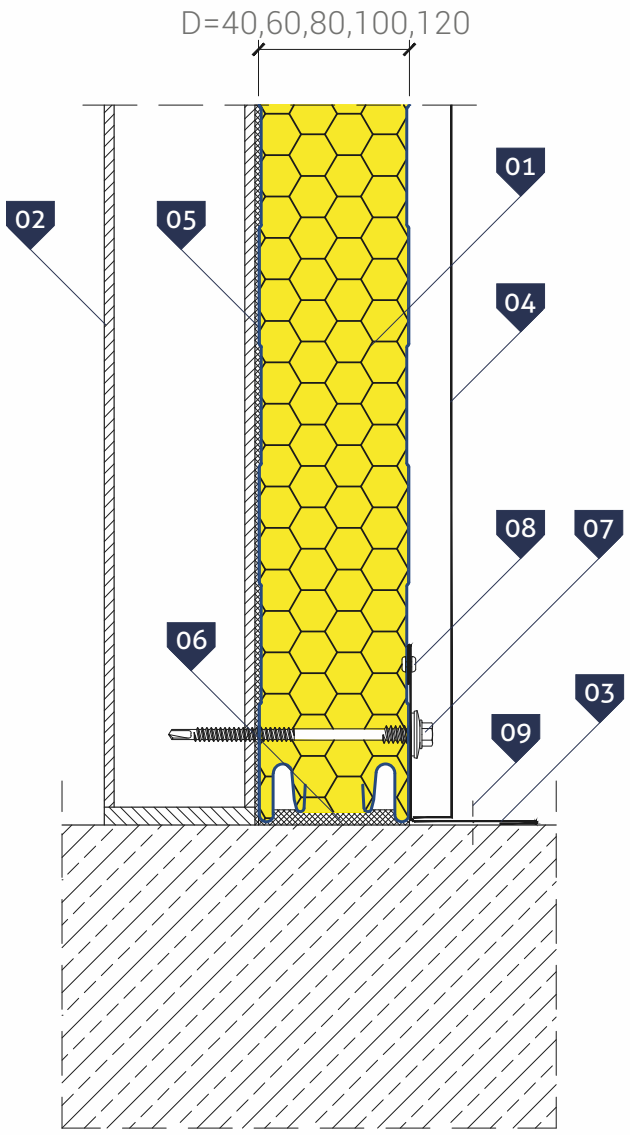
HORIZONTAL ARRANGEMENT of panels
Detail of panel connection to flooring

GÓR-STAL® SANDWICH PANELS

In the span



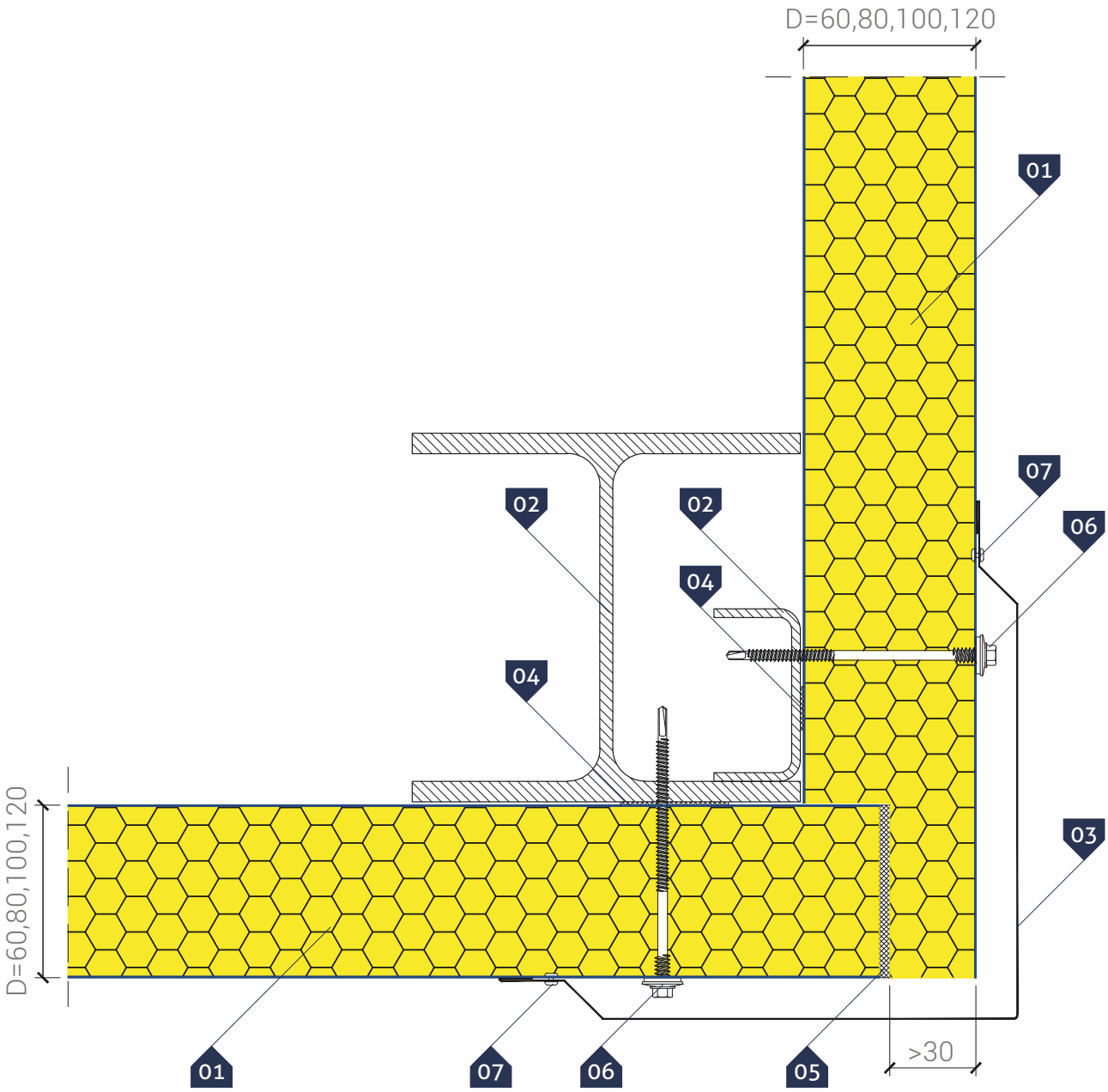
On the support



KEY:

01. **GS insPIRe® S** wall panel
02. Steel post acc. to structure design
03. Corner flashing **OB-06**
04. Covering flashing for panel joints
05. Polyethylene, self-adhesive sealing tape **(PES)***
06. Impregnated polyurethane seal **(PURS)** lub or polyurethane caulking foam
07. Self-drilling connector for sandwich panels
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
09. Steel expansion joint for quick assembly

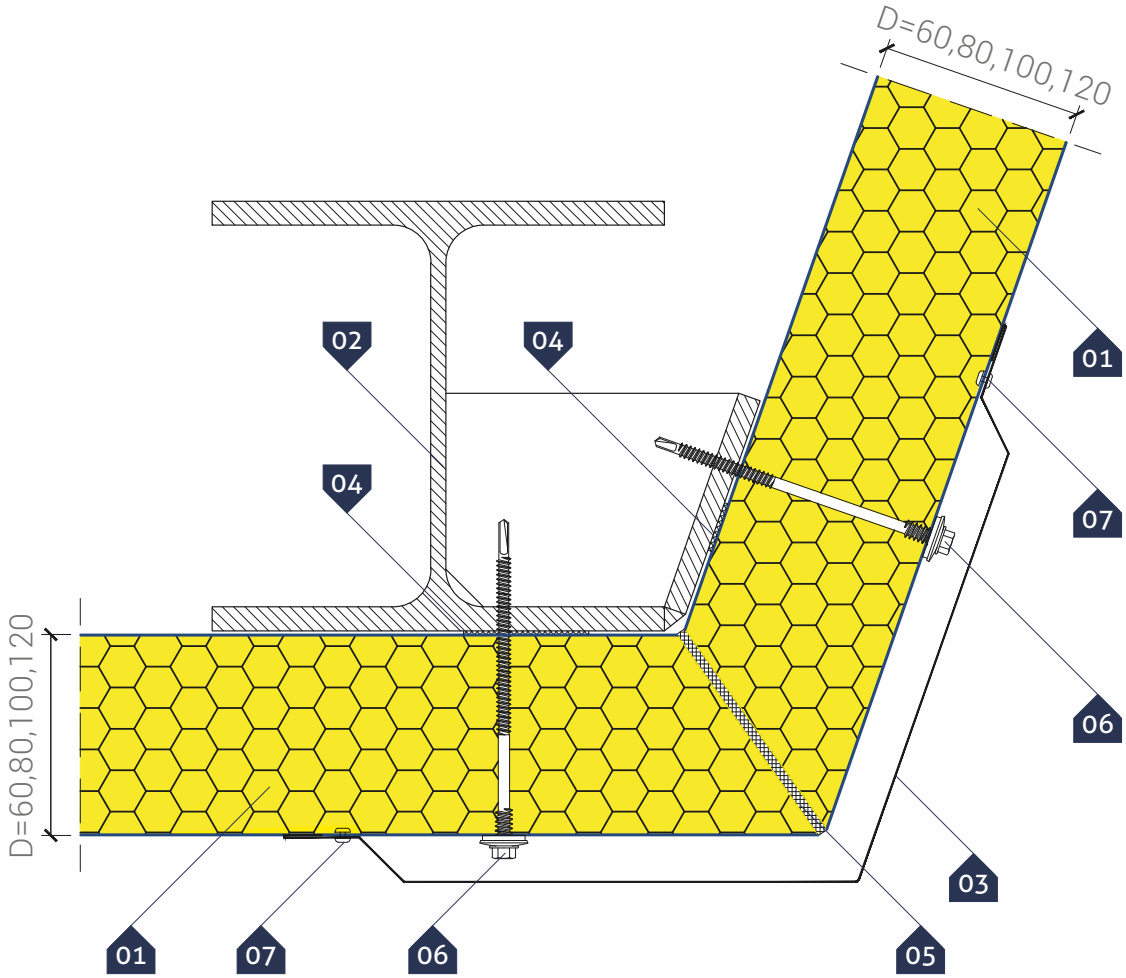
* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Steel post acc. to structure design
03. Corner flashing **OB-03**
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
06. Self-drilling connector for sandwich panels
07. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

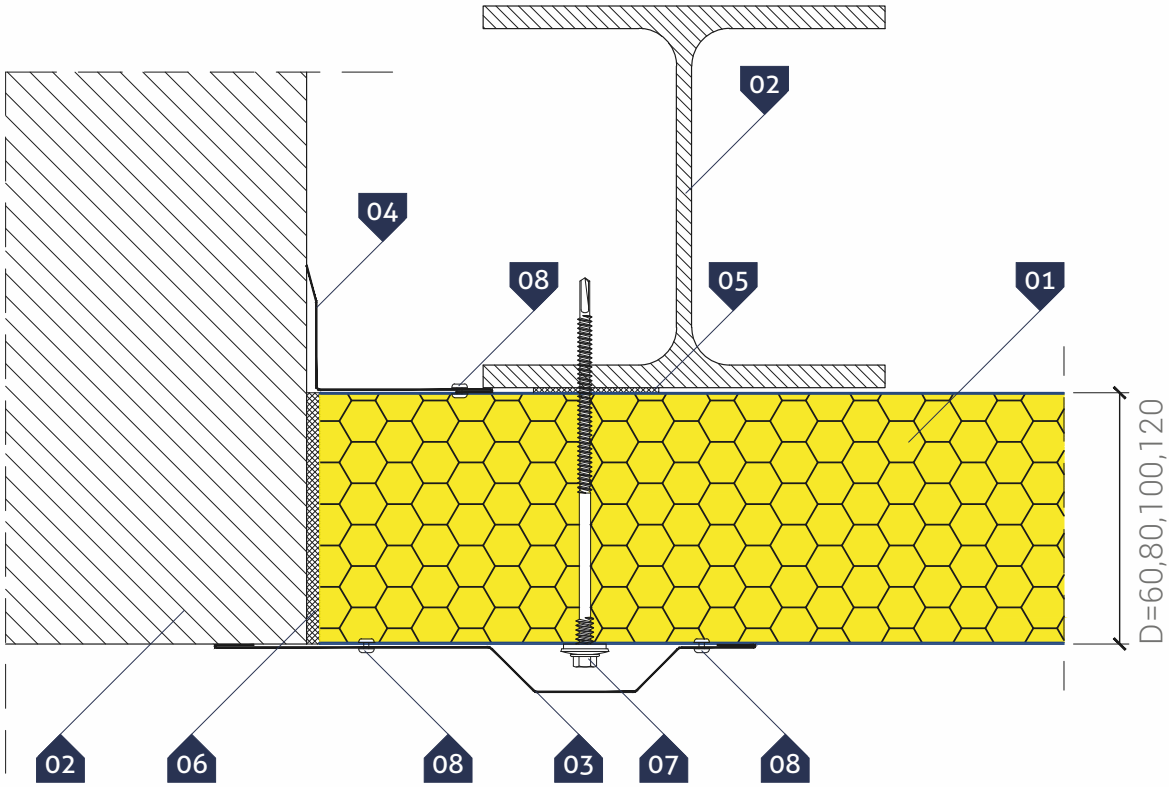
* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Steel post acc. to structure design
03. Corner flashing **OB-03**
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Polyurethane caulking foam
06. Self-drilling connector for sandwich panels
07. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

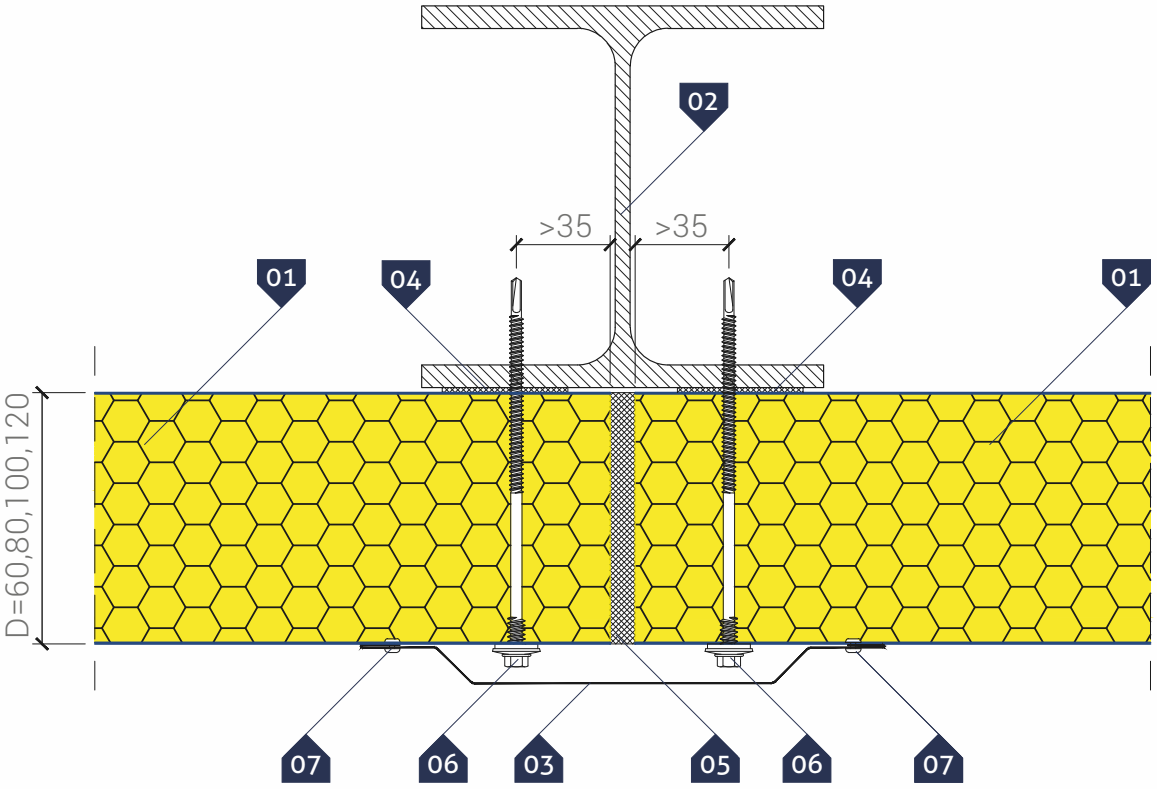
* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Blockwall and post acc. to structure design
03. Covering flashing **OB-19**
04. Inner corner flashing **OB-07**
05. Polyethylene, self-adhesive sealing tape **(PES)***
06. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
07. Self-drilling connector for sandwich panels
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

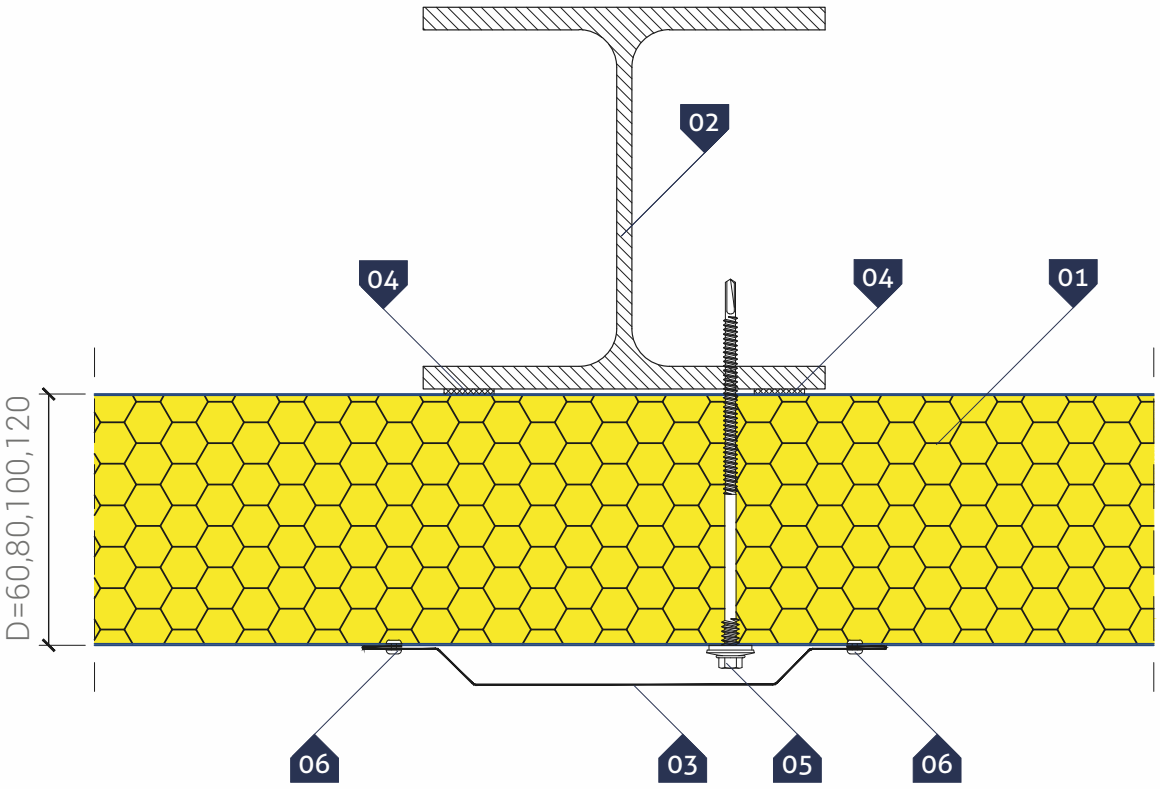
* - a recommended item



KEY:

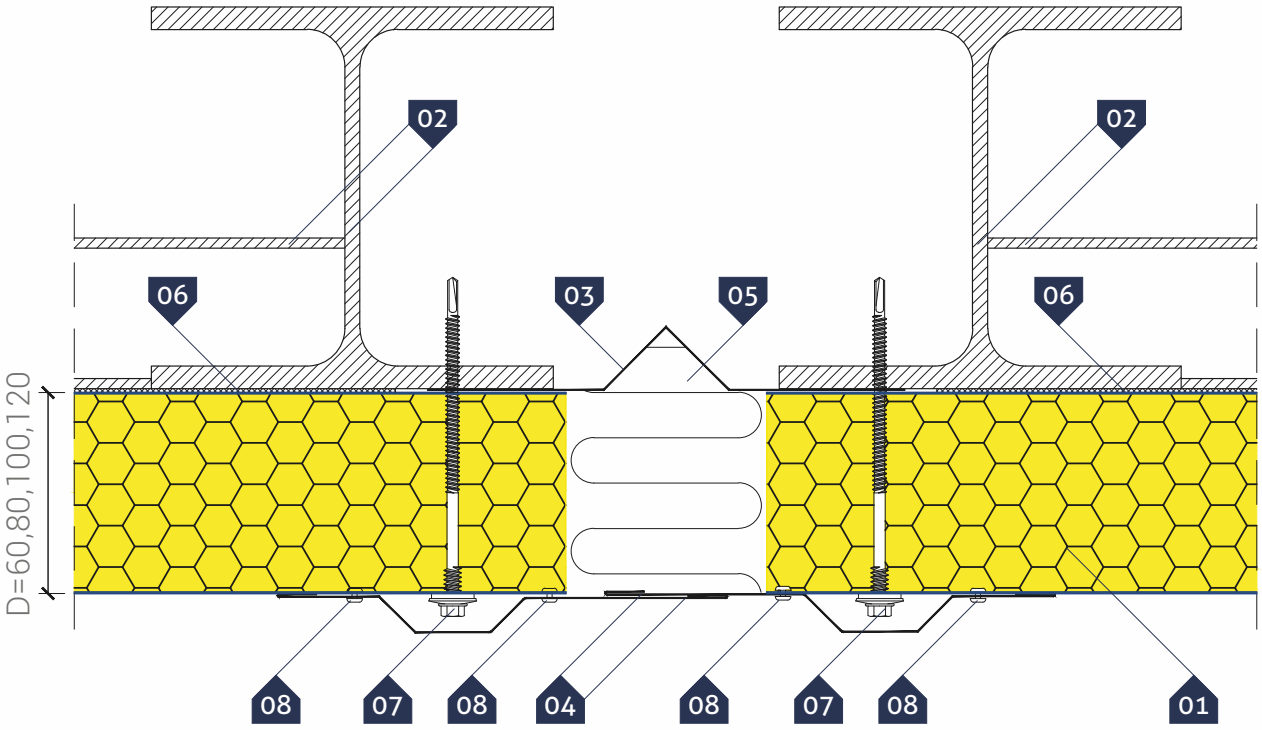
01. **GS insPIRe® S** wall panel
02. Steel post acc. to structure design
03. Covering flashin **OB-17**
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
06. Self-drilling connector for sandwich panels
07. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

* - a recommended item



KEY:
01. **GS insPIRe® S** wall panel
02. Steel post acc. to structure design
03. Covering flashin **OB-17**
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Self-drilling connector for sandwich panels
06. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

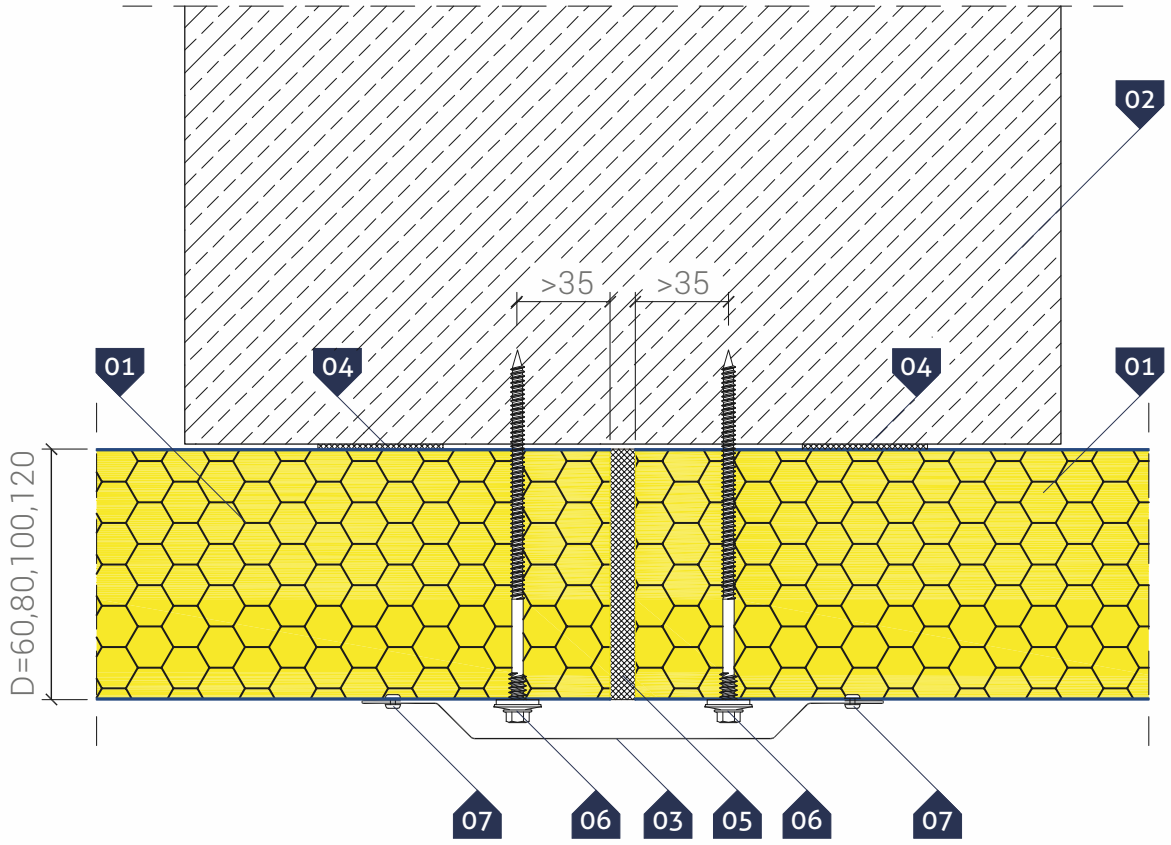
* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Steel posts and transom acc. to structure design
03. Individual expansion joint flashing
05. Drip edge **OB-13**
05. Thermal insulation on the fastening
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Self-drilling connector for sandwich panels
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

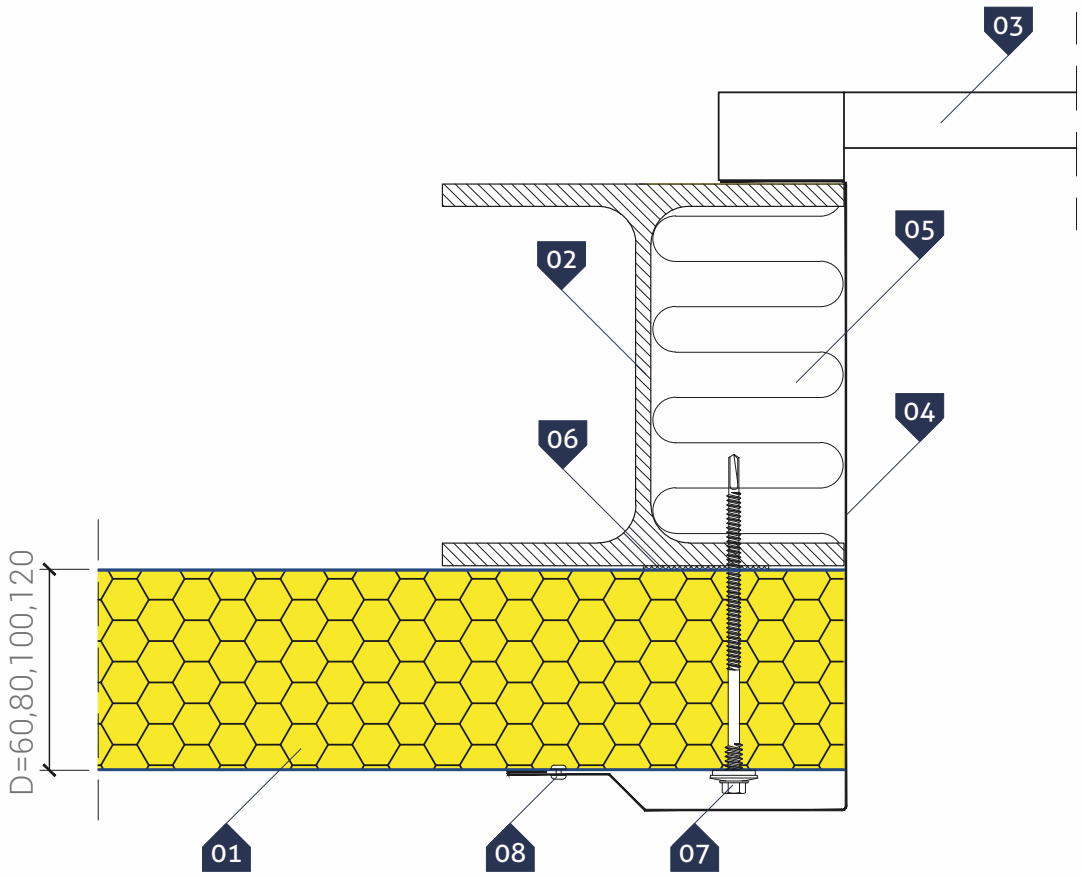
* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Reinforced concrete column acc. to structure design
03. Covering flashing **OB-17**
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
06. Connector for fastening of sandwich panels to concrete
07. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

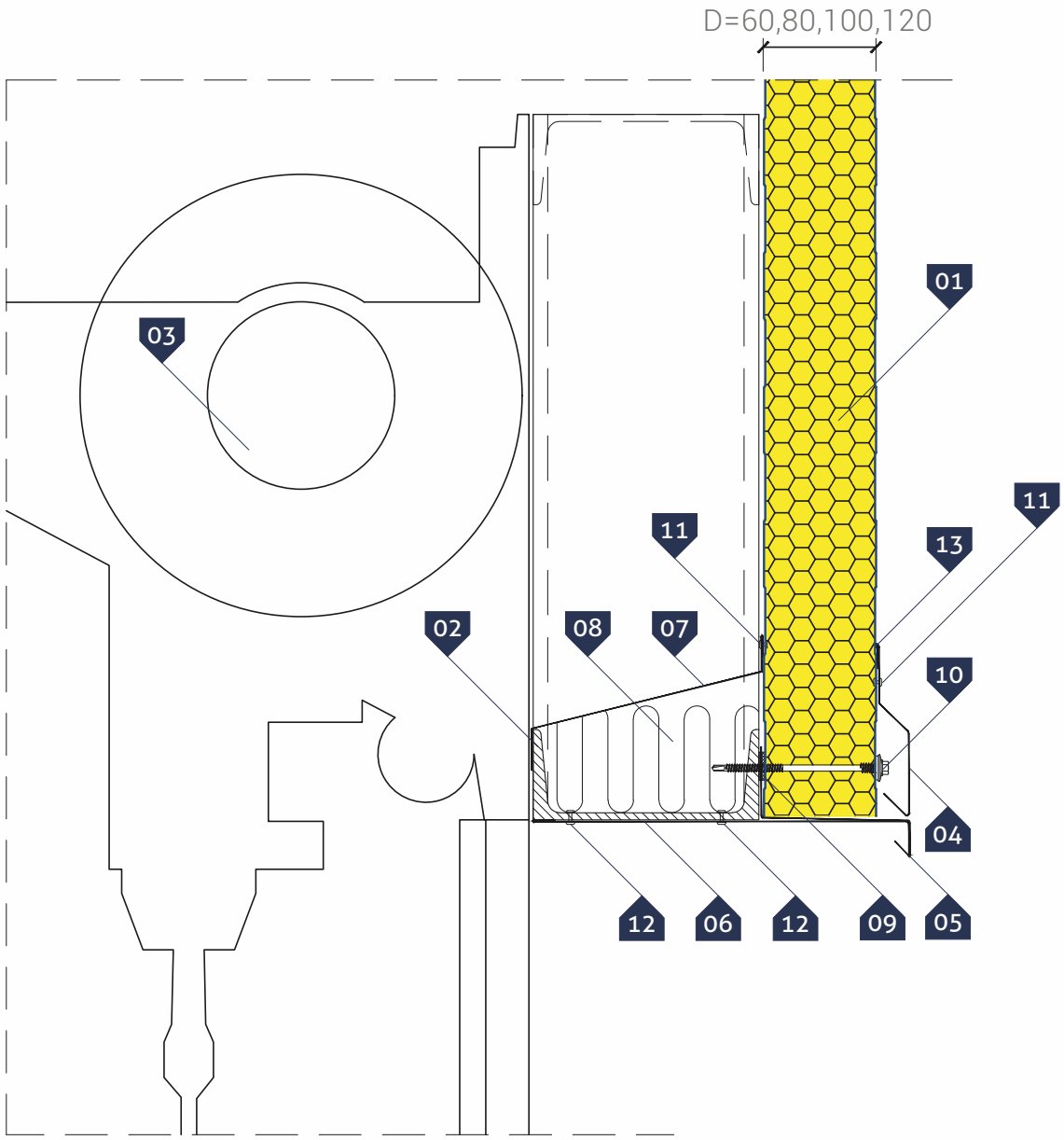
* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. Steel post acc. to structure design
03. Roller shutter door
04. Door flashing **OB-21**
05. Thermal insulation on the fastening
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Self-drilling connector for sandwich panels
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

* - a recommended item



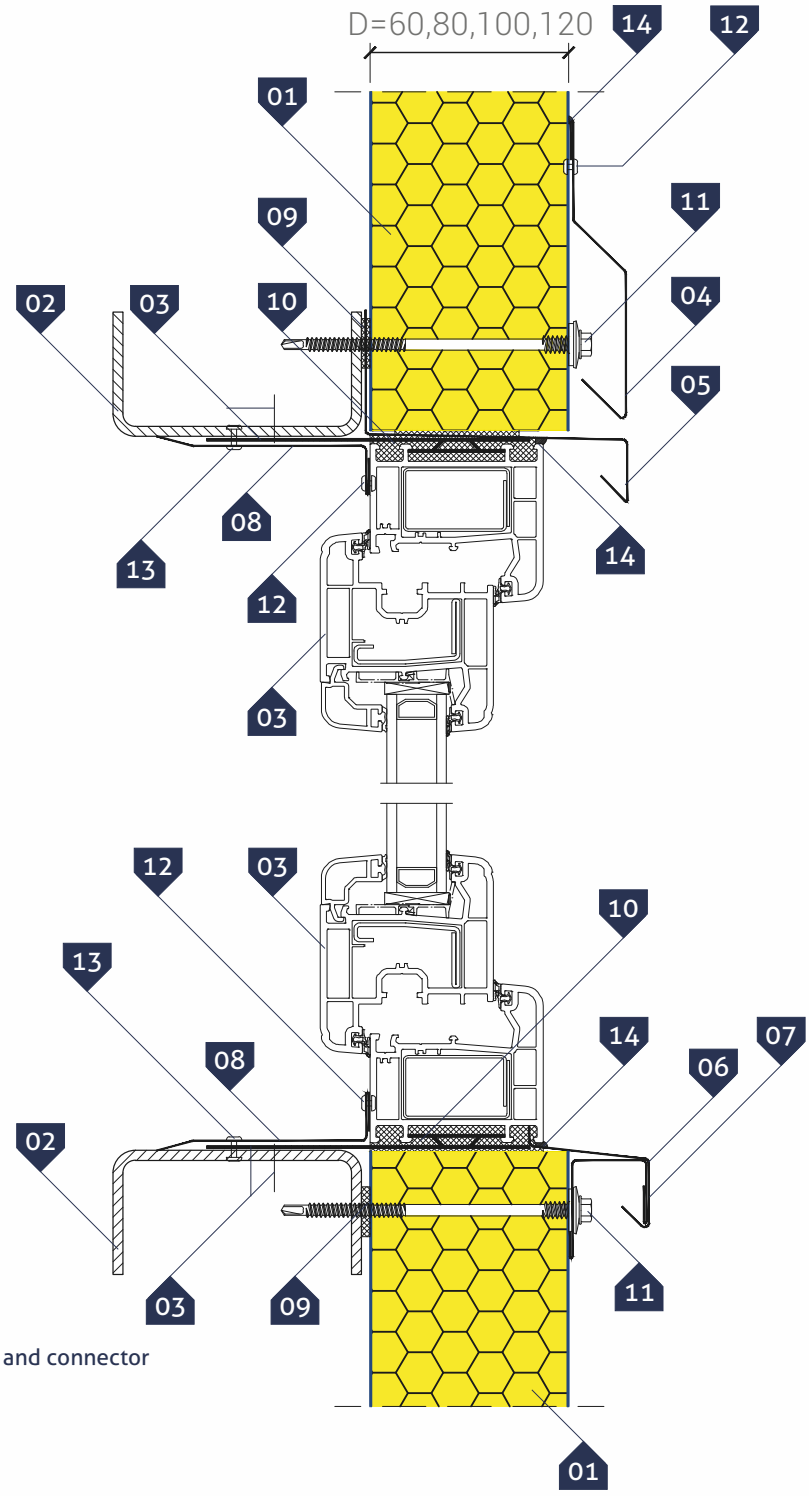
KEY:

01. **GS insPIRe® S** wall panel
02. Transom acc. to structure design
03. Roller shutter door
04. Drip edge **OB-10**
05. Drip edge **OB-13**
05. Drip edge **OB-20**
07. Individual covering flashing
08. Thermal insulation on the fastening
09. Polyethylene, self-adhesive sealing tape **(PES)***
10. Self-drilling connector for sandwich panels
11. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
12. Blind rivet **4,8 x 15,1** (for the structure)
13. Neutral silicone sealant

GS insPIRe® S wall sandwich panel (Standard cam-lock)

HORIZONTAL ARRANGEMENT of panels
Detail of window mounting in a sandwich panel
Type I – verticle section

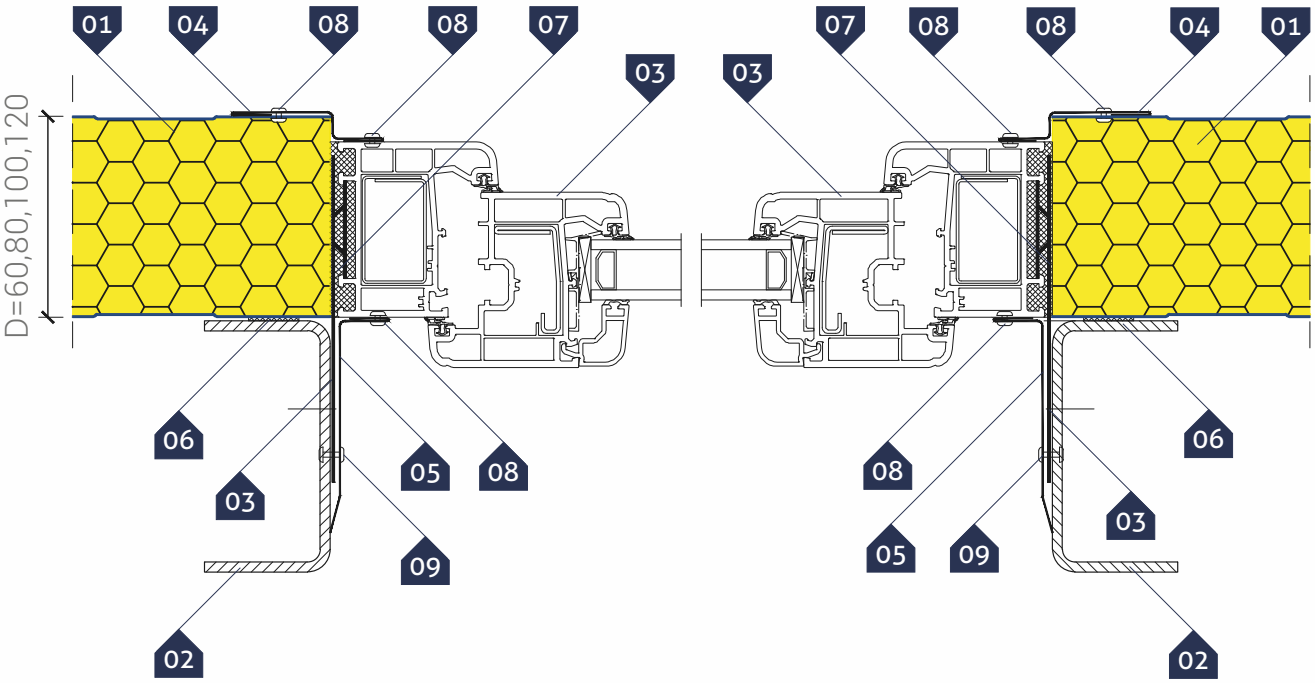
GÓR-STAL® SANDWICH PANELS



KEY:

01. **GS insPIRe® S** wall panel
02. Transom acc. to structure design
03. **PCV** or **aluminium** window with a holder and connector
04. Drip edge **OB-10**
05. Drip edge **OB-13**
06. Cill **OB-37**
07. Rigid flashing **OB-16**
08. Individual internal corner
09. Polyethylene, self-adhesive sealing tape **(PES)***
10. Polyethylene caulking foam
11. Self-drilling connector for sandwich panels
12. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
13. Blind rivet **4,8 x 15,1** (for the structure)
14. Neutral silicone sealant

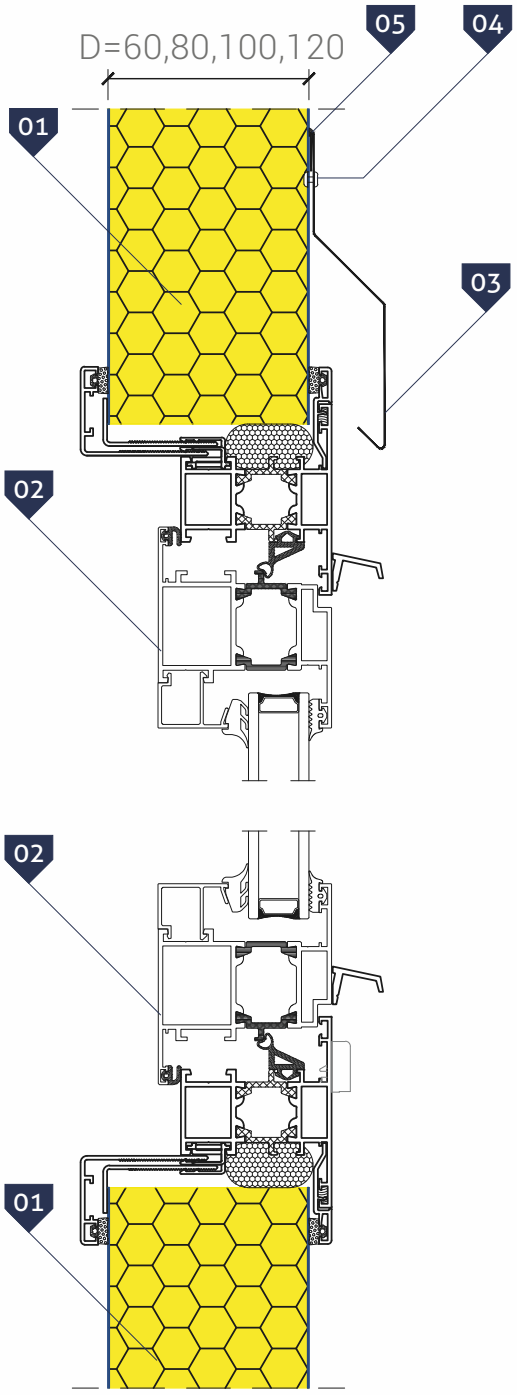
* - a recommended item



KEY:

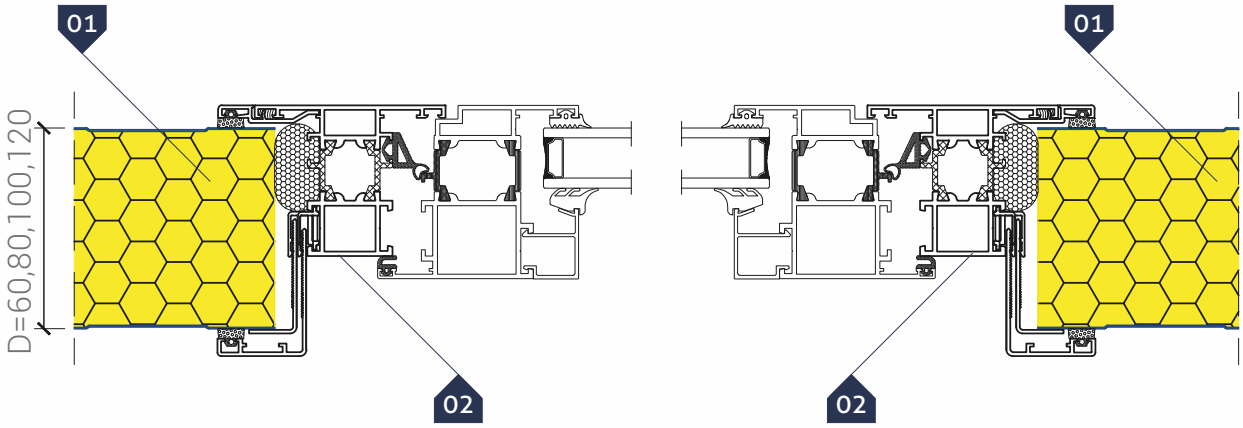
01. **GS insPIRe® S** wall panel
02. Transom acc. to structure design
03. **PVC** or **aluminium** window with a holder and connector
04. Individual covering flashing
05. Individual internal corner
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Polyethylene caulking foam
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
09. Blind rivet **4,8 x 15,1** (for the structure)

* - a recommended item



KEY:

01. **GS insPIRe® S** wall panel
02. **PVC** or **aluminium** window with a holder and connector
03. Drip edge **OB-11** (option)
04. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
05. Neutral silicone sealant



KEY:

1. **GS insPIRe® S** wall panel
2. **PVC** or **aluminium** window with a holder and connector

APPLICATION

GS insPIRe® U wall panel is designed for outer screening walls and inner partition walls in structural frame buildings. Panels can be mounted in both vertical and horizontal position, as single-span or multi-span wall elements. Hidden cam-lock, which is not visible from the outside makes the elevation look very functional and attractive architecturally.

PHYSICAL PROPERTIES

GS insPIRe® U wall panel is produced in the five thicknesses of the core: **60, 80, 100, 120 i 140 mm.** Panel facings are made of sheet metal galvanised on both sides according to **EN 10346** with organic polyester coating **25µm** thick. Thermal insulation core of the panels is a rigid polyisocyanurate (PIR) foam with a thickness of **40 kg/m³(+/-10%)**. The heat conductivity calculation value of the foam is: **λ =0,022 W/m·K** (for 2020 new panels will be available **MAX** with a core and a coefficient of **λ=0,019 W/m·K). Modular width** of plate is **1000 mm**. The standard panel length is between **2.0 to 12 m.** On special request we deliver panels shorter than **2 m** and longer than **12 m,** with a maximum length of **16.5 meters.** Water and air tightness of panel joints is assured by impregnated polyurethane seals **(PUS)** applied in the manufacturing process.

Thickness [mm]	Weight [kg/m²]		Modular width [mm]	Length: typical/available [m]	Lining standard RAL colours	
	facings 0,5/0,5 mm**	facings 0,5/0,4 mm**			external linings*	internal linings*
60	11,3	10,5	1000	2,0 - 12,0 / 16,5	3000, 5010, 6011, 7016, 7035, 8017, 9002, 9006, 9007,9010	9002, 9010
80	12,1	11,3				
100	12,9	12,1				
120	13,7	12,9				
140	14,5	13,7				

* available colors depending on the thickness of the cladding, panels thicknesses and modular widths (details from the Sales Representative)
****typical lining thicknesses; also available 0.6 and 0.7 mm (details from our Sales Representative)**

Thermal performance of panels depends on the thickness of the core and is expressed as a coefficient of heat transfer through a space dividing element (shown in the table below). Acoustic parameters were determined on the basis of **EN ISO 10140-3** and **EN-ISO 354**. Coldstore plates can be used as partitions of the requirements of sound insulation no greater than those specified below. Resistance to chemical corrosion - sandwich panels can be used in environments with atmosphere corrosiveness category C1, C2, C3 according to **EN ISO 12944-2**.

TECHNICAL PARAMETERS OF PIR CORE

Thickness [mm]	Heat-transfer coefficient U [W/m²·K]	Acoustic insulation	Reaction to fire	Fire resistance	NRO
	EN 14509	EN ISO 717-1	EN 13501-1	EN 13501-2	PN-B-02867
60	0,44*/ -	R_W = 23 dB R_{a1} = 21 dB R_{a2} = 20 dB	B-s1,d0	-	„NRO"
80	0,29*/ 0,26**				
100	0,23*/ 0,20**			EI 15	
120	0,19*/ 0,16**			EI 30	
140	0,16*/0,14**				

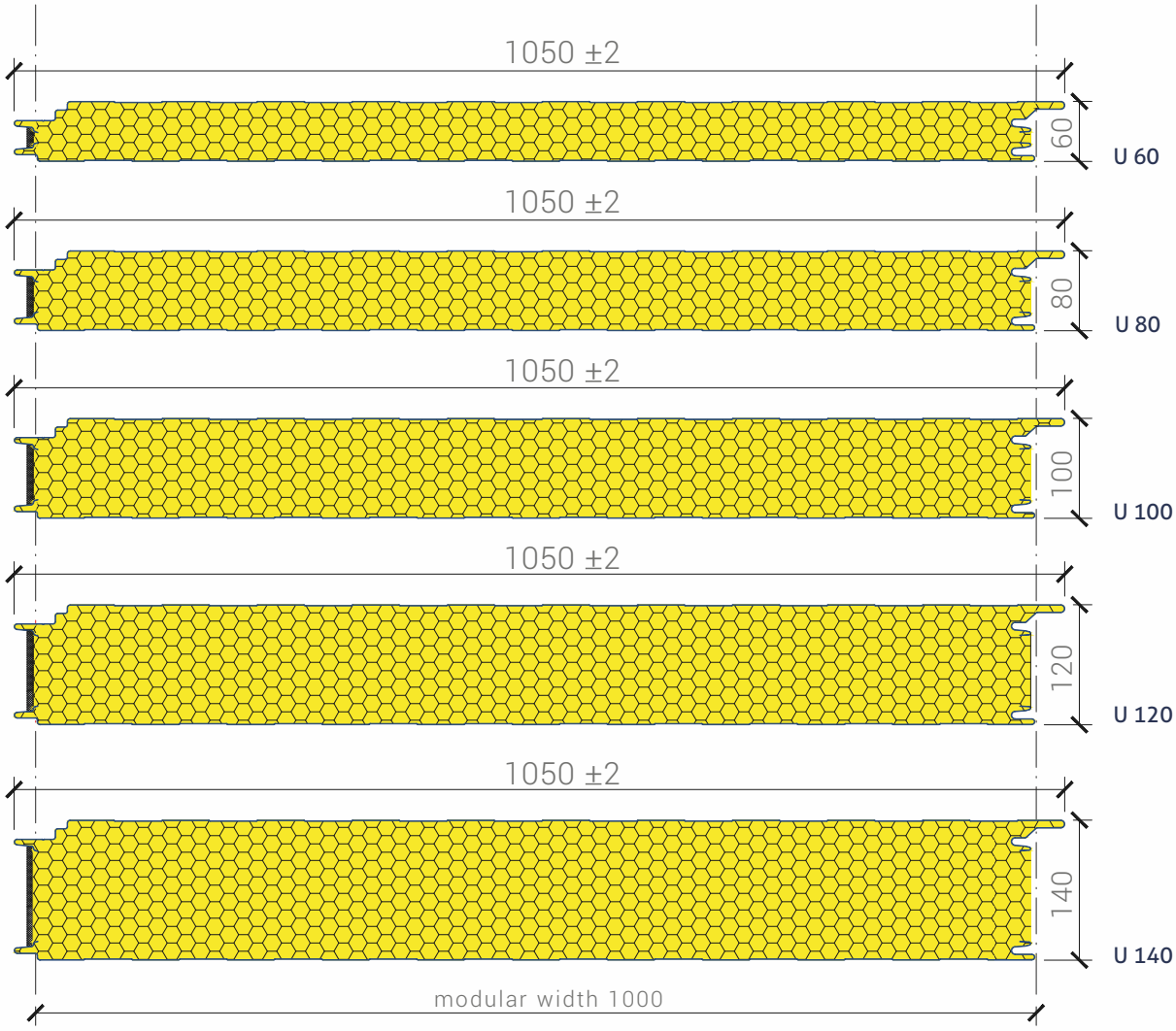
* value of U-factor for traditional core panels with a coefficient of λ=0,022 W/m·K
** value of U-factor for PIR MAX core panels with a coefficient of λ=0,019 W/m·K

PACKING

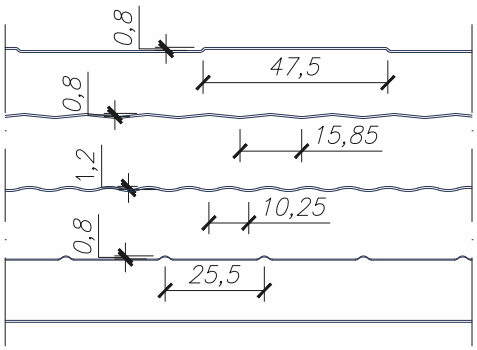
GS insPIRe® U sandwich panels are provided in packs on pallets allowing for their relocation. The table below specifies number of panels in a pack depending on panel thickness.

Panel thickness [mm]	60	80	100	120	140
Maximum number of panels in one pack	19	14	11	9	8

PANEL THICKNESS

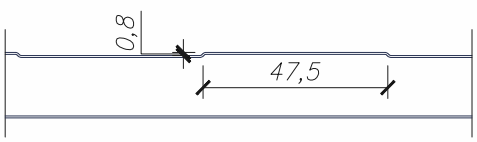


External lining profiles



L - Linear
M - Mircoprofiled
F - Wavy*
R - Grooving
P - Flat

Internal lining profiles



L - Linear
P - Flat

* - Profiling used for new orders as of February 2020. In the case when ordering panels for existing casings, please state this fact when placing the order and provide the previous order number as a reference.

TABLE OF ALLOWED LOADS FOR GS insPIRe® U SANDWICH PANEL

Load tables are prepared according to **EN 14 509** for panels with PIR core, linings in bright colors with a thickness of 0,5 mm and for internal temperature **T = 20°C**. Deflection condition assumed as **L/100**. For other data, separate calculations should be performed. Minimum width of supports **40/60** mm. Number of fasteners: **3/4** per support. Detailed tables of permissible loads are available on the website.

GS insPIRe® U mounted as a single-span element, loaded in direction: to support (pressure)

Panel thickness	The load due to:	The maximum load [kN/m²] 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	4,799	3,697	2,553	1,868	1,426	1,124	0,908	0,749	0,629	0,535
	SGU (q_k)	7,918	5,141	3,513	2,486	1,808	1,347	0,997	0,741	0,558	0,426	0,314
80	SGN (q_d)	7,030	5,236	4,171	3,411	2,496	1,905	1,502	1,214	1,002	0,840	0,715
	SGU (q_k)	8,948	6,665	5,211	3,783	2,814	2,136	1,651	1,297	1,033	0,812	0,643
100	SGN (q_d)	7,617	5,673	4,520	3,756	3,125	2,385	1,880	1,520	1,254	1,052	0,895
	SGU (q_k)	9,695	7,222	5,754	4,781	3,551	2,711	2,137	1,728	1,426	1,196	1,009
120	SGN (q_d)	7,631	5,684	4,528	3,763	3,219	2,812	2,497	2,245	1,869	1,567	1,334
	SGU (q_k)	9,713	7,235	5,764	4,790	4,098	3,580	3,132	2,513	2,039	1,672	1,385
140	SGN (q_d)	7,631	5,684	4,528	3,763	3,219	2,812	2,497	2,245	2,039	1,830	1,557
	SGU (q_k)	9,713	7,235	5,764	4,790	4,098	3,580	3,179	2,858	2,441	2,027	1,697

GS insPIRe® U mounted as a single-span element, loaded in direction: from support(suction)

Panel thickness	The load due to:	The maximum load [kN/m²] 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	0,756	0,687	0,629	0,535
	SGU (q_k)	3,424	2,550	2,032	1,688	1,444	1,262	0,951	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
100 120 140	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

GS insPIRe® U mounted as a multi-span element, loaded in direction: to support (pressure)

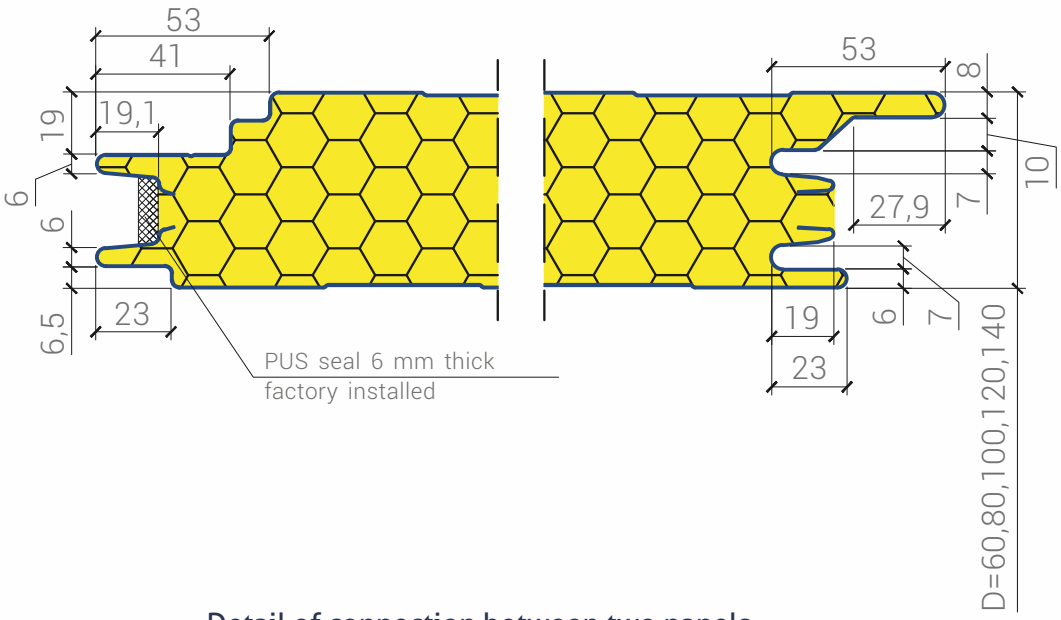
Panel thickness	The load due to:	The maximum load [kN/m²] on the span length [m]:										
		1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5
60	SGN (q_d)	4,768	3,523	2,799	1,900	1,323	0,977	0,752	0,598	0,487	0,404	0,341
	SGU (q_k)	6,201	4,571	3,623	2,571	1,805	1,340	1,036	0,826	0,674	0,561	0,474
80	SGN (q_d)	5,316	3,918	3,108	2,580	1,847	1,352	1,034	0,817	0,663	0,549	0,463
	SGU (q_k)	6,925	5,094	4,033	3,340	2,502	1,843	1,417	1,125	0,915	0,760	0,641
100	SGN (q_d)	5,872	4,319	3,422	2,837	2,411	1,750	1,330	1,047	0,846	0,699	0,588
	SGU (q_k)	7,654	5,623	4,446	3,679	3,139	2,372	1,814	1,434	1,164	0,964	0,812
120	SGN (q_d)	5,883	4,320	3,419	2,834	2,422	2,177	1,641	1,286	1,036	0,853	0,716
	SGU (q_k)	7,686	5,640	4,456	3,685	3,144	2,742	2,228	1,755	1,420	1,173	0,987
140	SGN (q_d)	5,928	4,342	3,429	2,837	2,422	2,115	1,878	1,569	1,256	1,029	0,859
	SGU (q_k)	7,742	5,674	4,475	3,696	3,150	2,746	2,434	2,126	1,710	1,407	1,179

GS insPIRe® U mounted as a multi-span element, loaded in direction: from support(suction)

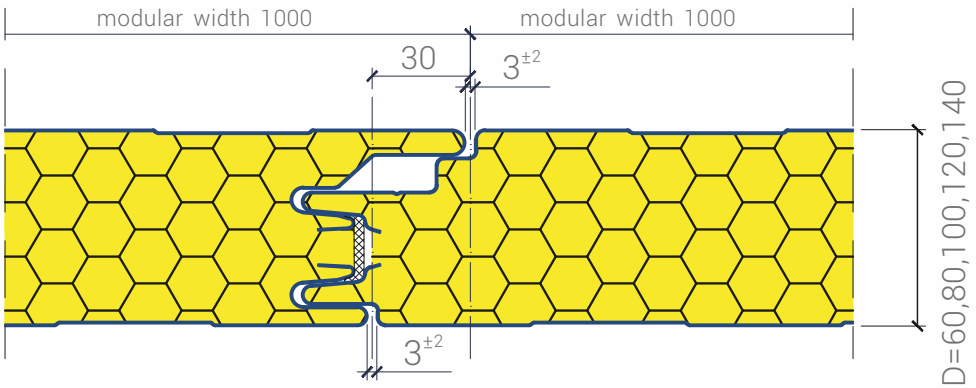
Panel thickness	The load due to:	The maximum load [kN/m²] on the span length [m]:										
		1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5
60	SGN (q_d)	2,191	1,630	1,350	1,090	0,937	0,823	0,692	0,542	0,437	0,360	0,302
	SGU (q_k)	1,781	1,322	1,056	0,881	0,756	0,663	0,590	0,532	0,484	0,444	0,411
80	SGN (q_d)	2,157	1,601	1,281	1,071	0,922	0,810	0,723	0,653	0,595	0,497	0,415
	SGU (q_k)	1,760	1,304	1,041	0,868	0,746	0,655	0,583	0,526	0,479	0,440	0,407
100	SGN (q_d)	2,130	1,575	1,259	1,053	0,907	0,798	0,713	0,644	0,588	0,541	0,501
	SGU (q_k)	1,744	1,288	1,027	0,857	0,737	0,647	0,577	0,521	0,475	0,436	0,404
120	SGN (q_d)	2,107	1,552	1,239	1,036	0,893	0,786	0,703	0,636	0,581	0,535	0,495
	SGU (q_k)	1,730	1,273	1,014	0,846	0,728	0,639	0,570	0,515	0,470	0,432	0,400
140	SGN (q_d)	2,127	1,555	1,234	1,029	0,885	0,779	0,696	0,630	0,575	0,530	0,491
	SGU (q_k)	1,745	1,277	1,012	0,842	0,723	0,635	0,566	0,511	0,467	0,429	0,397

Selected details of cladding made of GS insPIRe® U sandwich panels

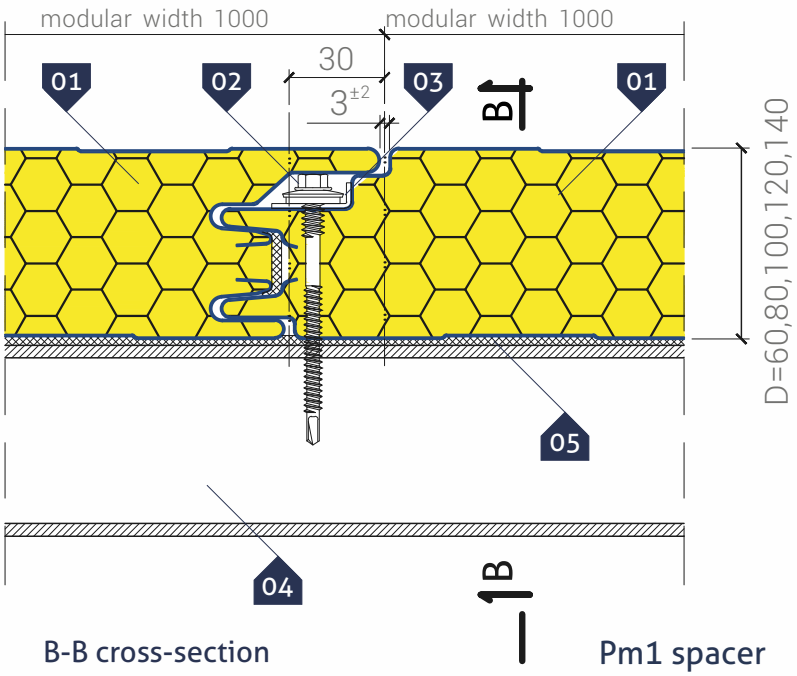
Shape of panels cam-lock



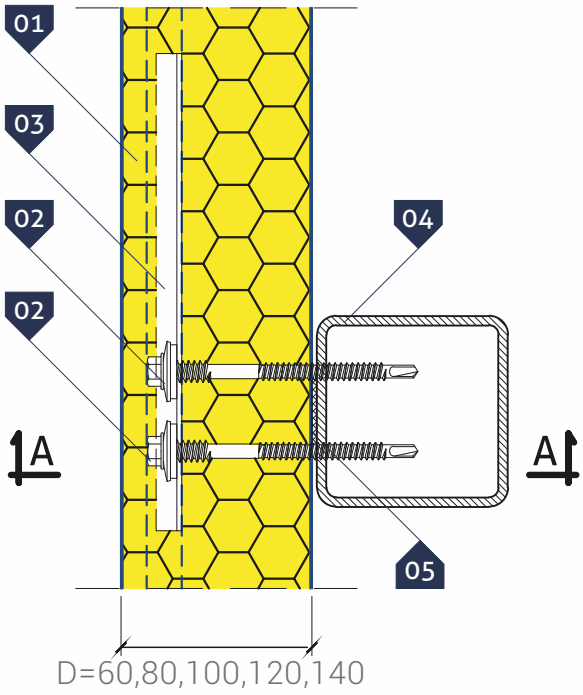
Detail of connection between two panels



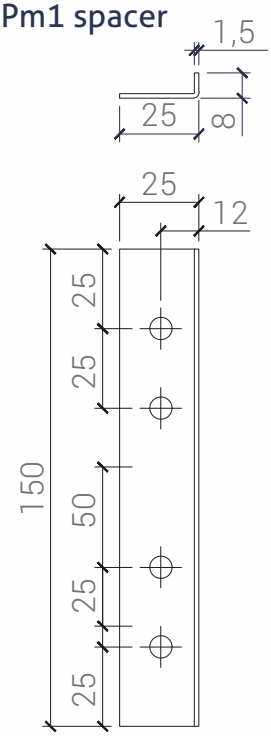
A-A cross-section



B-B cross-section



Pm1 spacer

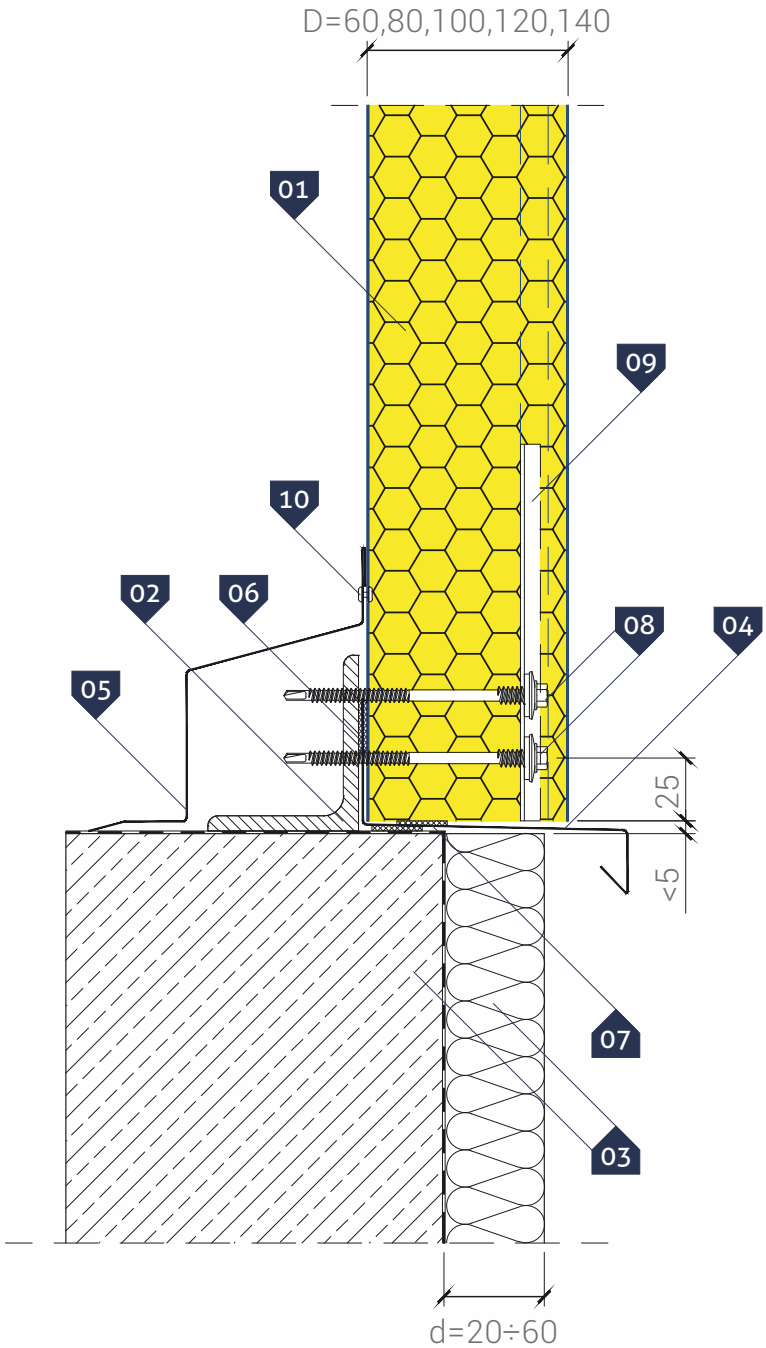


KEY:

01. **GS insPIRe® U** wall panel
02. Self-drilling connector for sandwich panels
03. **PM1** spacer
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Transom acc. to structure design

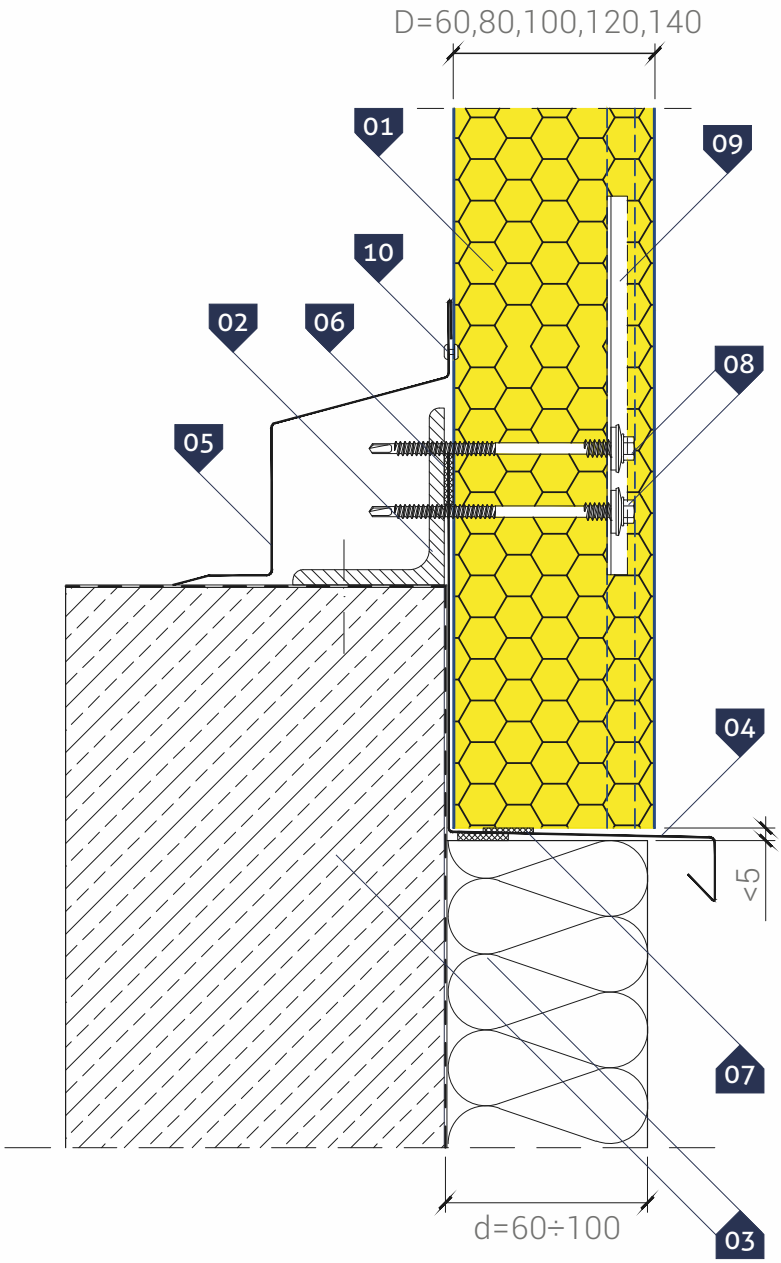
NOTE: Fasten each panel along its length to a structure with a minimum of two cam-locks

* - a recommended item



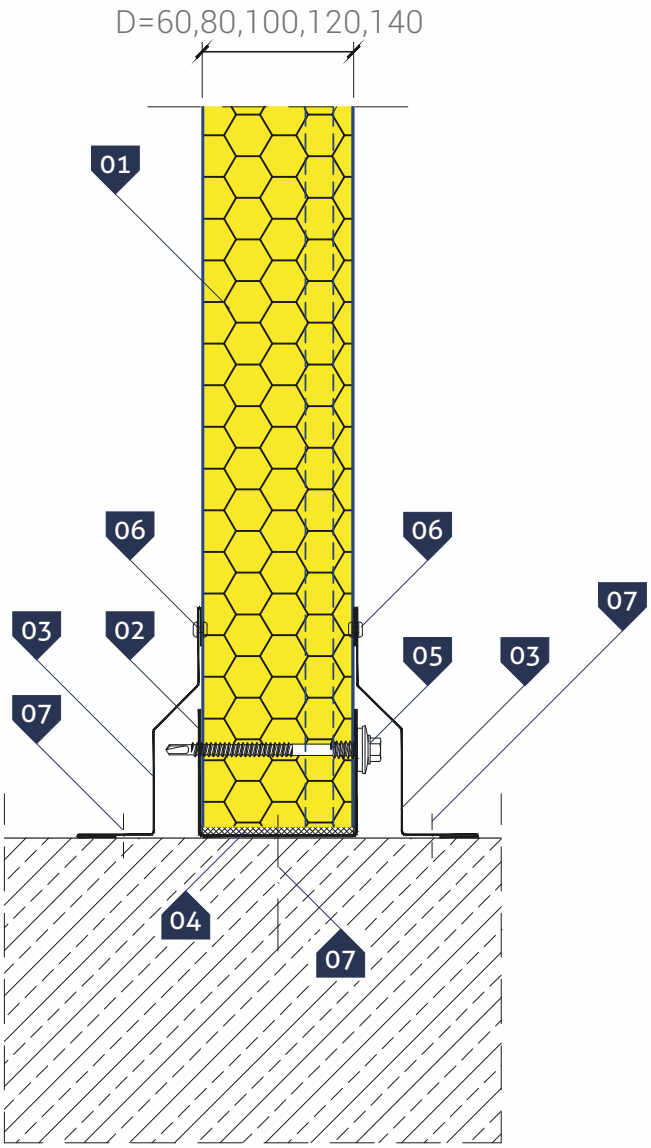
KEY:
01. **GS insPIRe® U** wall panel
02. Steel section acc. to structure design
03. Ground beam with insulation and thermal insulation acc. to detailed design
04. Drip edge **OB-13**
05. Covering flashing **OB-09**
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Impregnated polyurethane seal
08. Self-drilling connector for sandwich panels
09. **PM1** spacer
10. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

* - a recommended item



KEY:
01. **GS insPIRe® U** wall panel
02. Steel section acc. to structure design
03. Grround beam with insulation and thermal insulation acc. to detailed design
04. Eaves **OB-13** (extended)
05. Covering flashing **OB-09**
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Impregnated polyurethane seal
08. Self-drilling connector for sandwich panels
09. **PM1** spacer
10. Tight blind rivet **4,8 x 9,5**

* - a recommended item



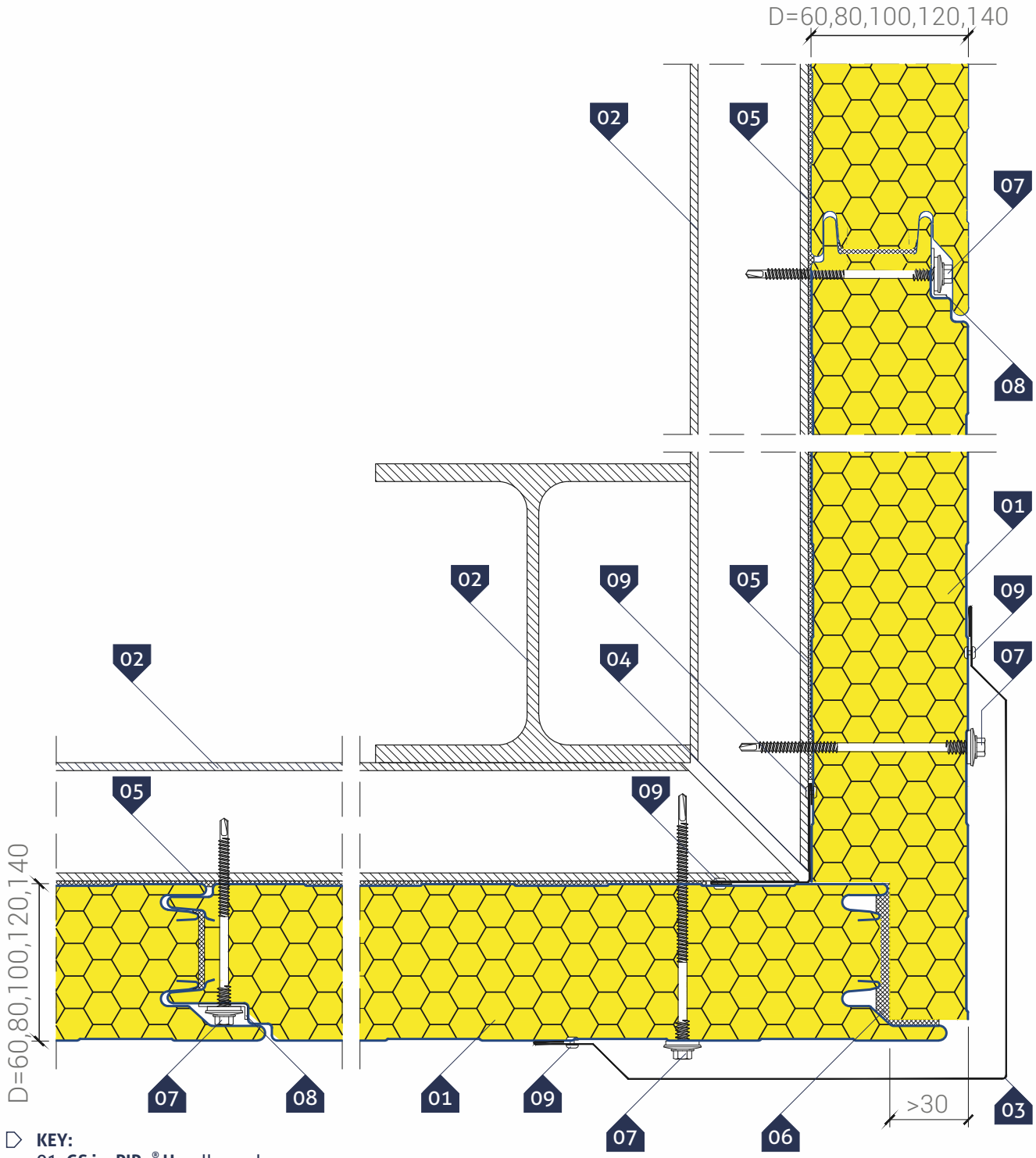
KEY:

01. **GS insPIRe® U** wall panel
02. Edge channel section **OB-42**
03. Covering flashing **OB-05**
04. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
05. Self-drilling connector for sandwich panels
06. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
07. Steel expansion joint for fast assembly

GS insPIRe® U wall sandwich panel (Hidden cam-lock)

VERTICAL ARRANGEMENT of panels
Detail of panel connection in a corner
Type I

GÓR-STAL® SANDWICH PANELS



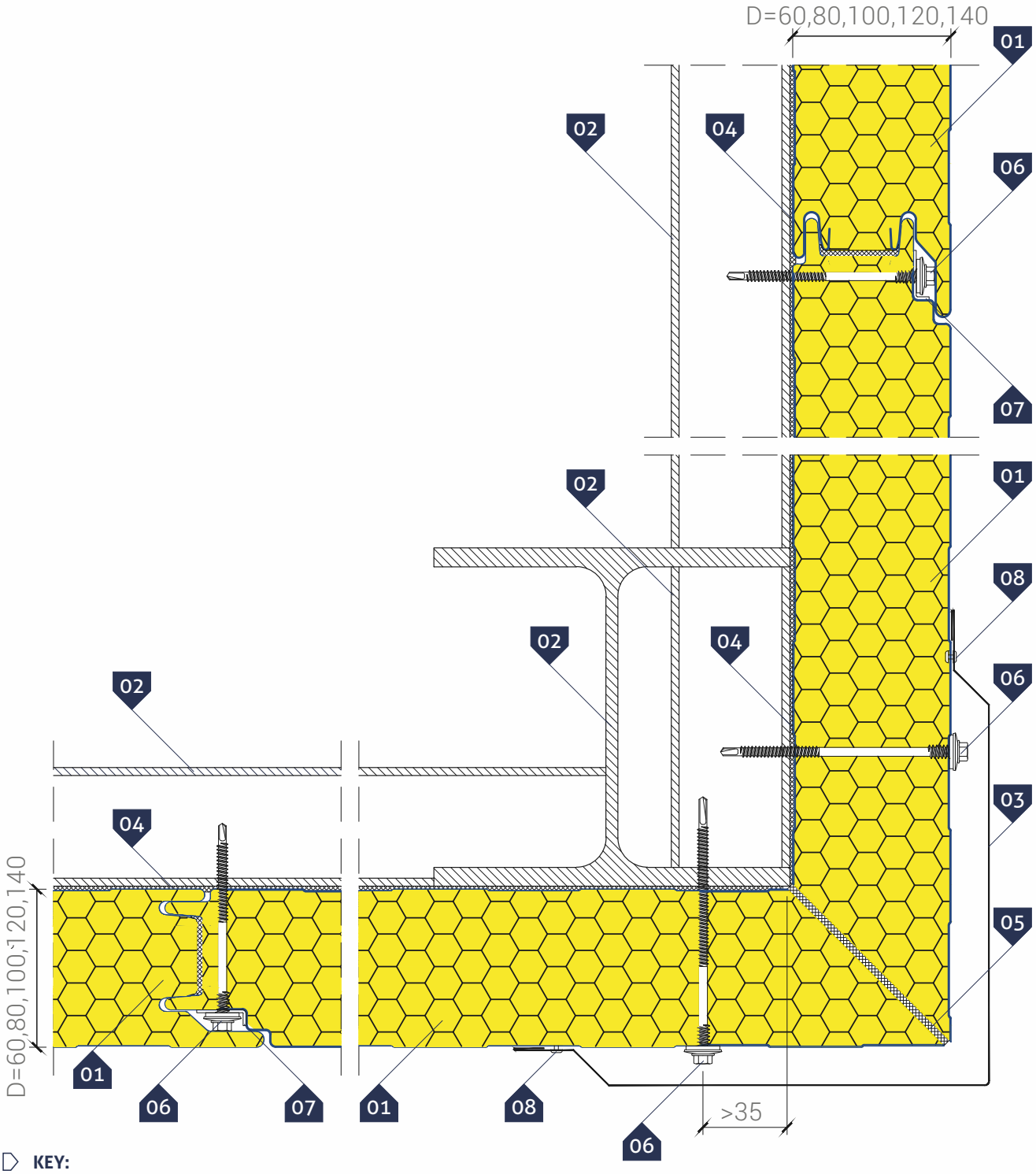
KEY:
01. **GS insPIRe® U** wall panel
02. Steel post and transom acc. to structure design
03. Corner flashing **OB-03**
04. Corner flashing **OB-02**
05. Polyethylene, self-adhesive sealing tape **(PES)***
06. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
07. Self-drilling connector for sandwich panels
08. **PM1** spacer
09. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

* - a recommended item

GS insPIRe® U wall sandwich panel (Hidden cam-lock)

VERTICAL ARRANGEMENT of panels
Detail of panel connection in a corner
Type II

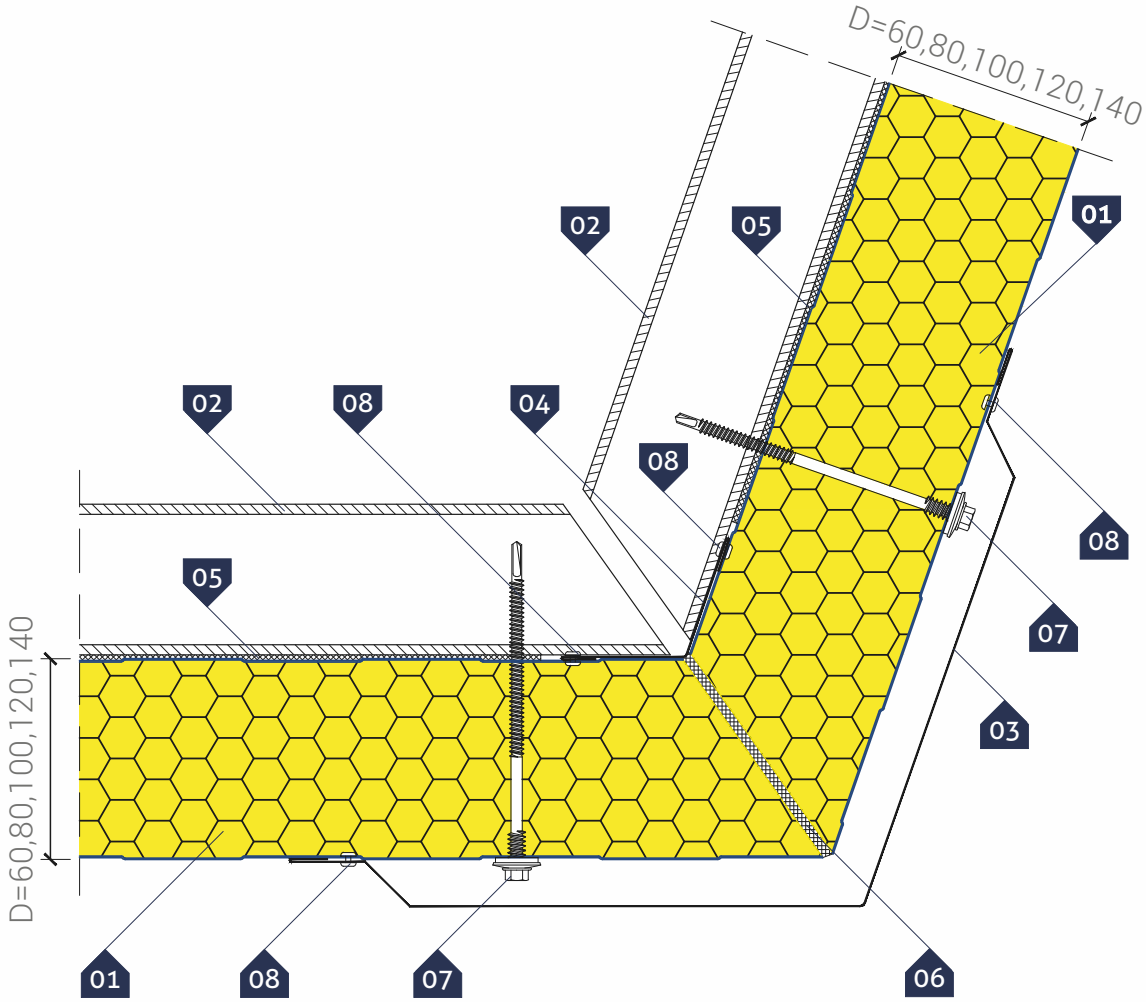
GÓR-STAL® SANDWICH PANELS



KEY:

01. **GS insPIRe® U** wall panel
02. Steel post and transom acc. to structure design
03. Corner flashing **OB-03**
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
06. Self-drilling connector for sandwich panels
07. **PM1** spacer
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

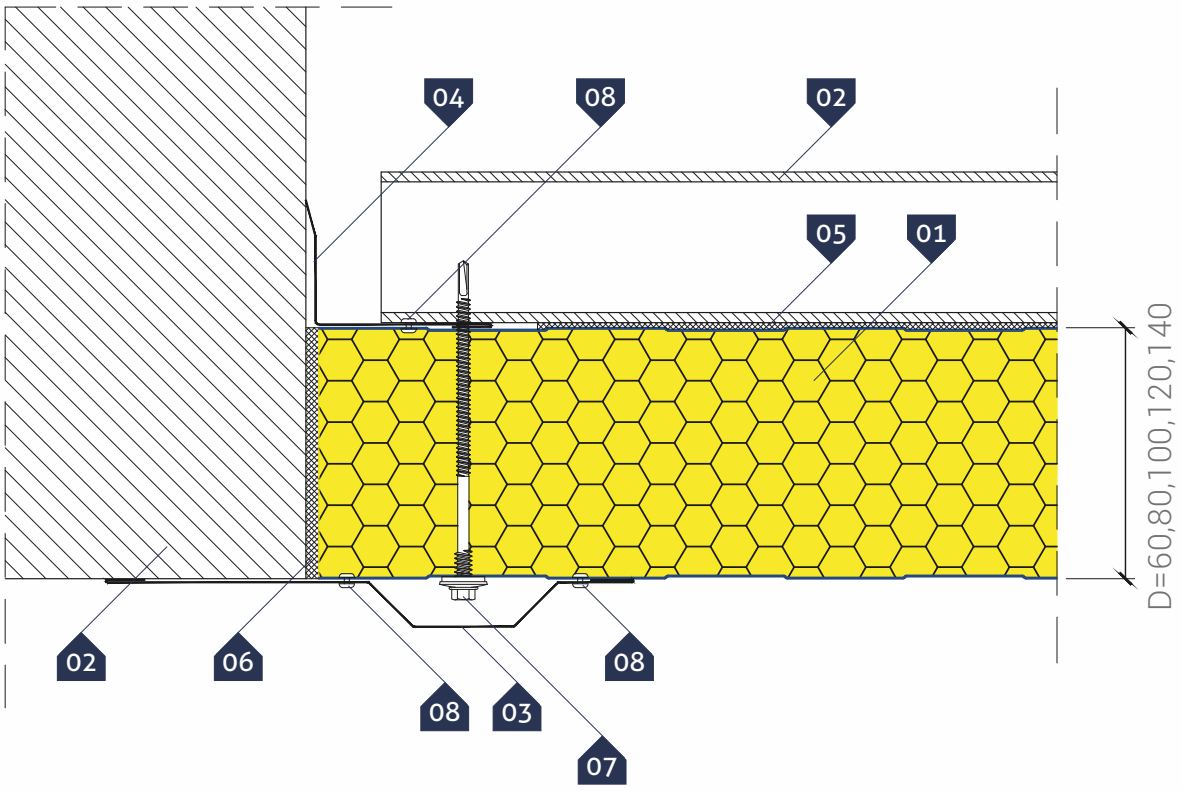
* - a recommended item



KEY:

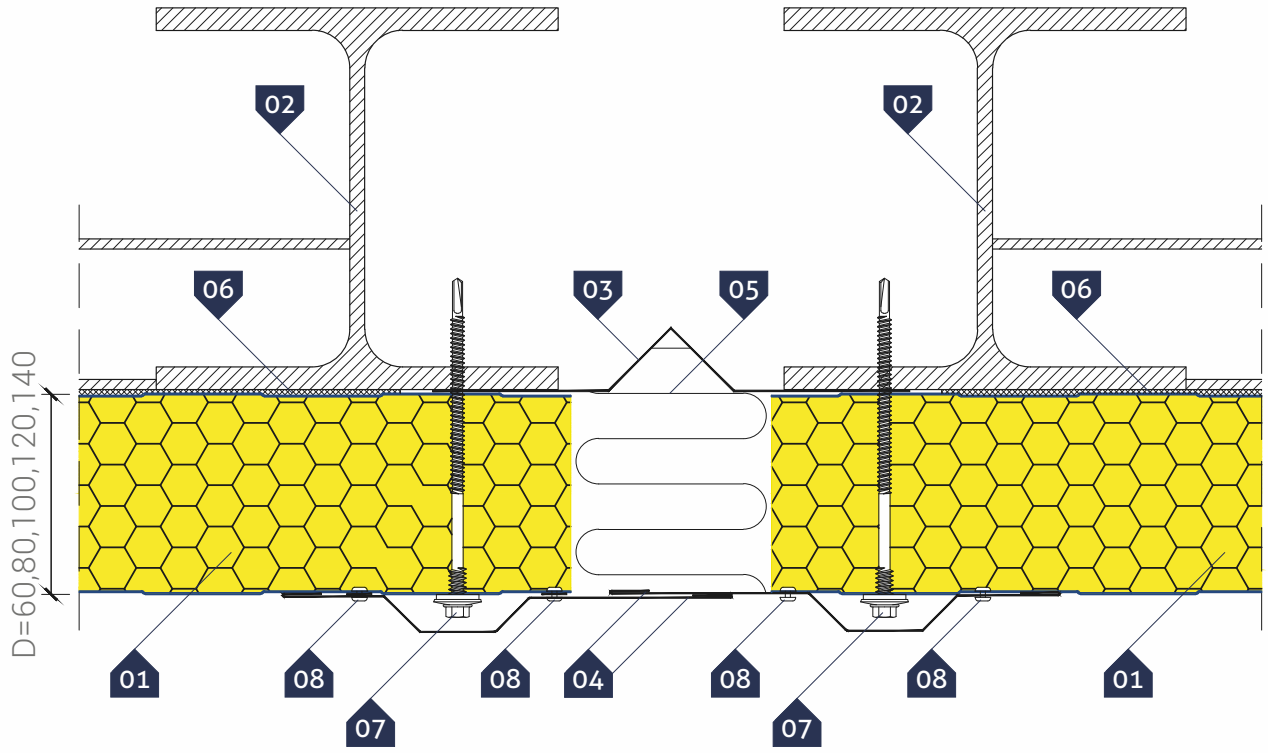
01. **GS insPIRe® U** wall panel
02. Transom acc. to structure design
03. Corner flashing **OB-03**
04. Corner flashin **OB-02**
05. Polyethylene, self-adhesive sealing tape **(PES)***
06. Polyurethane caulking foam
07. Self-drilling connector for sandwich panels
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

* - a recommended item



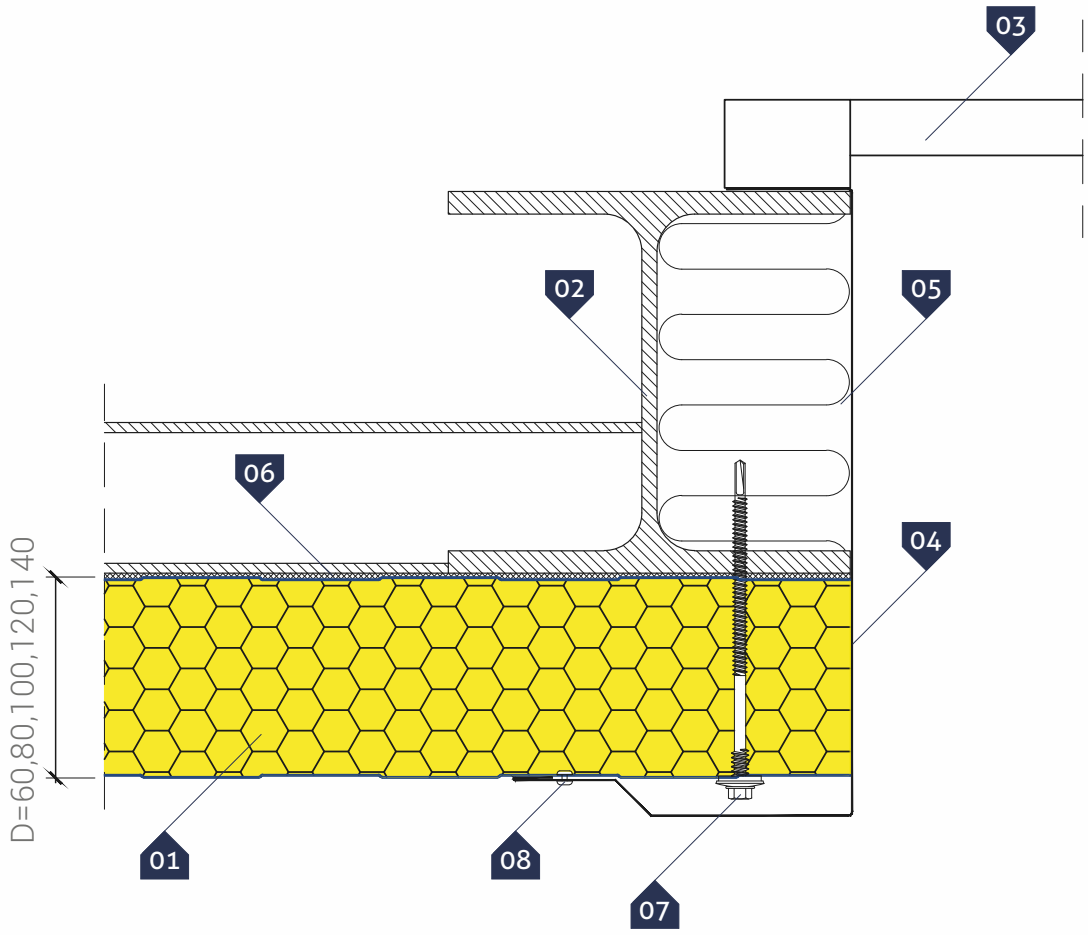
KEY:
01. **GS insPIRe® U** wall panel
02. Blockwall and transom acc. to structure design
03. Covering flashing **OB-19**
04. Inner corner flashing **OB-07**
05. Polyethylene, self-adhesive sealing tape **(PES)***
06. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
07. Self-drilling connector for sandwich panels
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

* - a recommended item



KEY:
01. **GS insPIRe® U** wall panel
02. Steel posts and transom acc. to structure design
03. Individual expansion joint flashing
04. Covering flashing **OB-17**
05. Thermal insulation on the fastening
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Self-drilling connector for sandwich panels
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

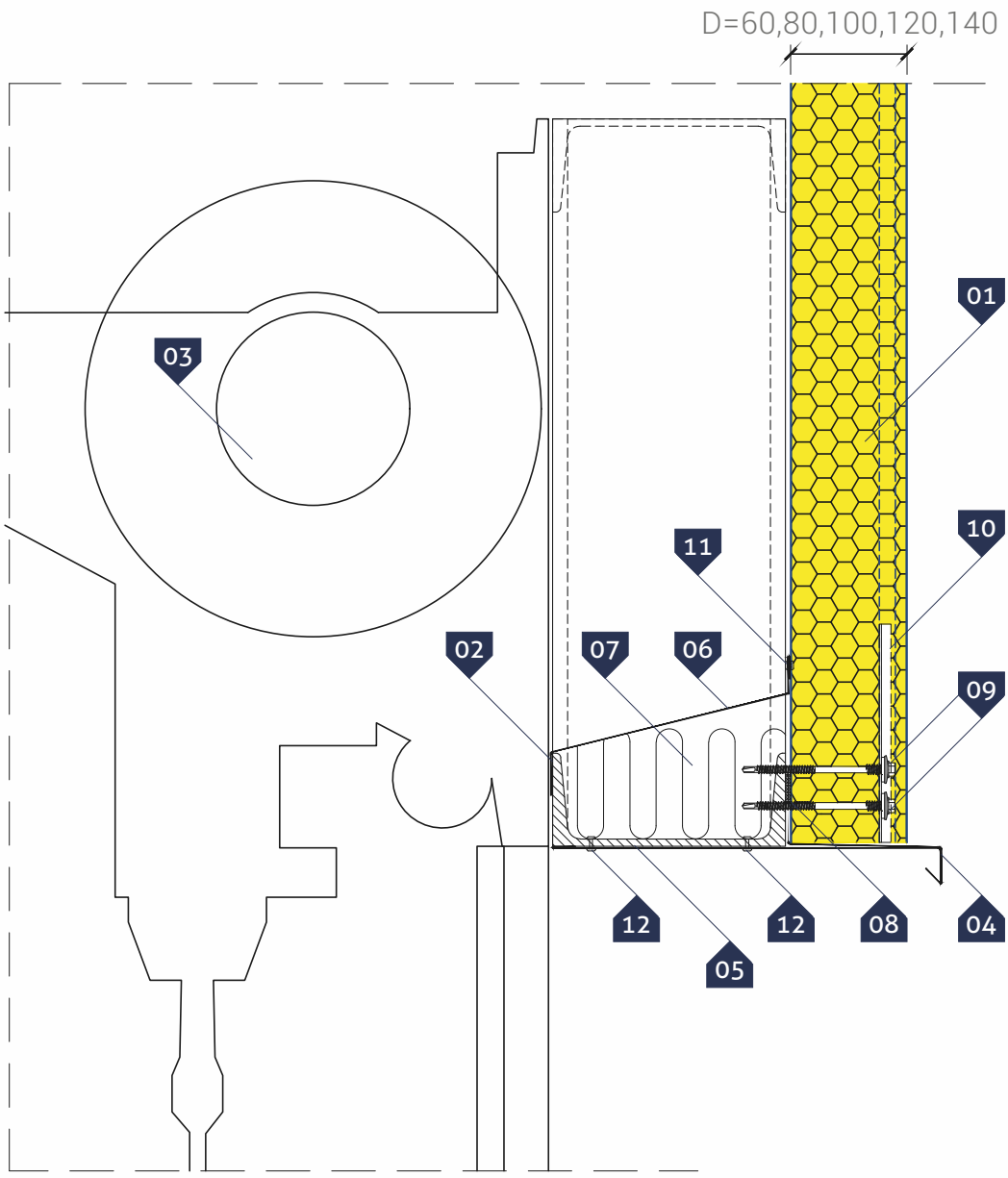
* - a recommended item



KEY:

01. **GS insPIRe® U** wall panel
02. Steel post and transom acc. to structure design
03. Industrial door
04. Door flashing **OB-21**
05. Thermal insulation on the fastening
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Self-drilling connector for sandwich panels
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

* - a recommended item



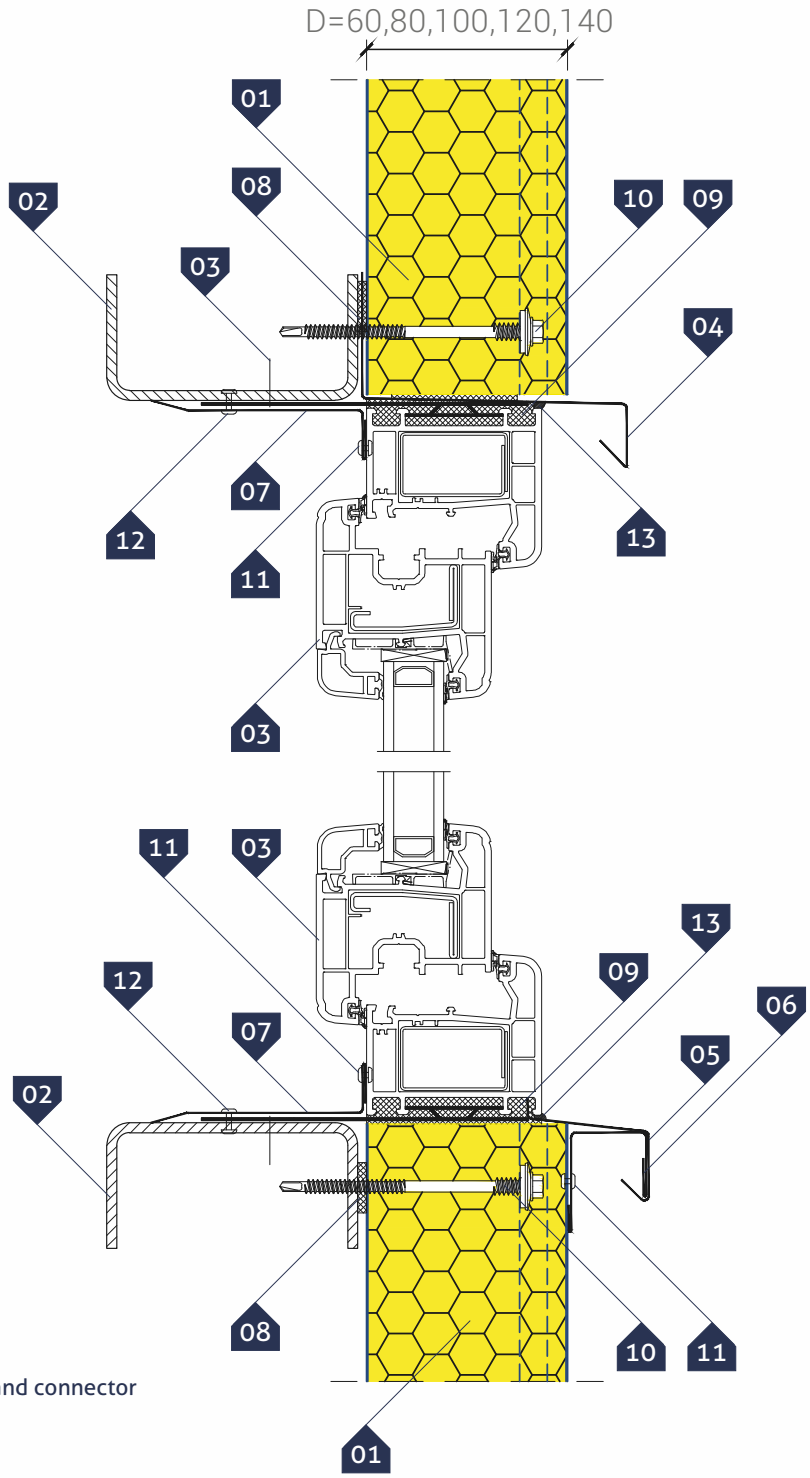
KEY:
01. **GS insPIRe® U** wall panel
02. Transom acc. to structure design
03. Roller shutter door
04. Drip edge **OB-13**
05. Covering flashing **OB-20**
06. Individual covering flashing
07. Thermal insulation on the fastening
08. Polyethylene, self-adhesive sealing tape **(PES)***
09. Self-drilling connector for sandwich panels
10. **PM1** spacer
11. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
12. Blind rivet **4,8 x 15,1** (for the structure)

* - a recommended item

GS insPIRe® U wall sandwich panel (Hidden cam-lock)

VERTICAL ARRANGEMENT of panels
Detail of window mounting in a sandwich panel
Type I – vertical section

GÓR-STAL® SANDWICH PANELS



KEY:

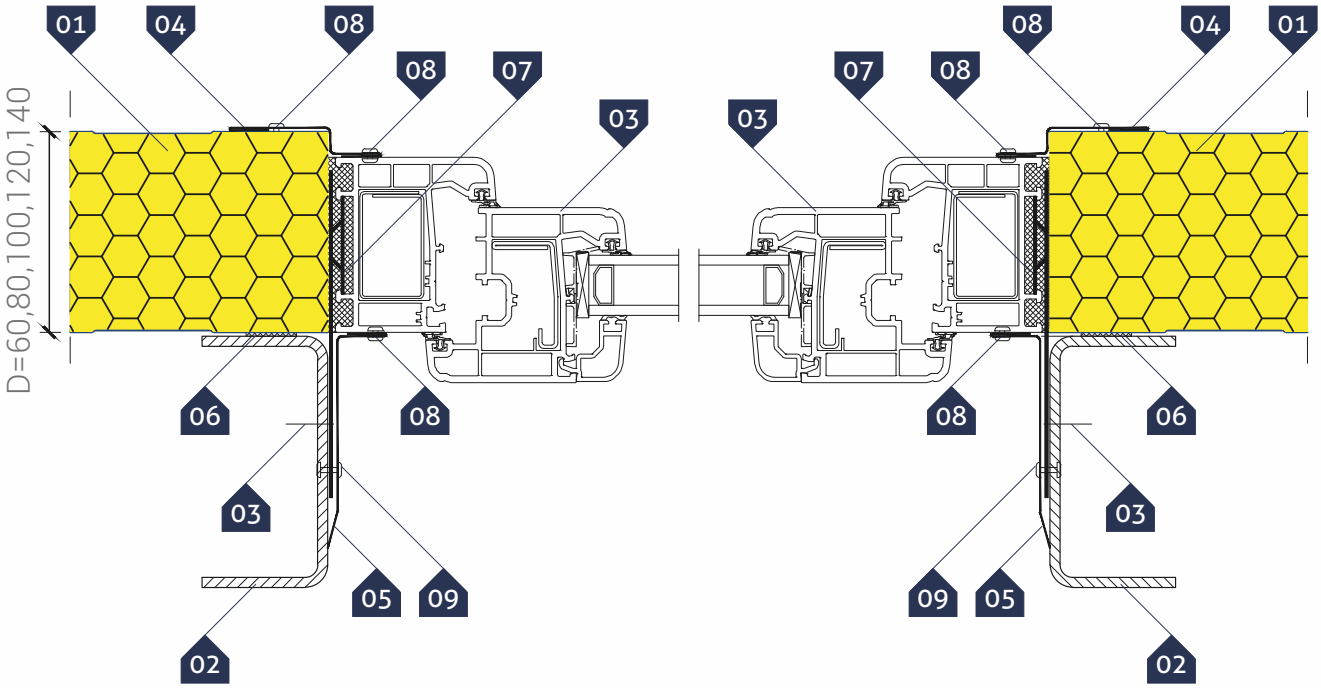
01. **GS insPIRe® U** wall panel
02. Transom acc. to structure design
03. **PCV** or **aluminium** window with a holder and connector
04. Drip edge **OB-13**
05. Cill **OB-37**
06. Stiffening flashing **OB-16**
07. Individual internal corner
08. Polyethylene, self-adhesive sealing tape **(PES)***
09. Polyurethane caulking foam
10. Self-drilling connector for sandwich panels
11. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
12. Blind rivet **4,8 x 15,1** (for the structure)
13. Neutral silicone sealant

* - a recommended item

GS insPIRe® U wall sandwich panel (Hidden cam-lock)

VERTICAL ARRANGEMENT of panels
Detail of window mounting in a sandwich panel
Type I – horizontal section

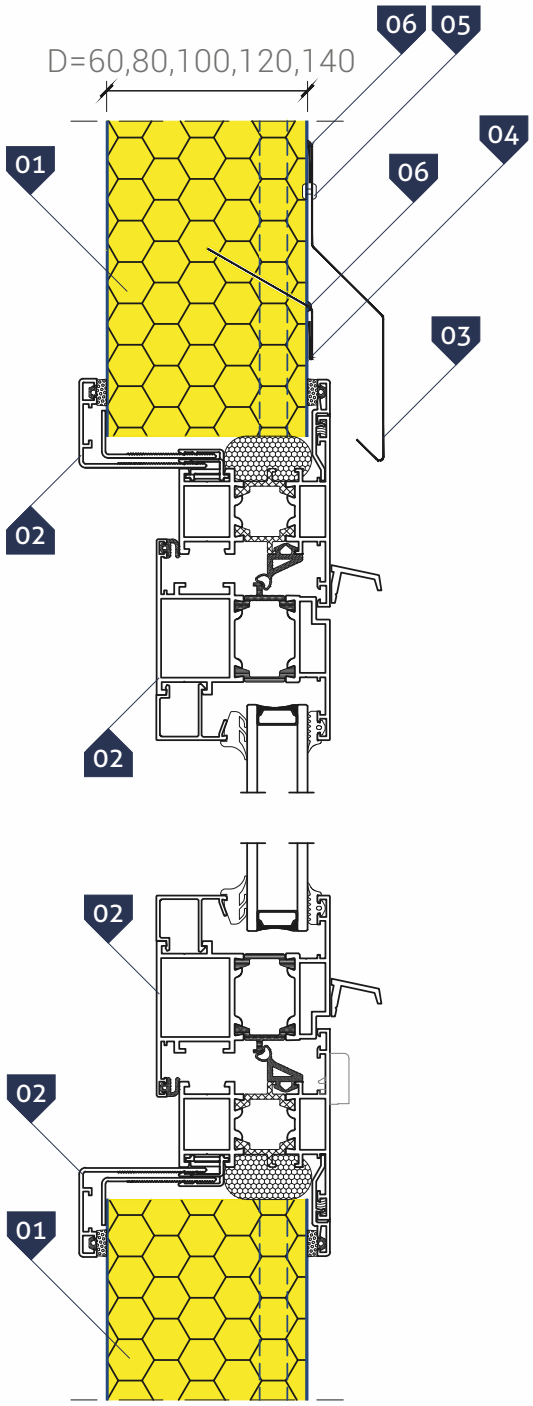
GÓR-STAL® SANDWICH PANELS



KEY:

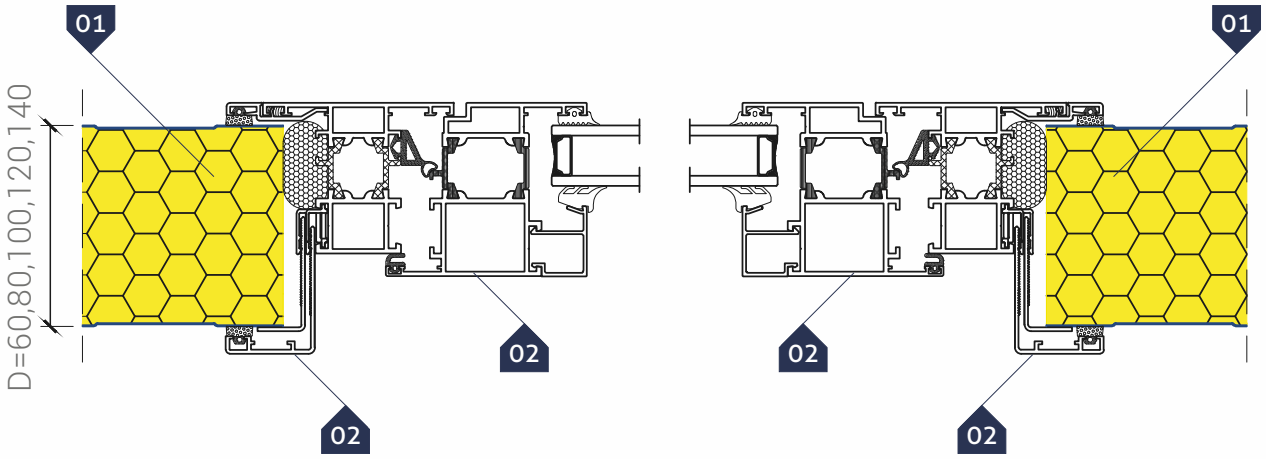
01. **GS insPIRe® U** wall panel
02. Transom acc. to structure design
03. **PCV** or **aluminium** window with a holder and connector
04. Individual covering flashing
05. Individual internal corner
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Polyurethane caulking foam
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
09. Blind rivet **4,8 x 15,1** (for the structure)

* - a recommended item



KEY:

01. **GS insPIRe® U** wall panel
02. **PCV** or **aluminium** window with a fastening profile
03. Drip edge **OB-11** (option)
04. Additional flashing on panels' junction
05. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
06. Neutral silicone sealant

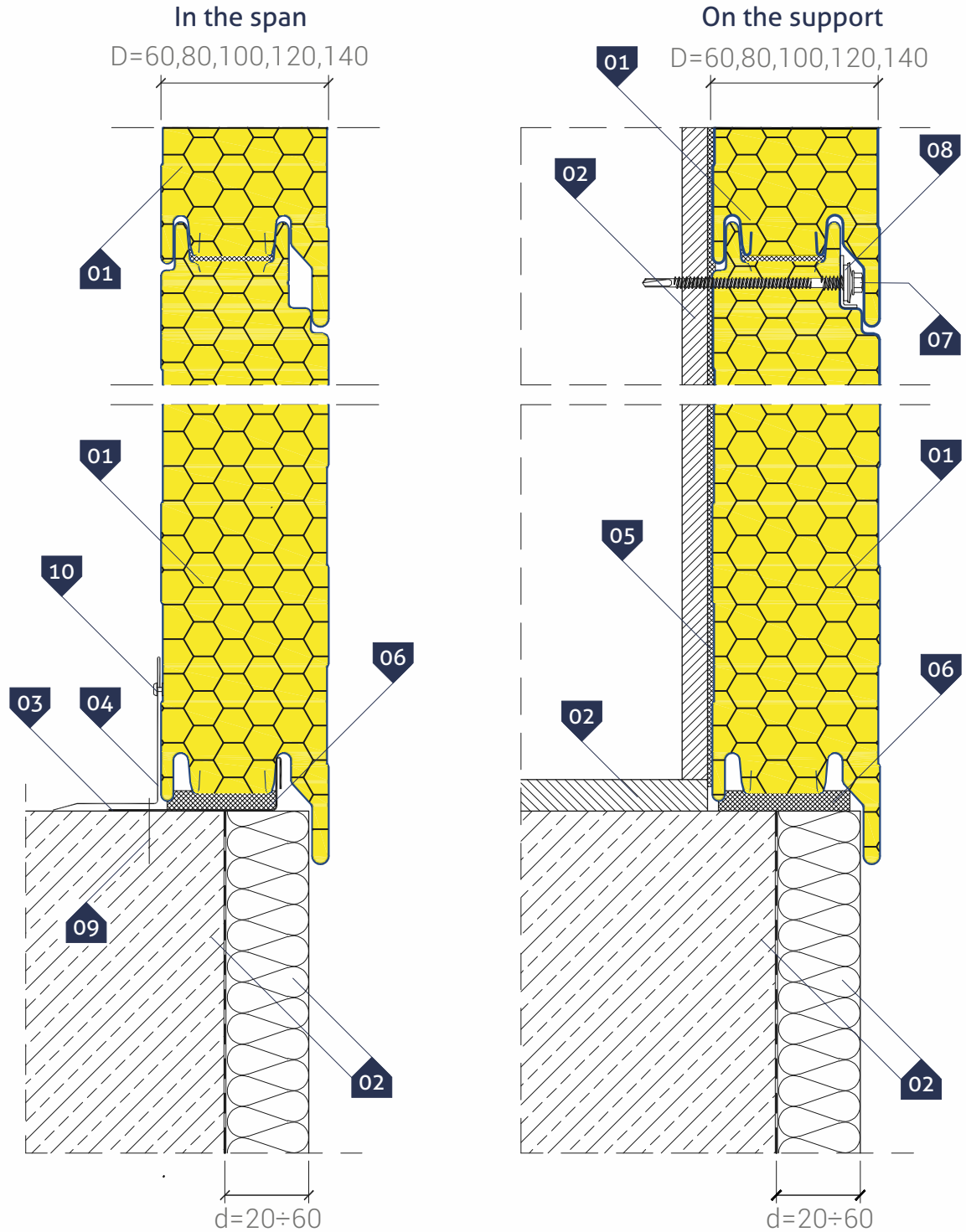


KEY:
01. **GS insPIRe® U** wall panel
02. **PCV** or **aluminium** window with a fastening profile

GS insPIRe® U wall sandwich panel (Hidden cam-lock)

HORIZONTAL ARRANGEMENT of panels
Details of panel connection to ground beam
Type I

GÓR-STAL® SANDWICH PANELS

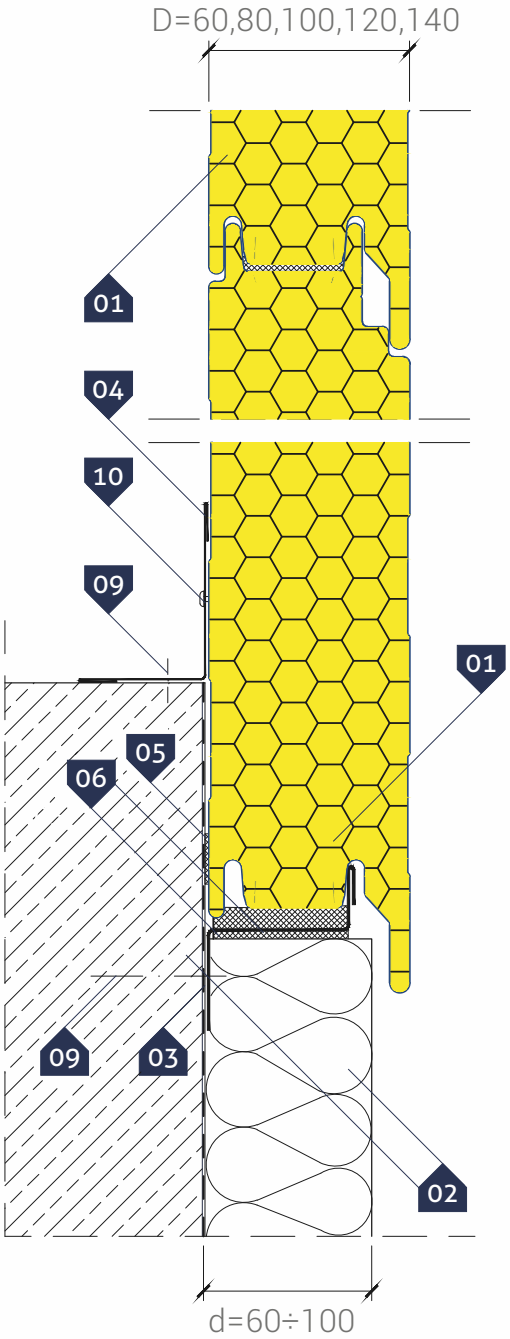


KEY:

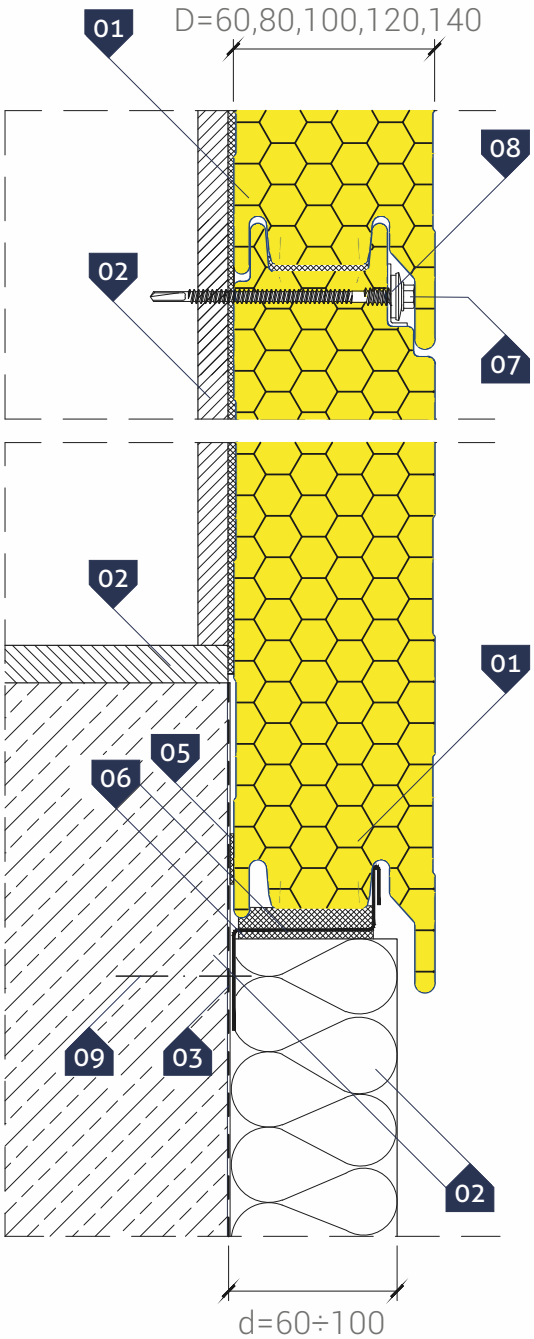
01. **GS insPIRe® U** wall panel
02. Structural elements acc. to detailed design and thermal insulation carried out after assembly of panel
03. Starting angle **OB-41**
04. Inner corner flashing **OB-07**
05. Polyethylene, self-adhesive sealing tape **(PES)***
06. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
07. Self-drilling connector for sandwich panels
08. **PM1** spacer
09. Steel expansion joint for quick assembly
10. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

* - a recommended item

In the span



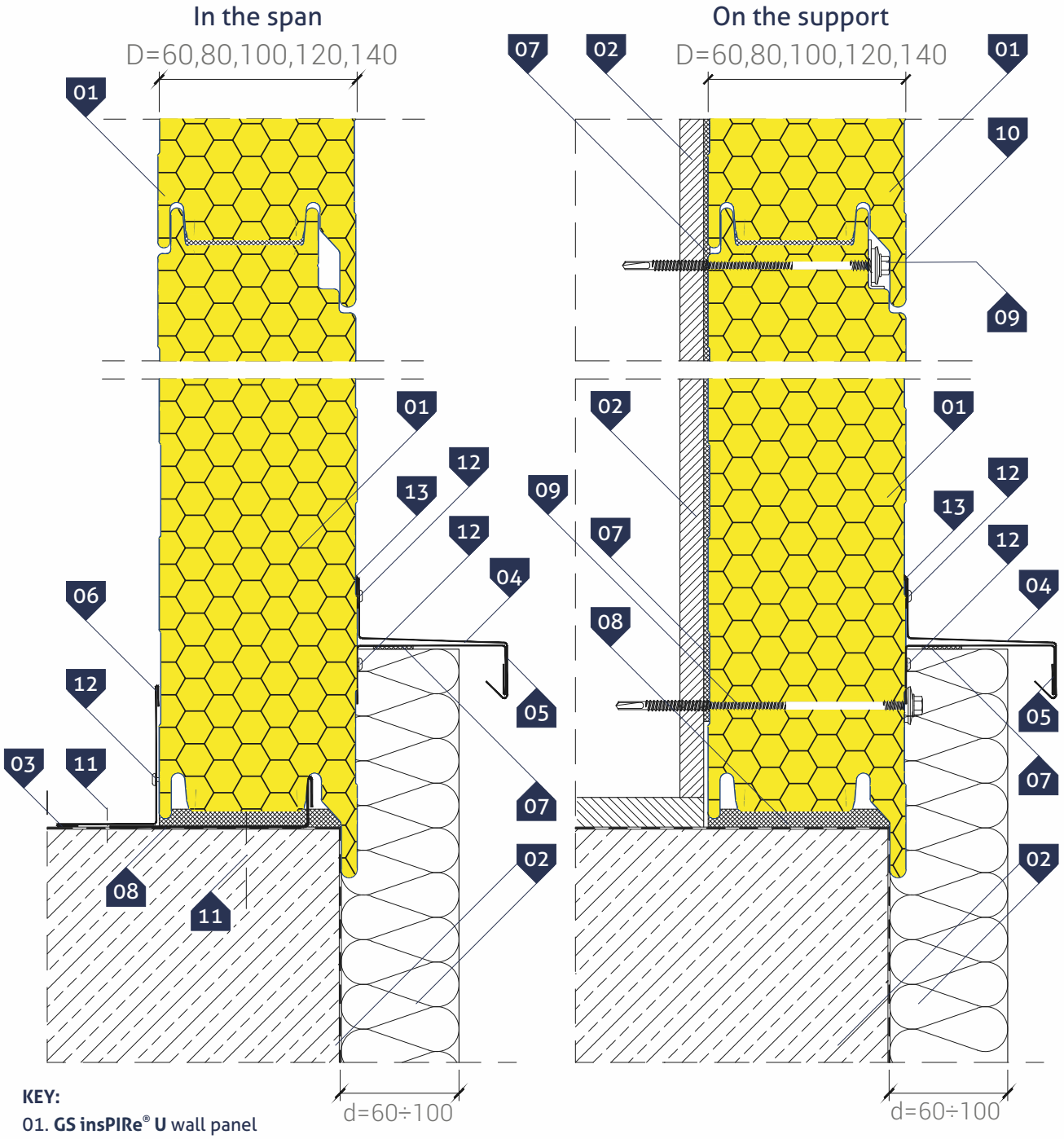
On the support



KEY:

01. **GS insPIRe® U** wall panel
02. Structural elements acc. to detailed design and thermal insulation carried out after assembly of panel
03. Edge Z-bar **OB-39**
04. Inner corner flashing **OB-06**
05. Polyethylene, self-adhesive sealing tape **(PES)***
06. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
07. Self-drilling connector for sandwich panels
08. **PM1** spacer
09. Steel expansion joint for quick assembly
10. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

* - a recommended item

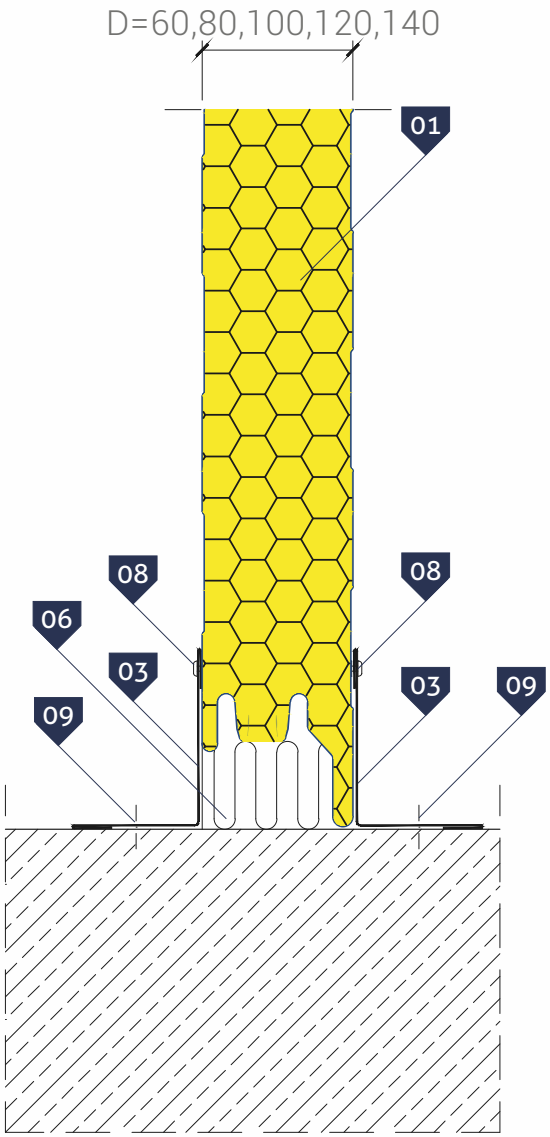


KEY:

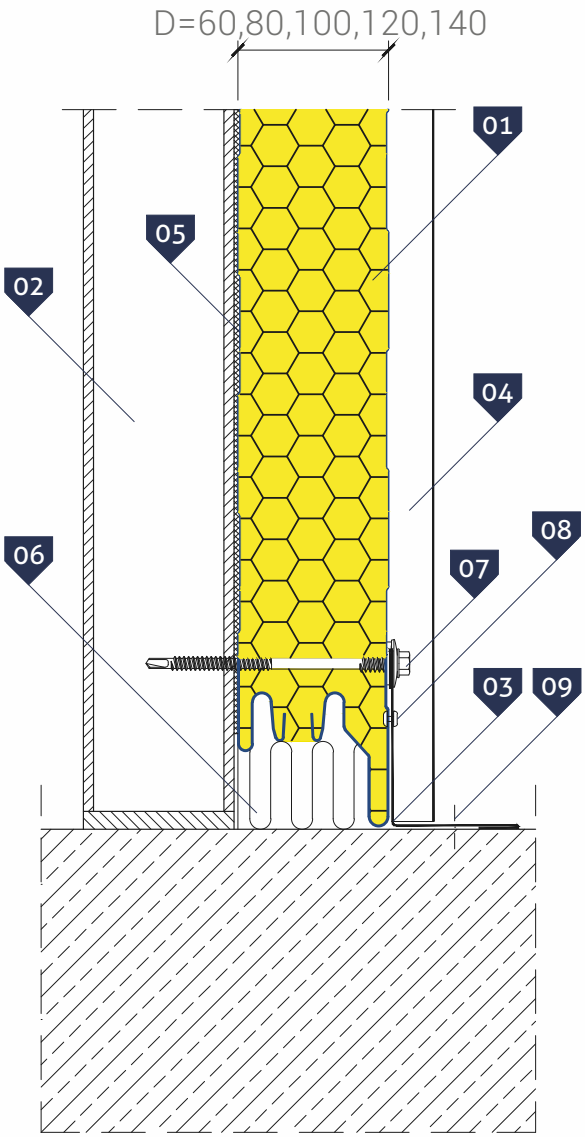
01. **GS insPIRe® U** wall panel
02. Structural elements acc. to detailed design and thermal insulation carried out after assembly of panel
03. Starting angle **OB-41**
04. Drip edge **OB-15**
05. Rigid flashing **OB-15a**
06. Inner corner flashing **OB-06**
07. Polyethylene, self-adhesive sealing tape **(PES)***
08. Polyurethane caulking foam
09. Self-drilling connector for sandwich panels
10. **PM1** spacer
11. Steel expansion joint for quick assembly
12. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
13. Neutral silicone sealant

* - a recommended item

In the span



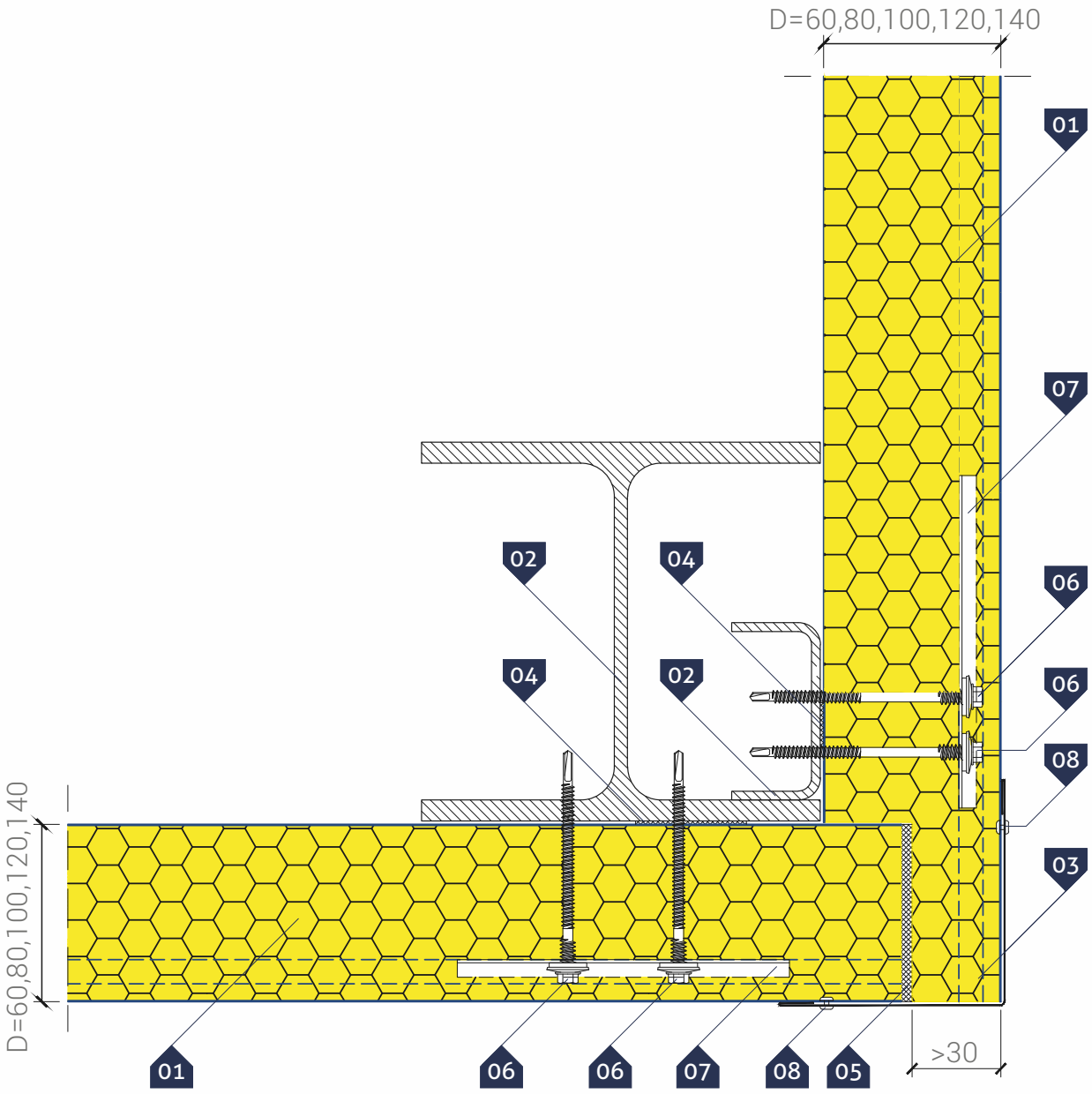
On the support



KEY:

01. **GS insPIRe® U** wall panel
02. Steel post acc. to structure design
03. Inner corner flashing **OB-06**
04. Covering flashing for panel junction
05. Polyethylene, self-adhesive sealing tape **(PES)***
06. Thermal insulation carried out on the fastening
07. Self-drilling connector for sandwich panels
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
09. Steel expansion joint for quick assembly

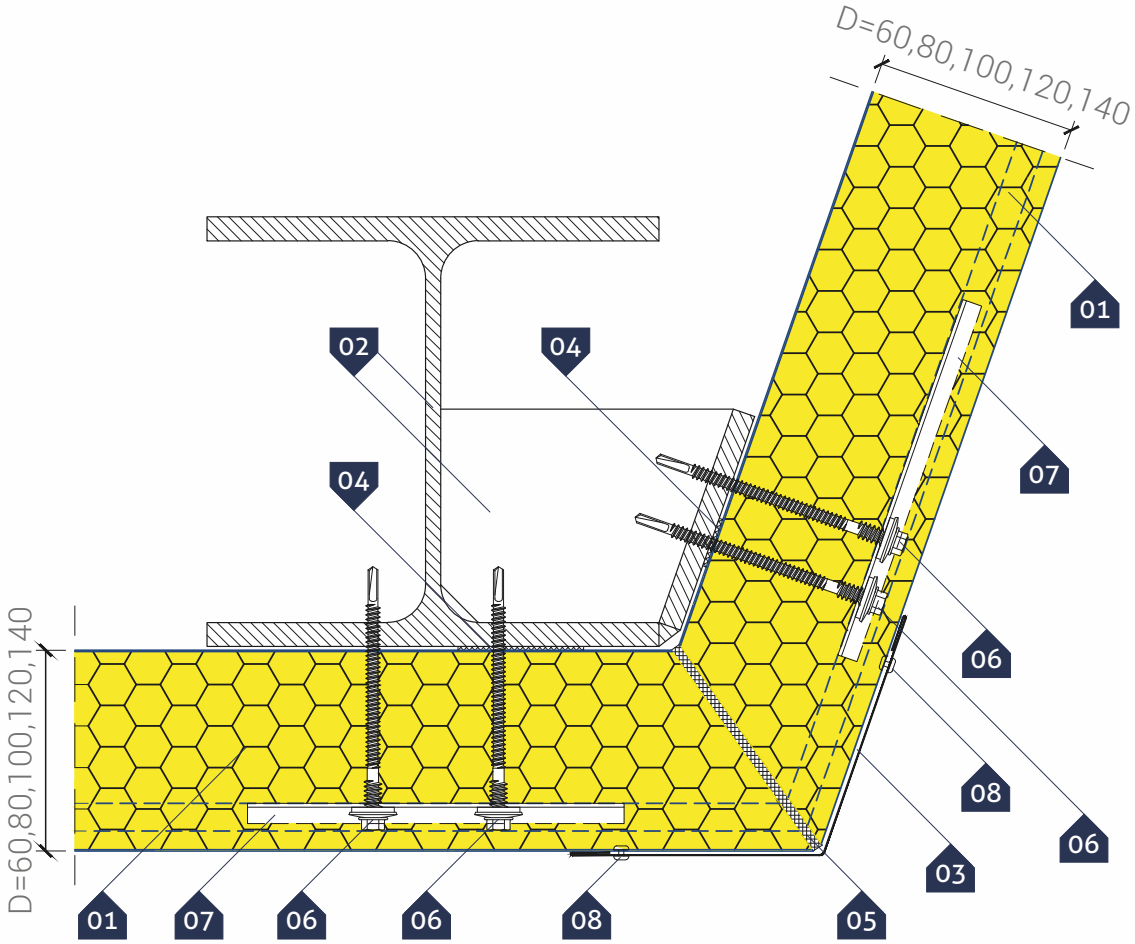
* - a recommended item



KEY:

01. **GS insPIRe® U** wall panel
02. Steel post acc. to structure design
03. External corner flashing **OB-01**
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
06. Self-drilling connector for sandwich panels
07. **PM1** spacer
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

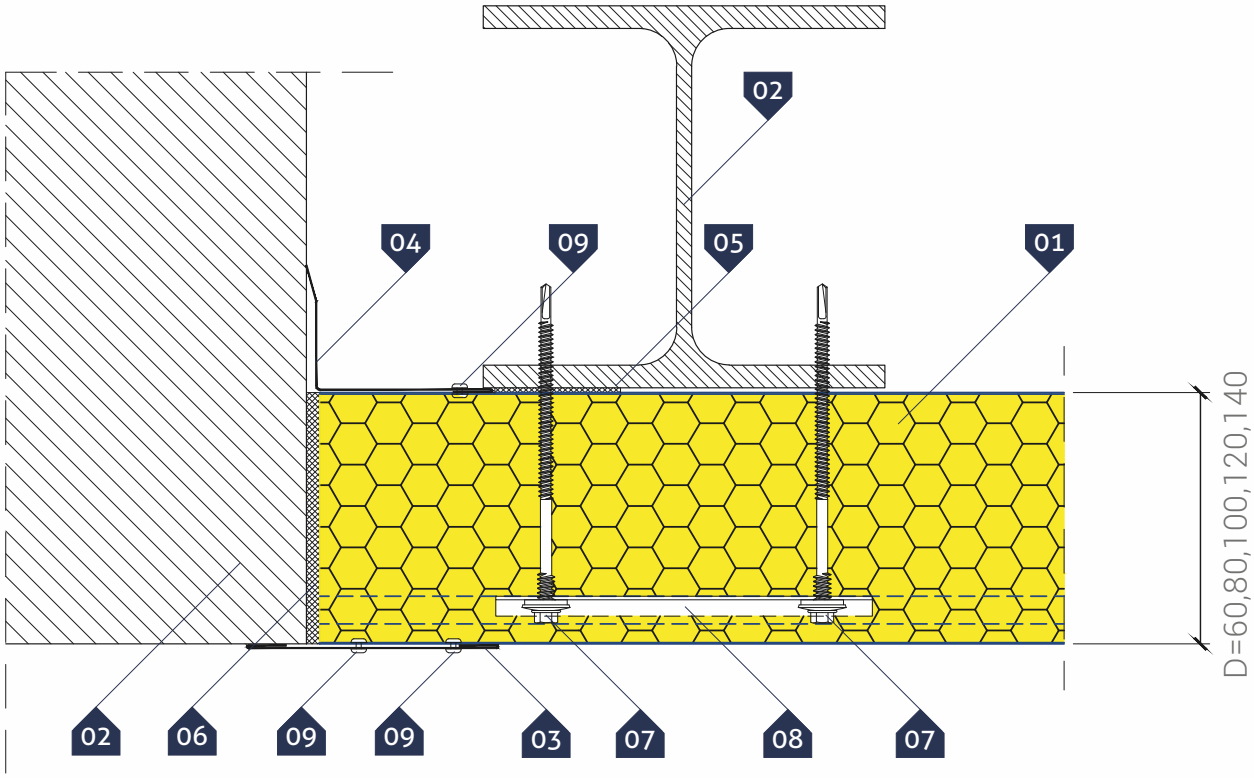
* - a recommended item



KEY:

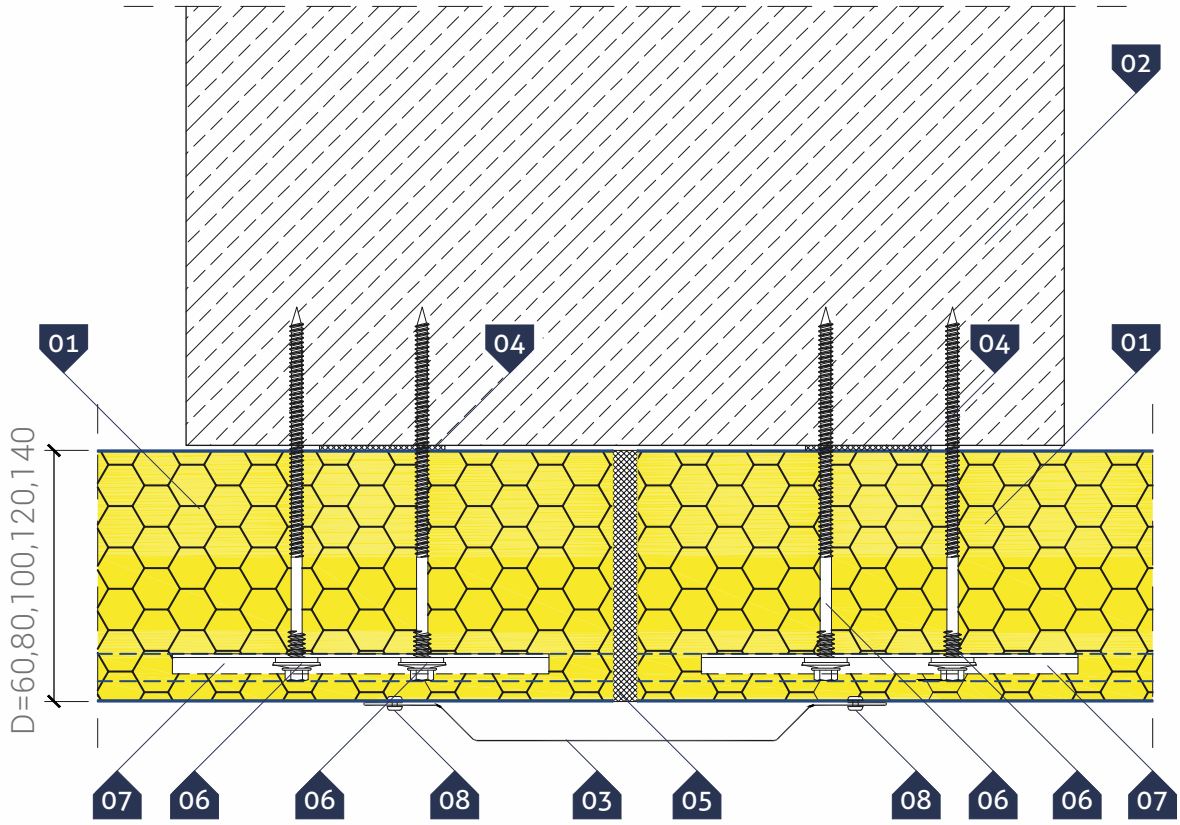
01. **GS insPIRe® U** wall panel
02. Steel post acc. to structure design
03. External corner flashing **OB-01**
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
06. Self-drilling connector for sandwich panels
07. **PM1** spacer
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

* - a recommended item



KEY:
01. **GS insPIRe® U** wall panel
02. Blockwall and post acc. to structure design
03. Masking treatment **OB-18**
04. Inner corner flashing **OB-07**
05. Polyethylene, self-adhesive sealing tape **(PES)***
06. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
07. Self-drilling connector for sandwich panels
08. **PM1** spacer
09. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

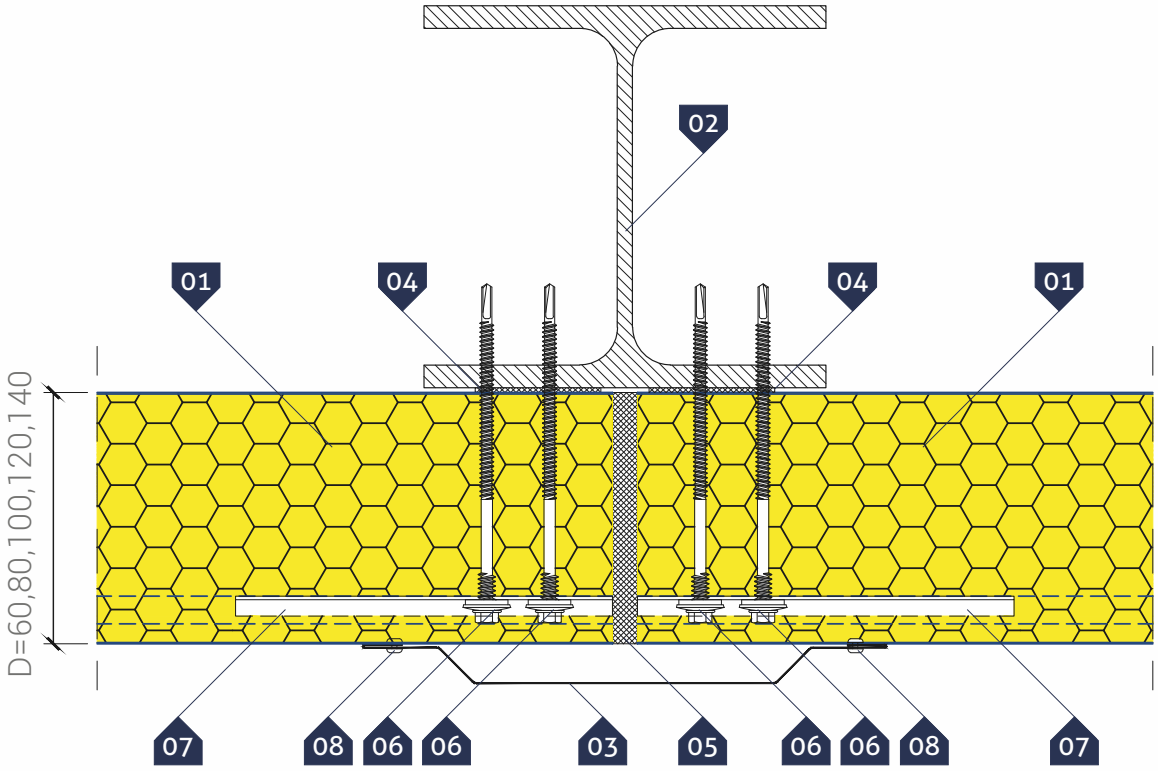
* - a recommended item



KEY:

01. **GS insPIRe® U** wall panel
02. Reinforced concrete post acc. to structure design
03. Covering flashing **OB-17**
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
06. Self-drilling fastener for fixing sandwich panels
07. **PM1** spacer
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

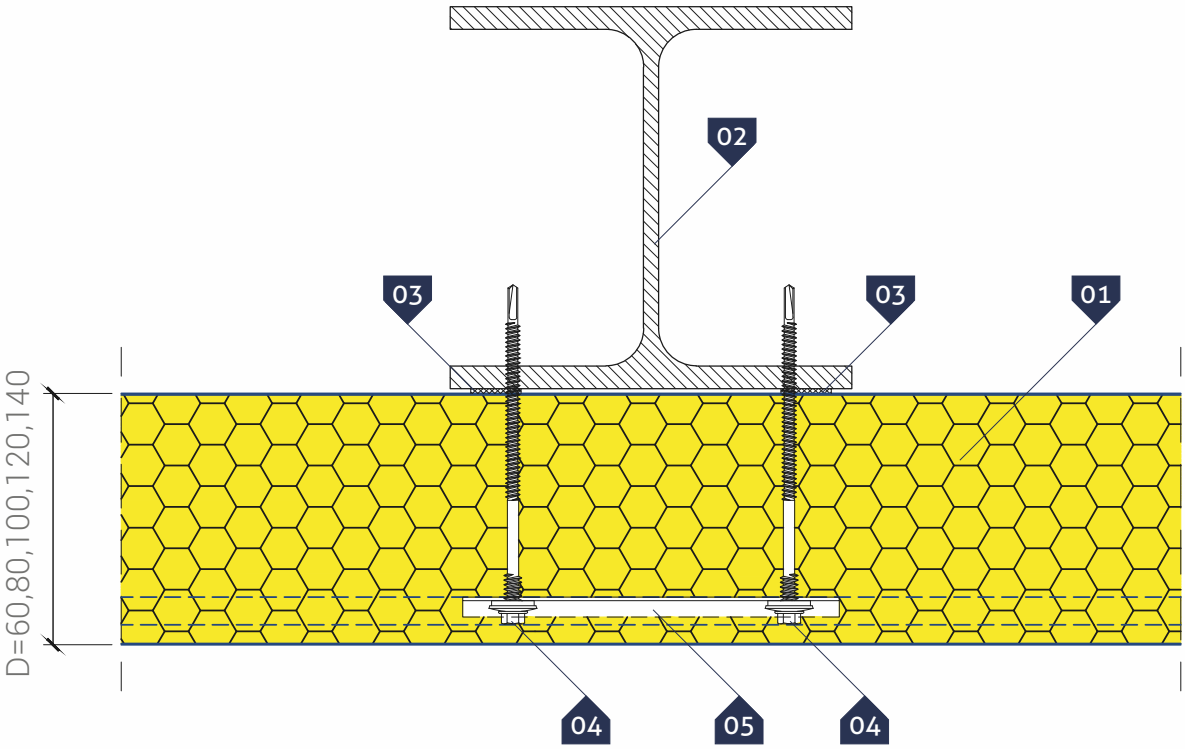
* - a recommended item



KEY:

01. **GS insPIRe® U** wall panel
02. Steel column according to structure design
03. Covering flashing **OB-17**
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Impregnated polyurethane seal **(PURS)** or polyurethane caulking foam
06. Self-drilling connector for sandwich panels
07. **PM1** spacer
08. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

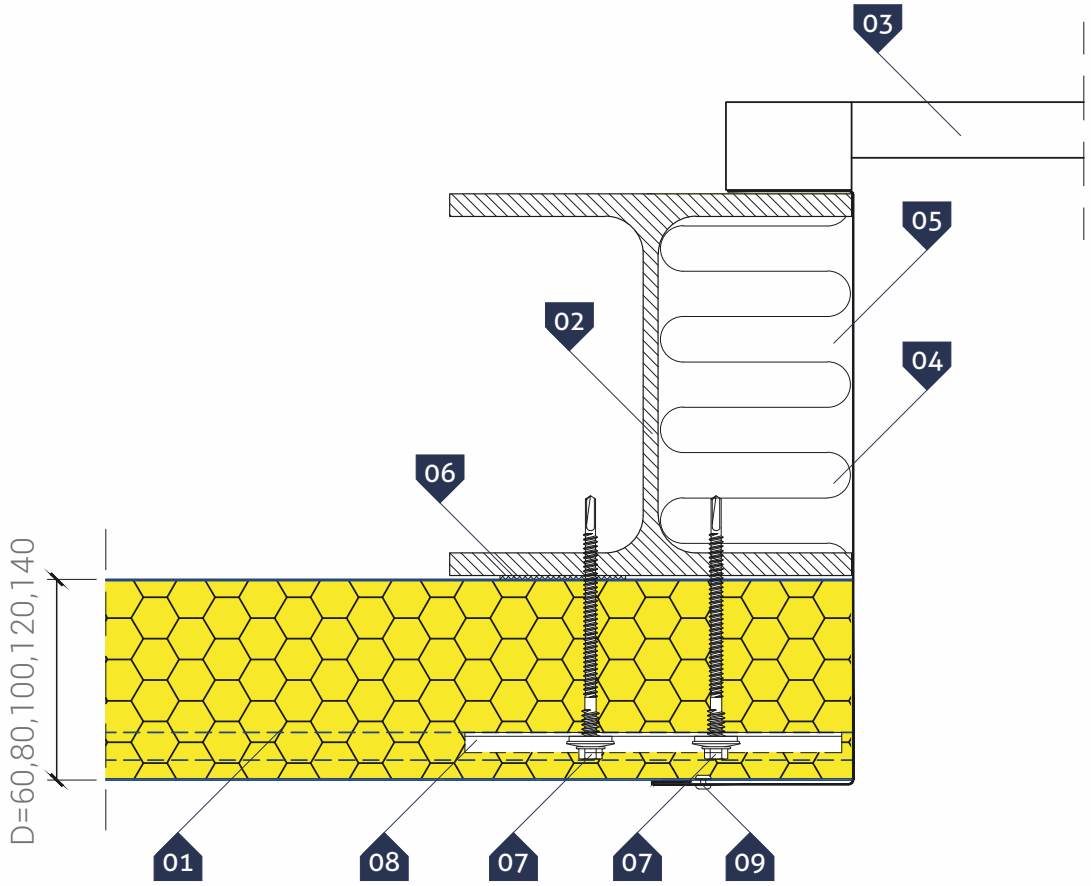
* - a recommended item



KEY:

01. **GS insPIRe® U** wall panel
02. Steel column according to structure design
03. Polyethylene, self-adhesive sealing tape **(PES)***
04. Self-drilling connector for sandwich panels
05. **PM1** spacer

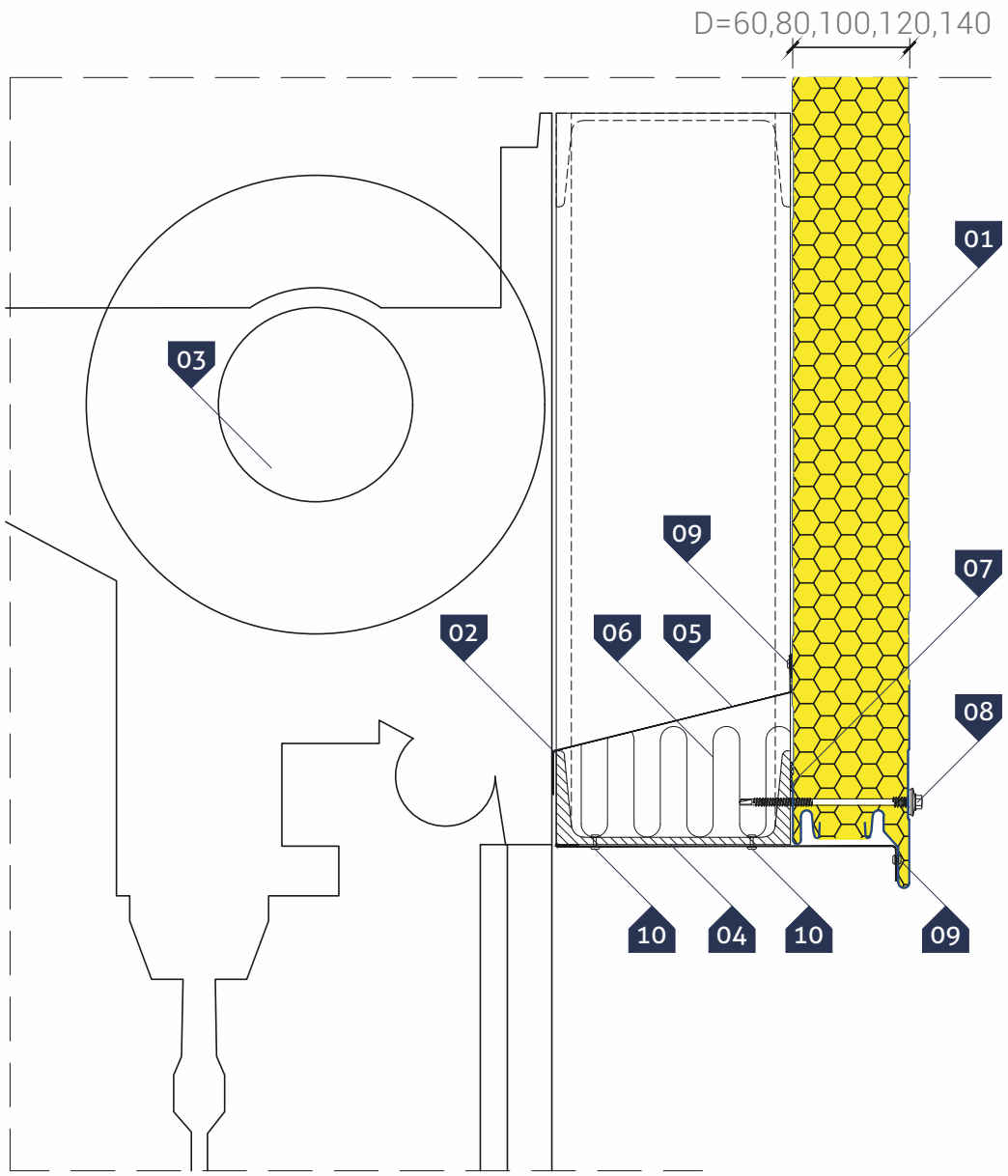
* - a recommended item



KEY:

01. **GS insPIRe® U** wall panel
02. Steel post acc. to structure design
03. Roller shutter door
04. Individual door flashing
05. Thermal insulation on the fastening
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Self-drilling connector for sandwich panels
08. **PM1** spacer
09. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**

* - a recommended item



KEY:

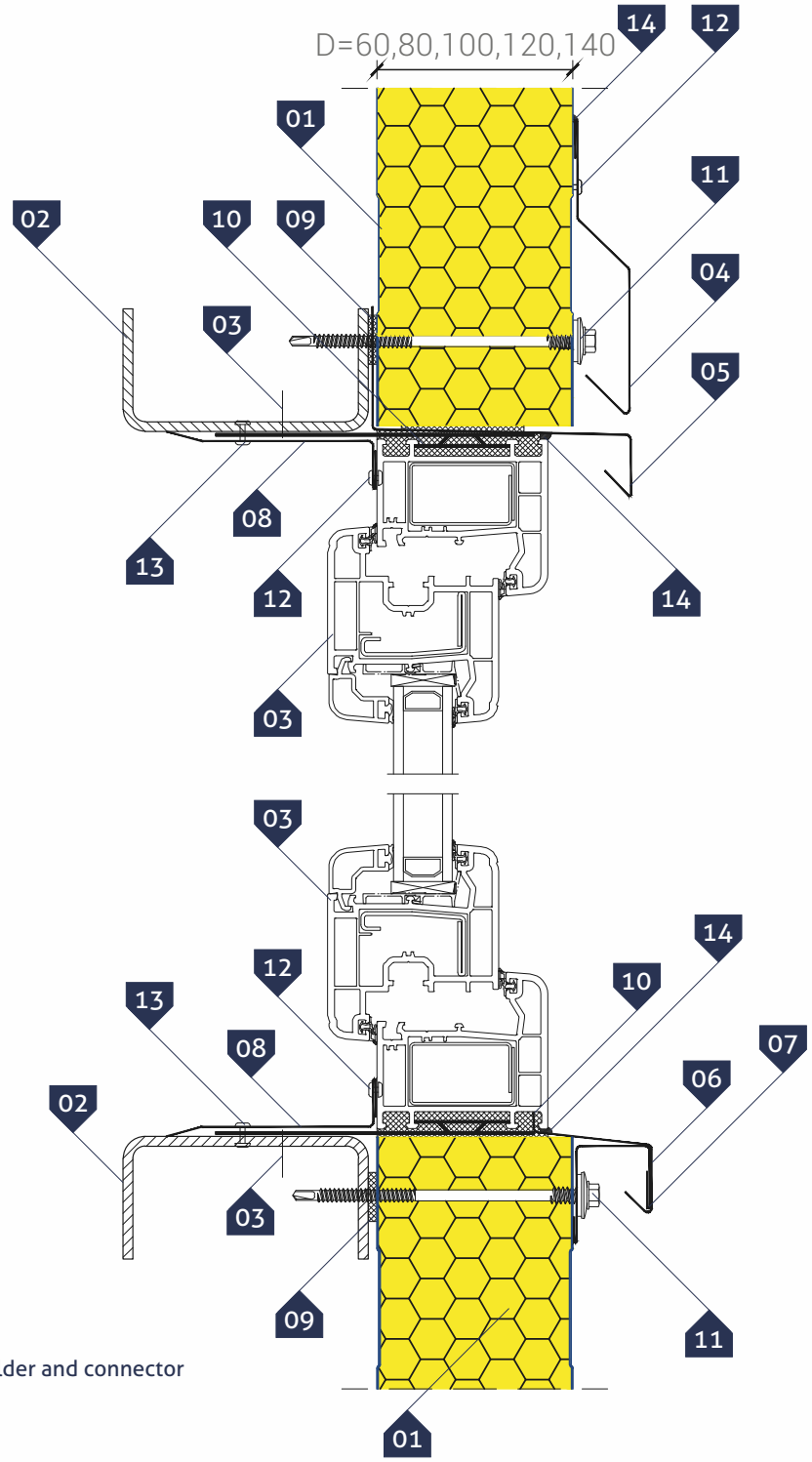
01. **GS insPIRe® U** wall panel
02. Transom acc. to structure design
03. Roller shutter door
04. Individual covering flashing
05. Individual covering flashing
06. Thermal insulation on the fastening
07. Polyethylene, self-adhesive sealing tape **(PES)***
08. Self-drilling connector for sandwich panels
09. Rivet **4,0 x 8,0**
10. Blind rivet **4,8 x 15,1** (for the structure)

* - a recommended item

GS insPIRe® U wall sandwich panel (Hidden cam-lock)

HORIZONTAL ARRANGEMENT of panels
Detail of window mounting in a sandwich panel
Type I – verticle section

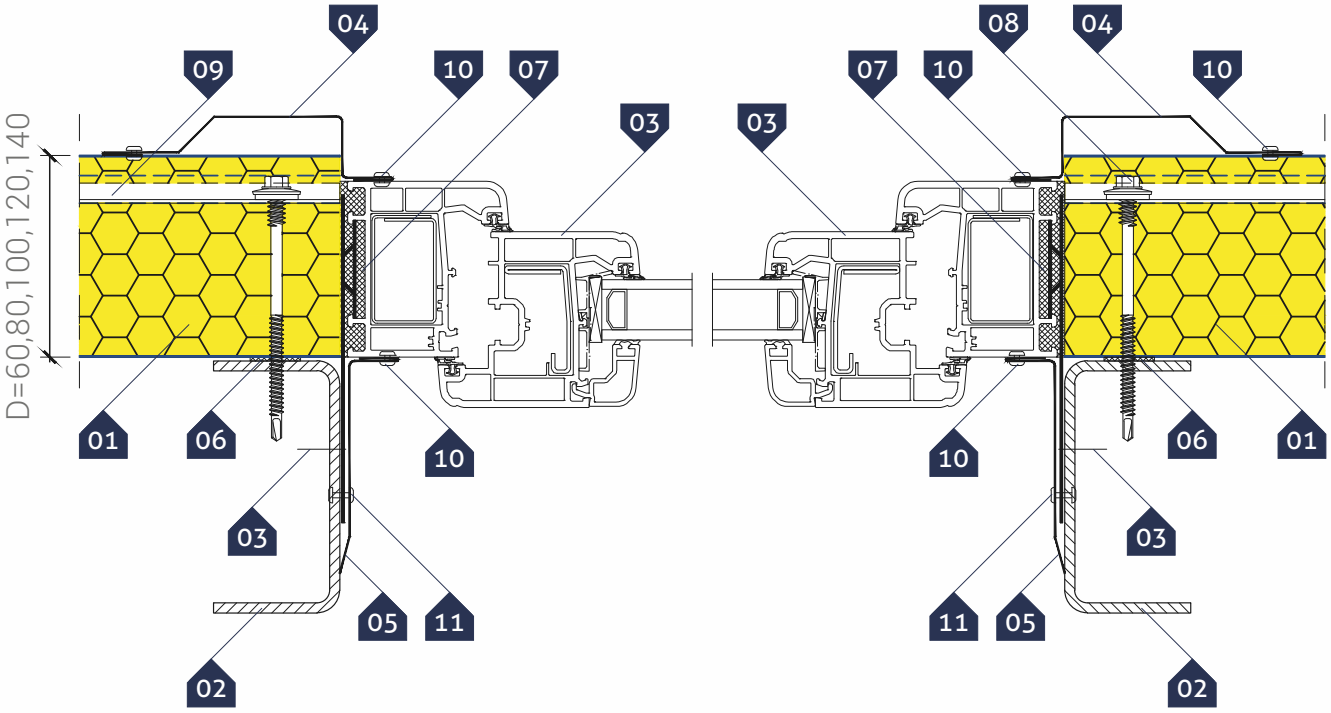
GÓR-STAL® SANDWICH PANELS



KEY:

01. **GS insPIRe® U** wall panel
02. Transom acc. to structure design
03. **PCV** or **aluminium** window with a holder and connector
04. Drip edge **OB-10**
05. Drip edge **OB-13**
06. Cill **OB-37**
07. Rigid flashing **OB-16**
08. Individual internal corner
09. Polyethylene, self-adhesive sealing tape **(PES)***
10. Polyurethane caulking foam
11. Self-drilling connector for sandwich panels
12. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
13. Blind rivet **4,8 x 15,1** (for the structure)
14. Neutral silicone sealant

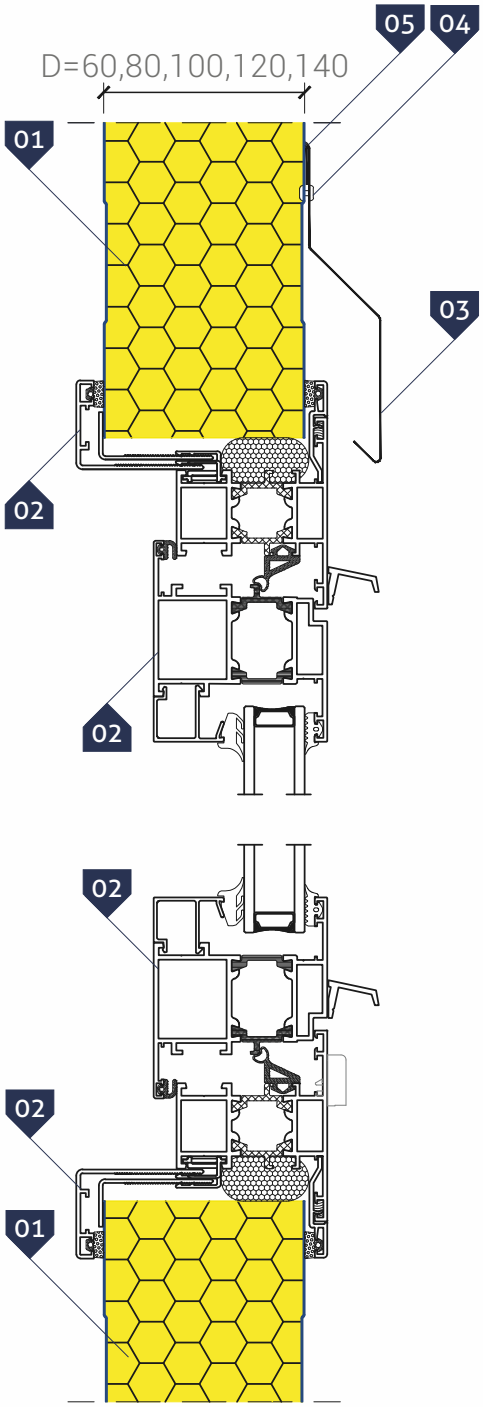
* - a recommended item



KEY:

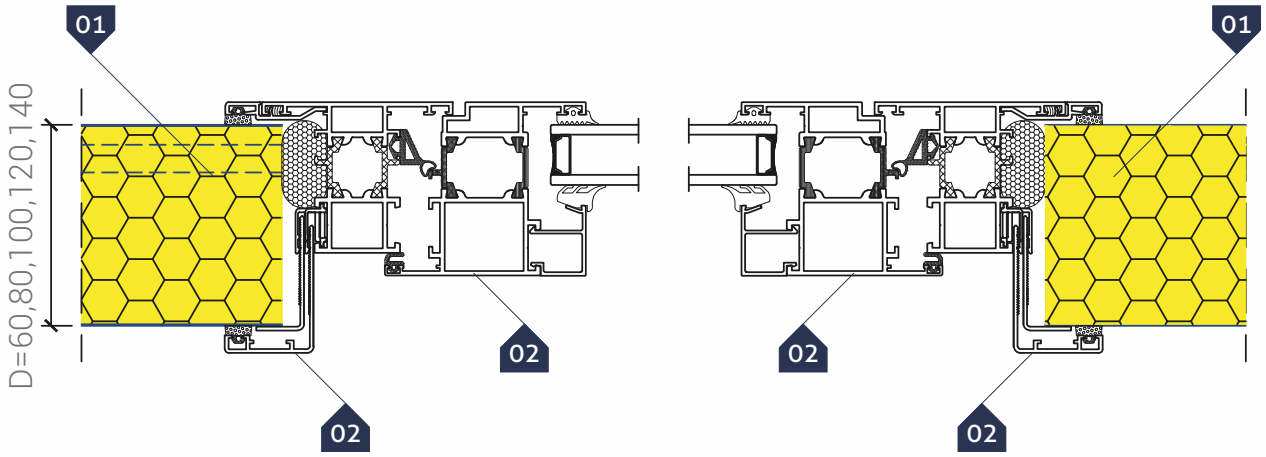
01. **GS insPIRe® U** wall panel
02. Transom acc. to structure design
03. **PCV** or **aluminium** window with a holder and connector
04. Individual covering flashing
05. Individual internal corner
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Polyurethane caulking foam
08. Self-drilling connector for sandwich panels
09. **PM1** spacer
10. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
11. Blind rivet **4,8 x 15,1** (for the structure)

* - a recommended item



KEY:

01. **GS insPIRe® U** wall panel
02. **PVC** or **aluminium** window with a fastening profile
03. Drip edge **OB-11** (option)
04. Self-drilling connector for steel sheets or rivet **4.0 x 8.0**
05. Neutral silicone sealant



KEY:
01. **GS insPIRe® U** wall panel
02. **PVC** or **aluminium** window with a fastening profile

GS insPIRe® U wall sandwich panel bent

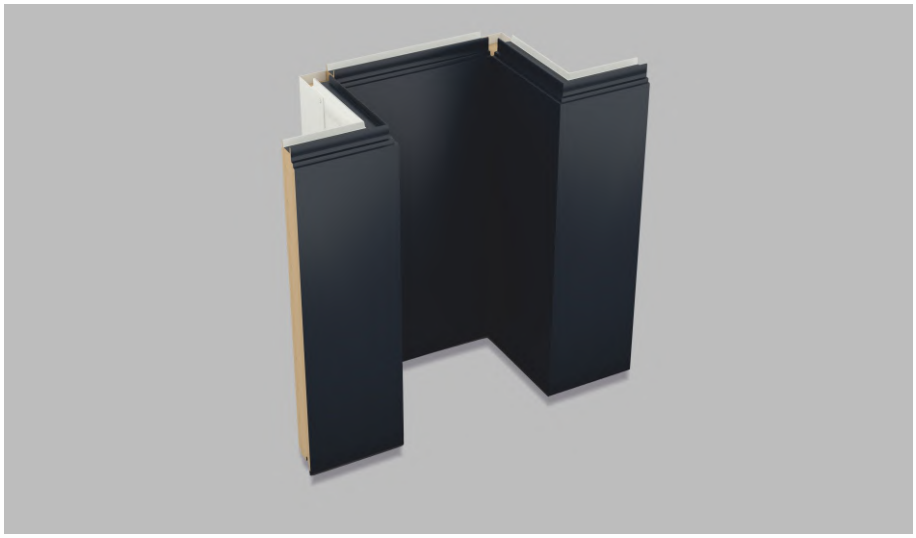
Facing the expectations of customers, Gór Stal company introduced to its offer corner wall panels **GS insPIRe® U bent**, the use of which allows to avoid flashing in the vertical corners of the concave and convex buildings, as a result of which it is possible to maintain the homogeneity of the housing in those places. In order to facilitate works on the site, **bent**-type panels are assembled in the same way as flat panels, i.e. with PM-1 washers, self-drilling screws, and between panels and the structure PES tape is recommended.

In addition, the use of the **bent-type** panel allows to limit the linear thermal bridge occurring at junction of panels in the corner when using flat panels.

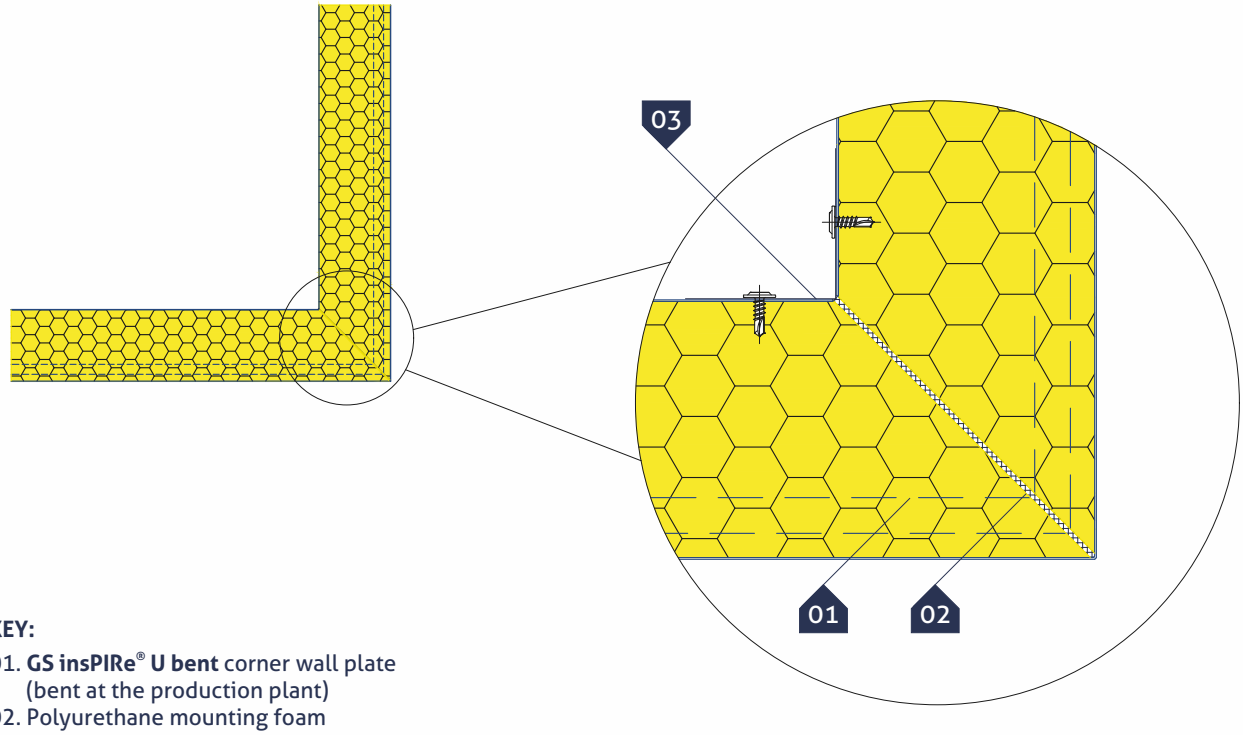
General remarks:

- range of available thicknesses from 60 to 120 mm,
- minimal bending equal to the panel thickness,
- sum of dimensions up to 4.0 m,
- there is a possibility of bending the outer metal sheet towards the face of the panel, which will cause its masking.

Possible shapes along with the boundary dimensions of the panes are illustrated in the figure on the next page.



Bending detail

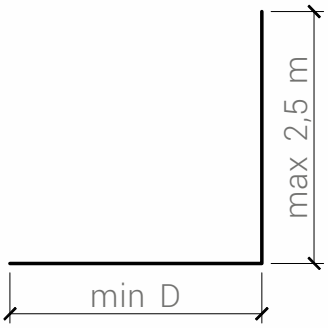


KEY:

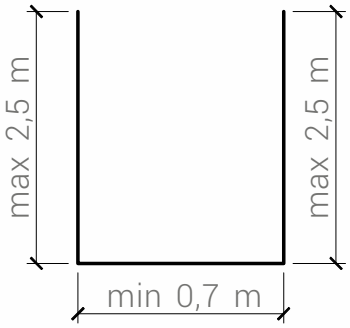
01. **GS insPIRe® U bent** corner wall plate (bent at the production plant)
02. Polyurethane mounting foam
03. Structural flashing (possible disassembly with extreme caution)

Corner panels production capacity

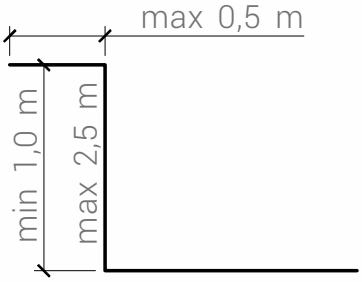
01 L type



02 U type



03 Z type



04 unusual custom

* according to an individual design by prior arrangement

APPLICATION

GS PIR D roof panel is designed for roof covers. They are characterized by a very deep re-profiling of the trapezoidal outer cladding. This is related to the transfer of long-lasting service loads. The panels are fastened with screws to a wooden, steel or reinforced concrete structure. Minimum inclination of the roof slopes is **3° (5.2%)** without skylights and **5° (8.7%)** for coverings made of plates joined lengthwise.

PHYSICAL PROPERTIES

GS PIR D roof panel is produced in six core thicknesses: **40/80, 60/100, 80/120, 100/140, 120/160 i 160/200 mm**. The panel cladding is made of steel sheet galvanized on both sides according to **EN 10346** with an organic polyester lacquer with a coating thickness of **25 µm**. The thermo-insulating core of panels is a hard **polyisocyanurate foam (PIR)** with a density of **40 kg/m^3 (+/- 10%)**. The calculated thermal conductivity coefficient is: **λ = 0.022 W/m·K** (from November 2018 available are panels in the **MAX** version with a core with a coefficient of **λ = 0.020 W/m · K**). The modular width of the panel is **1000 mm**, and its standard lengths range from **2.0 m** to **12.0 m**. At the customer's special request, we deliver panels shorter than **2.0 m** and longer than **12.0 m**, with a maximum length of **16.5 m**. Water and air tightness of panel joints is assured by impregnated polyurethane seals **(PUS)** applied in the manufacturing process.

Thickness [mm]	Weight [kg/m²]			Modular width [mm]	Length: typical/available [m]	Lining standard RAL colours	
	facings 0,5/0,5 mm	facings 0,5/0,4 mm	facings 0,4/0,4 mm			external linings*	internal linings*
40/80	10,4	9,6	8,7	1000	2,0 - 12,0 / 16,5	3000, 5010, 6011, 7016, 7035, 8017, 9002, 9006, 9007, 9010	9002, 9010
60/100	11,2	10,4	9,5				
80/120	12,0	11,2	10,3				
100/140	12,8	12,0	11,1				
120/160	13,6	12,8	11,9				
160/200	15,2	14,4	13,5				

* available colors depending on the thickness of the cladding, panels thicknesses and modular widths (details from the Sales Representative)

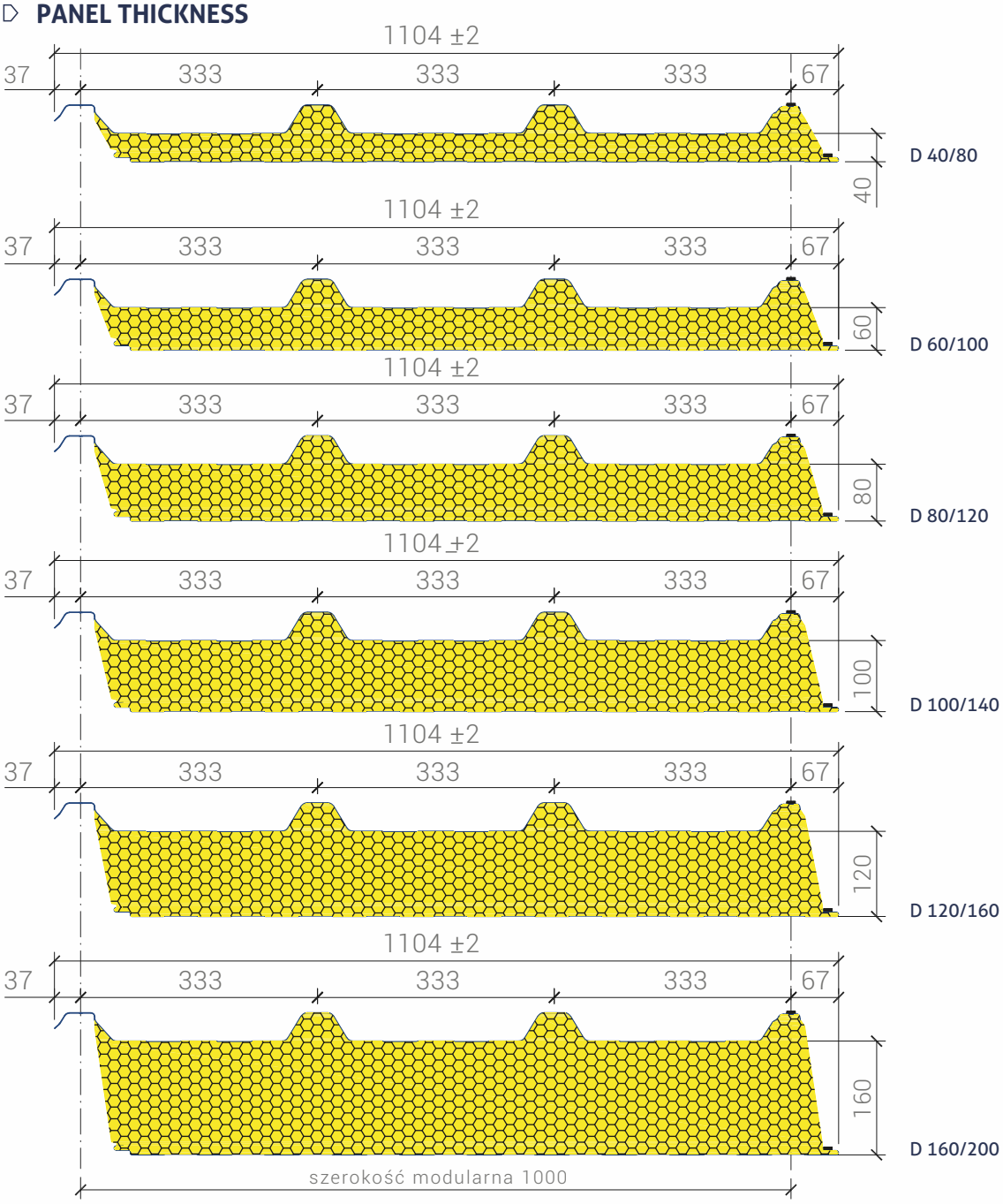
Thermal performance of panels depends on the thickness of the core and is expressed as a coefficient of heat transfer through a space dividing element (shown in the table below). Acoustic parameters were determined on the basis of **EN ISO 10140-3** and **EN-ISO 354**. Coldstore panels can be used as partitions of the requirements of sound insulation no greater than those specified below. Resistance to chemical corrosion - sandwich panels can be used in environments with atmosphere corrosiveness category C1, C2, C3 according to **EN ISO 12944-2**.

TECHNICAL PARAMETERS OF PIR CORE

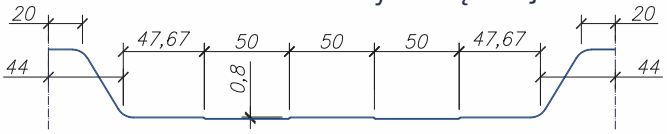
Thickness [mm]	Heat-transfer coefficient U [W/m²·K]	Acoustic insulation	Reaction to fire	Fire resistance	NRO
	EN 14509	**EN ISO 717-1**	**EN 13501-1**	**EN 13501-2**	**PN-B-02867**
40/80	0,55*/ -	R_W = 24 dB R_{a1} = 22 dB R_{a2} = 20 dB	B-s1, d0	-	B_{ROOF}(t1,t2,t3)
60/100	0,37*/ -				
80/120	0,27*/ 0,25**			REI 30/RE 120 conditions according to classification	
100/140	0,22*/ 0,20**				
120/160	0,18*/0,17**				
160/200	0,14*/ 0,13**				

* value of U-factor for traditional core panels with a coefficient of λ=0,022 W/m·K
** value of U-factor for PIR MAX core panels with a coefficient of λ=0,020 W/m·K

PANEL THICKNESS

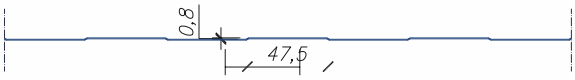


Profilowanie okładziny zewnętrznej



T - Trapezowe

Profilowanie okładziny wewnętrznej



L - Liniowe

TABLE OF ALLOWED LOADS FOR GS PIR D SANDWICH PANEL

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

Panel thickness	The load due to:	The maximum load [kN/m^2] on the span length [m]:										
		1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5
40/80	SGN (q_d)	4,159	2,986	2,327	1,855	1,206	0,829	0,591	0,430	0,317	0,234	0,171
	SGU (q_k)	1,669	1,143	0,828	0,617	0,467	0,356	0,272	0,206	0,154	0,112	0,078
60/100	SGN (q_d)	4,993	3,615	2,818	2,301	1,885	1,299	0,934	0,691	0,522	0,398	0,305
	SGU (q_k)	2,620	1,830	1,356	1,040	0,814	0,645	0,514	0,412	0,329	0,263	0,208
80/120	SGN (q_d)	5,553	4,018	3,130	2,553	2,149	1,815	1,306	0,971	0,739	0,572	0,447
	SGU (q_k)	3,583	2,530	1,899	1,478	1,117	0,950	0,775	0,636	0,523	0,432	0,356
100/140	SGN (q_d)	5,868	4,242	3,301	2,690	2,263	1,947	1,507	1,114	0,844	0,651	0,508
	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
120/160	SGN (q_d)	5,860	4,231	3,296	2,683	2,246	1,930	1,687	1,398	1,061	0,821	0,644
	SGU (q_k)	5,525	3,950	2,785	2,197	1,929	1,591	1,327	1,116	0,944	0,802	0,683
160/200	SGN (q_d)	5,923	4,272	3,310	2,684	2,247	1,925	1,678	1,483	1,170	0,885	0,666
	SGU (q_k)	5,927	4,278	3,294	2,638	2,169	1,815	1,540	1,319	1,137	0,986	0,858

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

Panel thickness	The load due to:	The maximum load [kN/m^2] on the span length [m]:										
		1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5
40/80	SGN (q_d)	1,835	1,365	1,092	0,913	0,785	0,689	0,587	0,461	0,372	0,306	0,257
	SGU (q_k)	1,511	1,122	0,896	0,751	0,641	0,565	0,501	0,438	0,362	0,301	0,253
60/100	SGN (q_d)	1,792	1,330	1,065	0,891	0,768	0,675	0,603	0,545	0,497	0,445	0,372
	SGU (q_k)	1,484	1,099	0,878	0,733	0,630	0,553	0,493	0,445	0,406	0,373	0,345
80/120	SGN (q_d)	1,758	1,300	1,040	0,871	0,752	0,662	0,592	0,535	0,489	0,450	0,417
	SGU (q_k)	1,463	1,080	0,862	0,720	0,620	0,545	0,486	0,439	0,401	0,368	0,341
100/140	SGN (q_d)	1,730	1,274	1,018	0,853	0,736	0,649	0,581	0,526	0,481	0,443	0,411
	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
120/160	SGN (q_d)	1,706	1,251	1,012	0,848	0,722	0,637	0,571	0,518	0,474	0,437	0,406
	SGU (q_k)	1,431	1,049	0,844	0,705	0,600	0,528	0,472	0,428	0,391	0,360	0,333
160/200	SGN (q_d)	1,736	1,254	0,988	0,821	0,706	0,622	0,557	0,505	0,462	0,427	0,396
	SGU (q_k)	1,454	1,054	0,830	0,689	0,591	0,519	0,464	0,419	0,383	0,353	0,327

The load capacity tables have been developed according to **EN 14509** for panels with PIR core with claddings in light colors for an internal temperature of **20 °C.** Deflection condition was assumed as **L/200**. In the case of a different sheet thickness, limit deflections, temperatures, fastening or dark colors of the cladding, separate calculations are necessary. Minimum width of supports - **40** mm and **60** mm (indirect). Number of fasteners necessary on intermediate supports - **4**, on extreme supports - **3**. Detailed tables of permissible loads are available on the website.

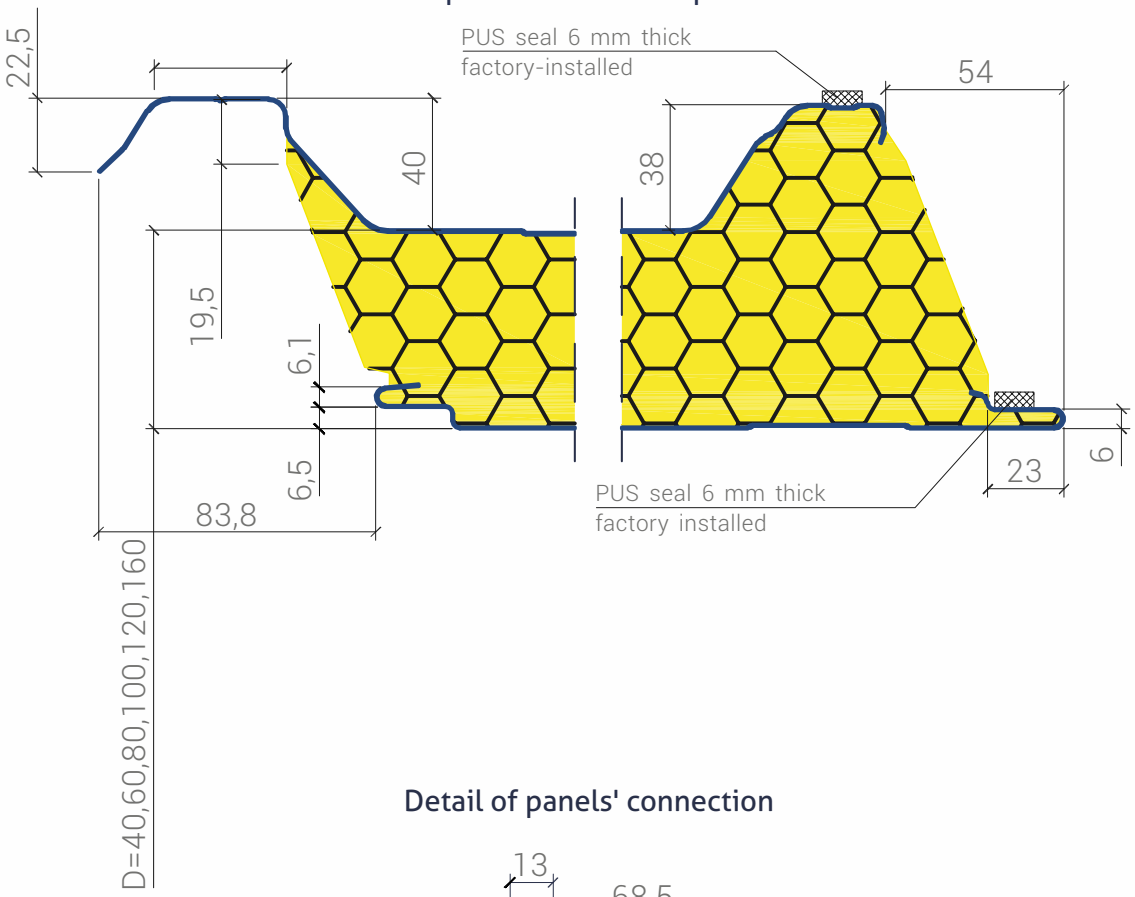
PACKING

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

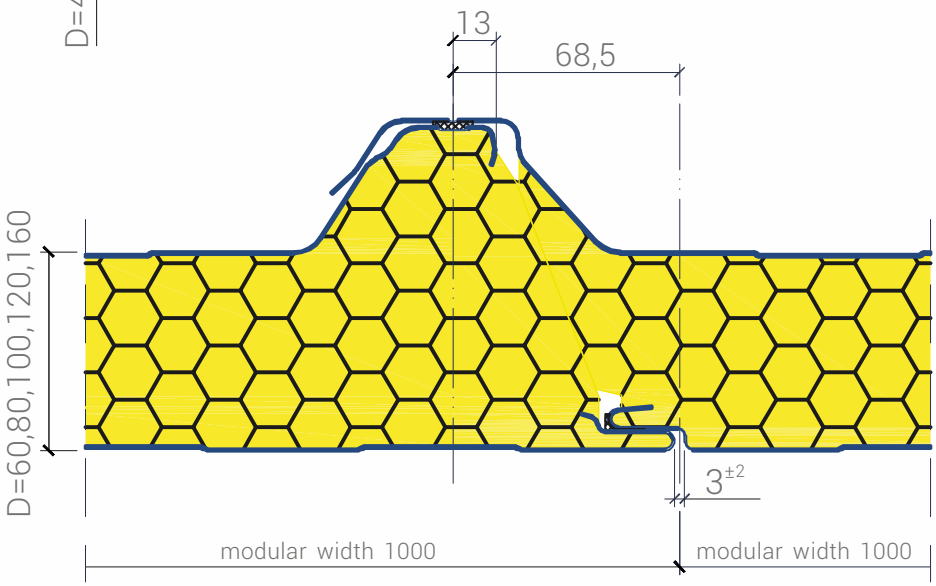
Panel thickness [mm]	40/80	60/100	80/120	100/140	120/160	160/200
Maximum number of panels in one batch	14	11	9	8	7	6

Selected details of cladding made of GS-PIR D roof panel

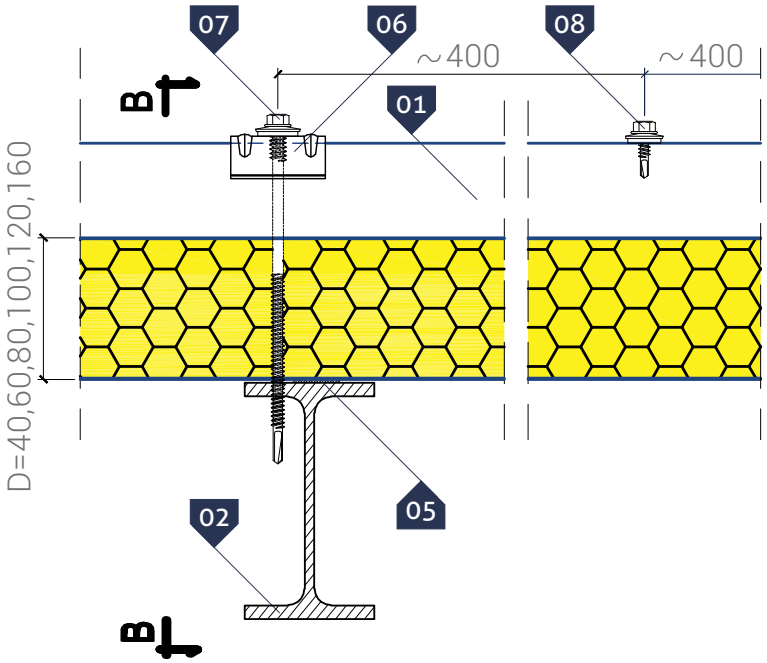
Shape of cam-lock for panels



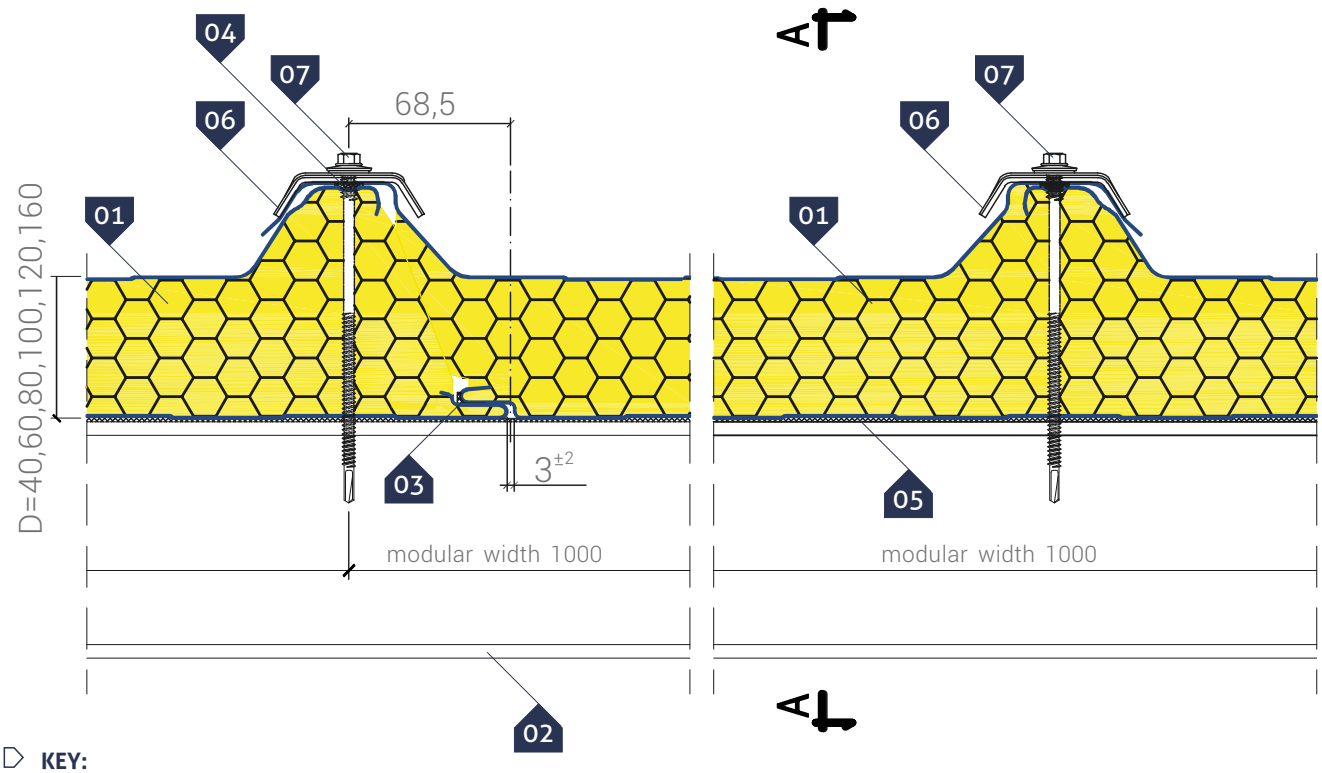
Detail of panels' connection



A-A cross-section



B-B cross-section



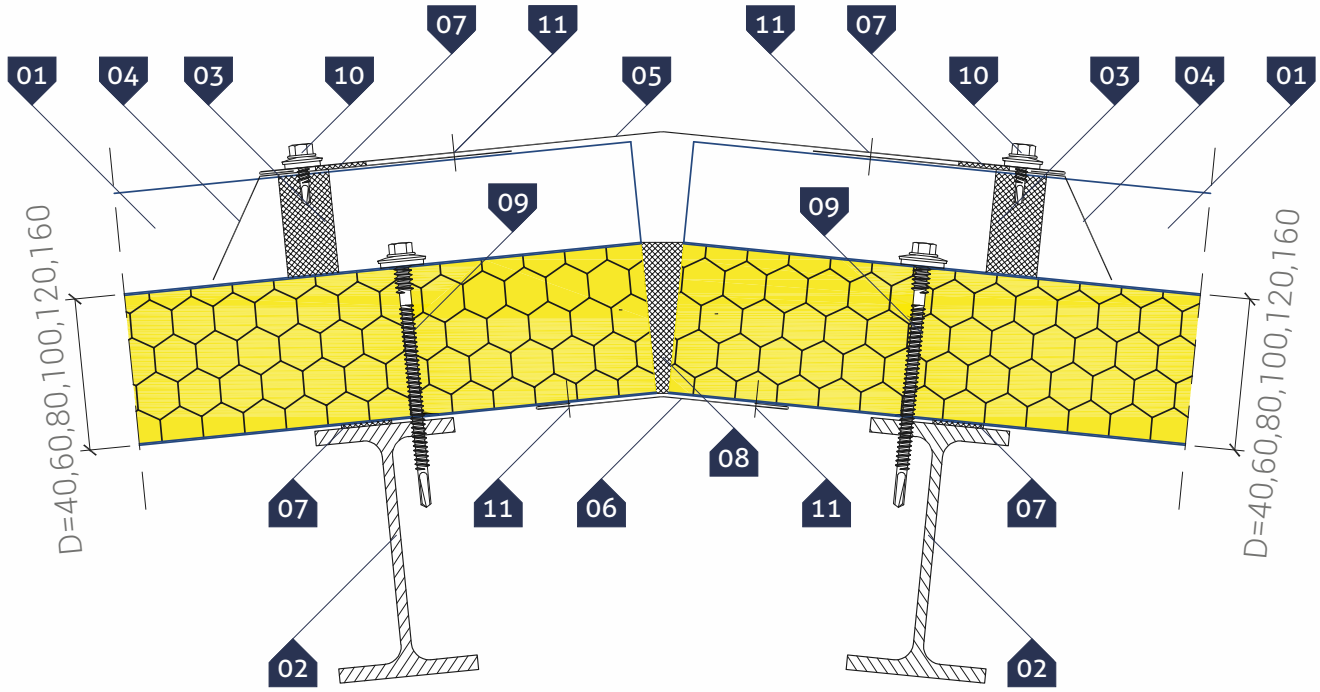
KEY:

01. **GS PIR D** roof panel
02. Purlin acc. to structure design
03. Lower **PUS** gasket installed at the factory
04. Upper **PUS** gasket installed at the factory
05. Polyethylene, self-adhesive sealing tape **(PES)***
06. Calotte - clamping washer
07. Self-drilling connector for sandwich panels
08. Self-drilling connector for steel sheets

NOTE:

Each panel should be fastened widthwise to the structure with two fasteners and with three fasteners at the roof edges (for full-width panels).

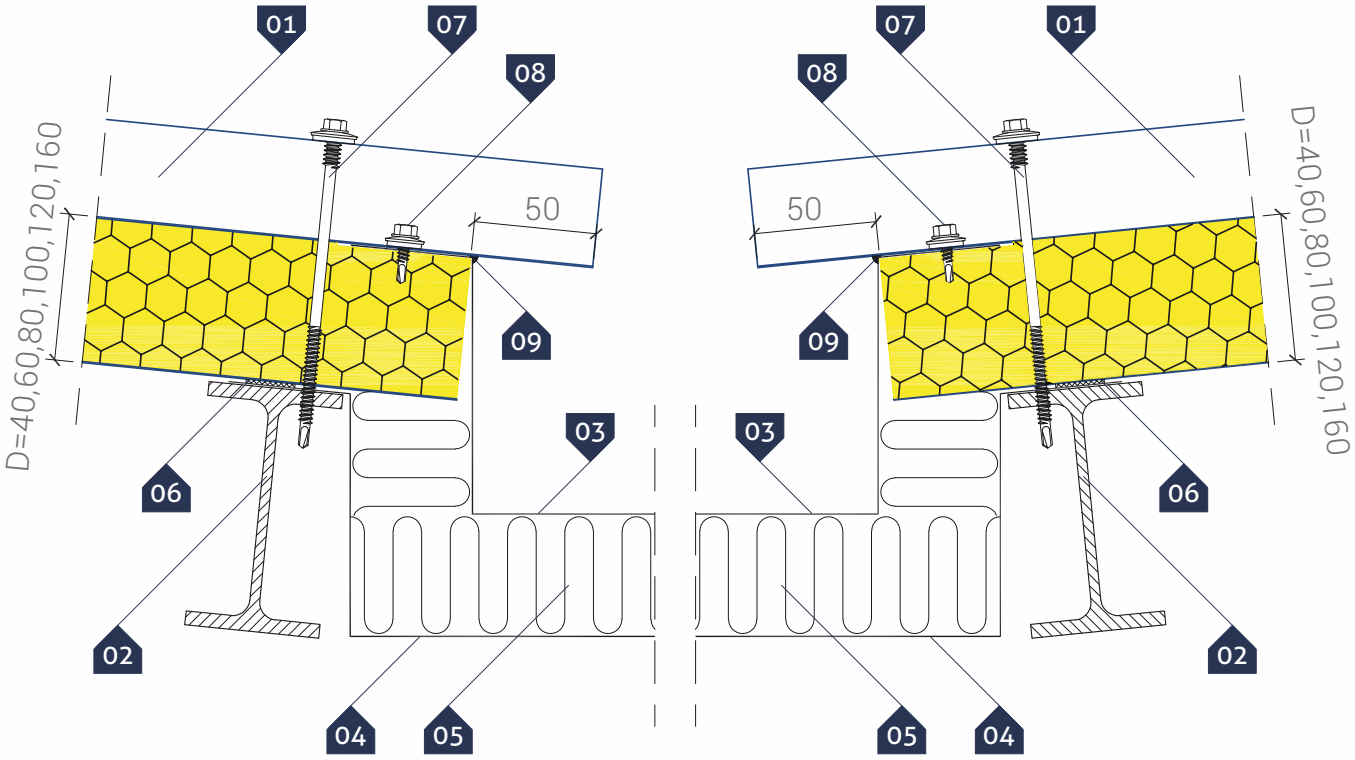
* - a recommended item



KEY:

01. **GS PIR D** roof panel
02. Purlin acc. to structure design
03. Profiled seal **(PE)**
04. Profiled flashing **OB-28**
05. Top roof ridge flashing **OB-22**
06. Bottom roof ridge flashing **OB-23**
07. Polyethylene, self-adhesive sealing tape **(PES)***
08. Polyurethane caulking foam
09. Self-drilling connector for sandwich panels
10. Self-drilling connector with a hex head for steel sheets
11. Self-drilling connector with a flat pan head for steel sheets

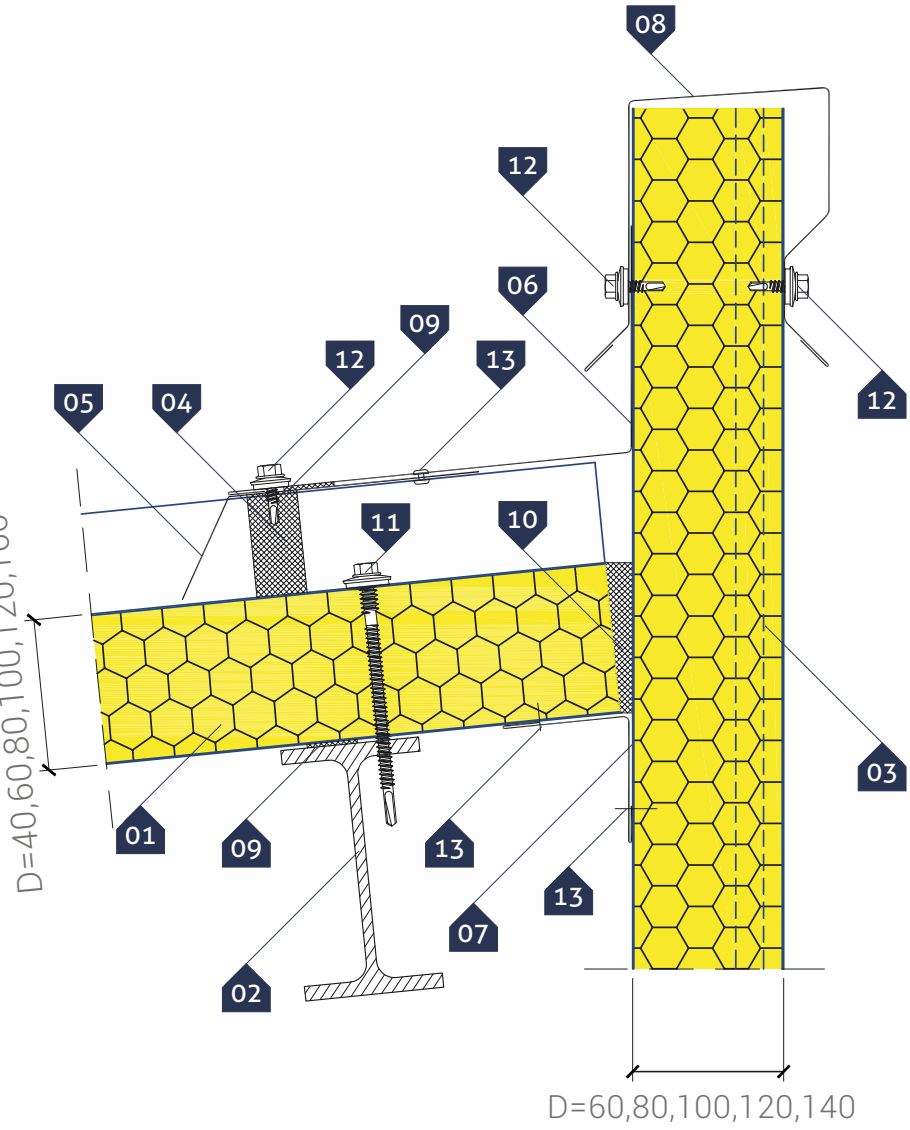
* - a recommended item



KEY:

01. **GS PIR D** roof panel
02. Purlin acc. to structure design
03. Individual inner gutter profile
04. Individual outer gutter profile
05. Thermal insulation carried out on the fastening
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Self-drilling connector for sandwich panels
08. Self-drilling connector with a hex head for steel sheets
09. Butyl sealing compound

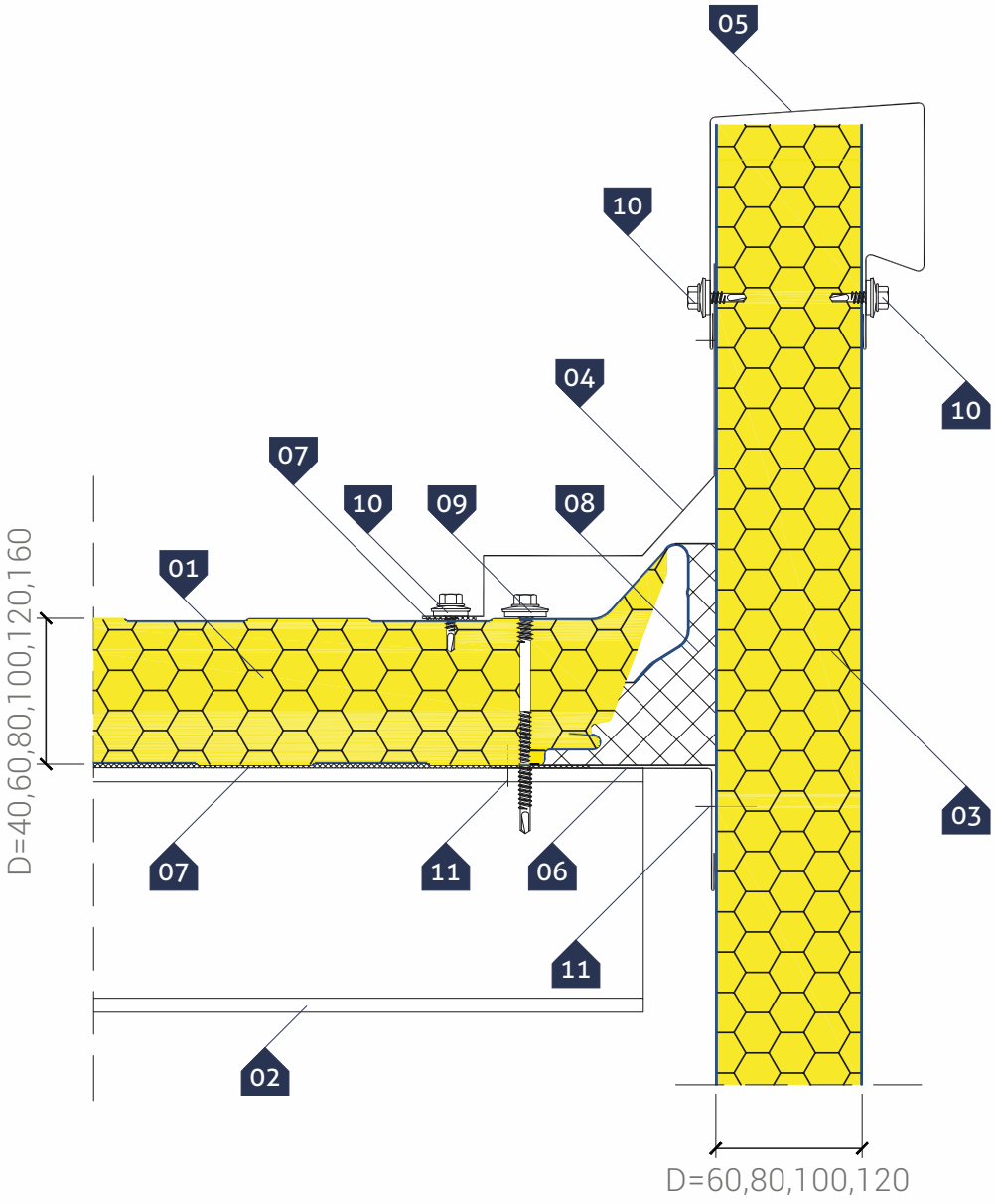
* - a recommended item



KEY:

01. **GS PIR D** roof panel
02. Purlin acc. to structure design
03. **GS insPIRe® U** wall panel
04. Profiled seal **(PE)**
05. Profiled flashing **OB-28**
06. Roof covering flashing **OB-29**
07. Corner treatment **OB-02**
08. Attic flashing **OB-34**
09. Polyethylene, self-adhesive sealing tape **(PES)***
10. Polyurethane caulking foam
11. Self-drilling connector for sandwich panels
12. Self-drilling connector with a hex head for steel sheets
13. Self-drilling connector with a flat pan head for steel sheets

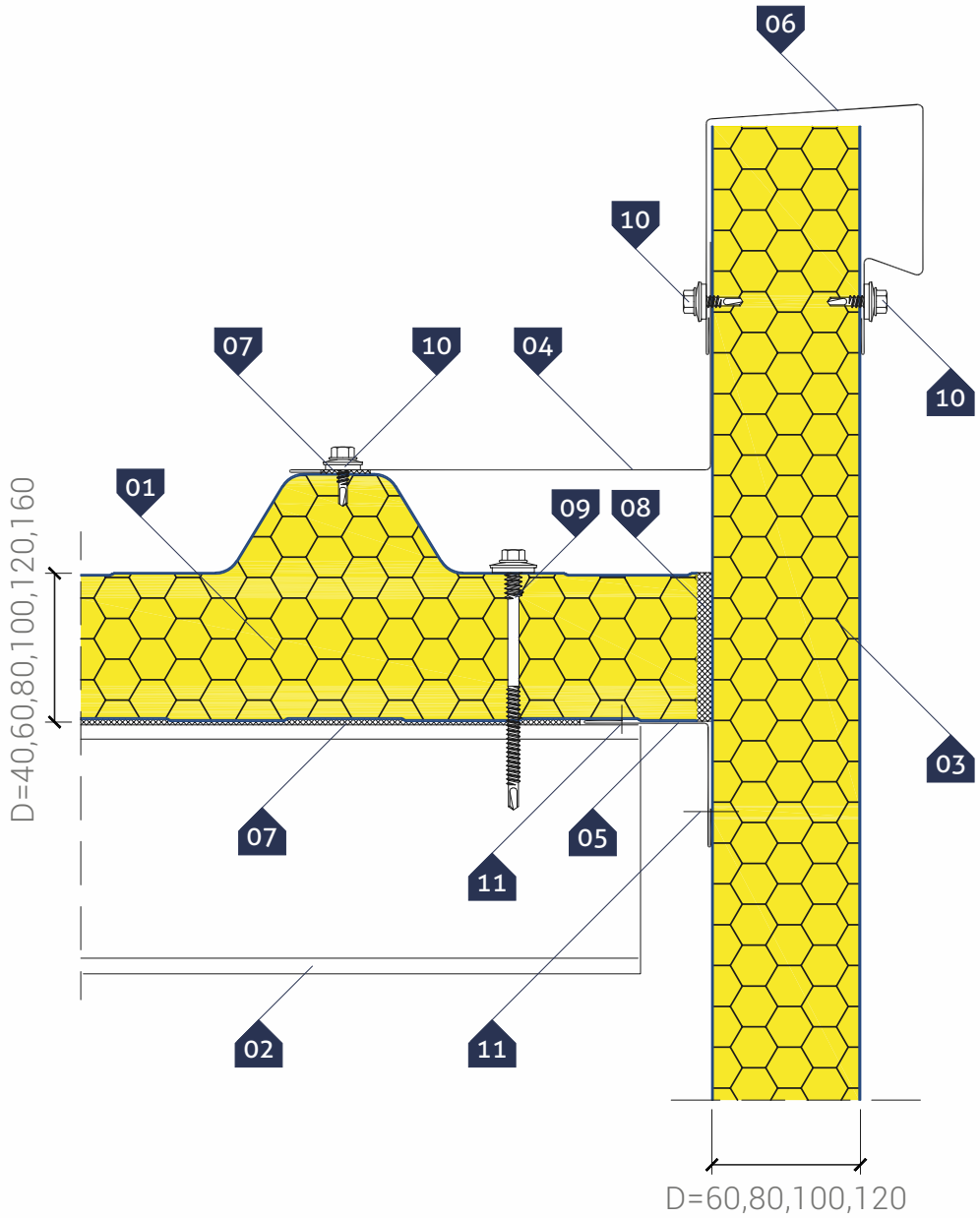
* - a recommended item



KEY:

01. **GS PIR D** roof panel
02. Purlin acc. to structure design
03. **GS insPIRe® S** wall panel
04. Non-standard masking flashing
05. Attic flashing **OB-05**
06. Corner treatment **OB-02**
07. Polyethylene, self-adhesive sealing tape **(PES)***
08. Filling with thermal insulation material
09. Self-drilling connector for sandwich panels
10. Self-drilling connector with a hex head for steel sheets
11. Self-drilling connector with a flat pan head for steel sheets

* - a recommended item



KEY:

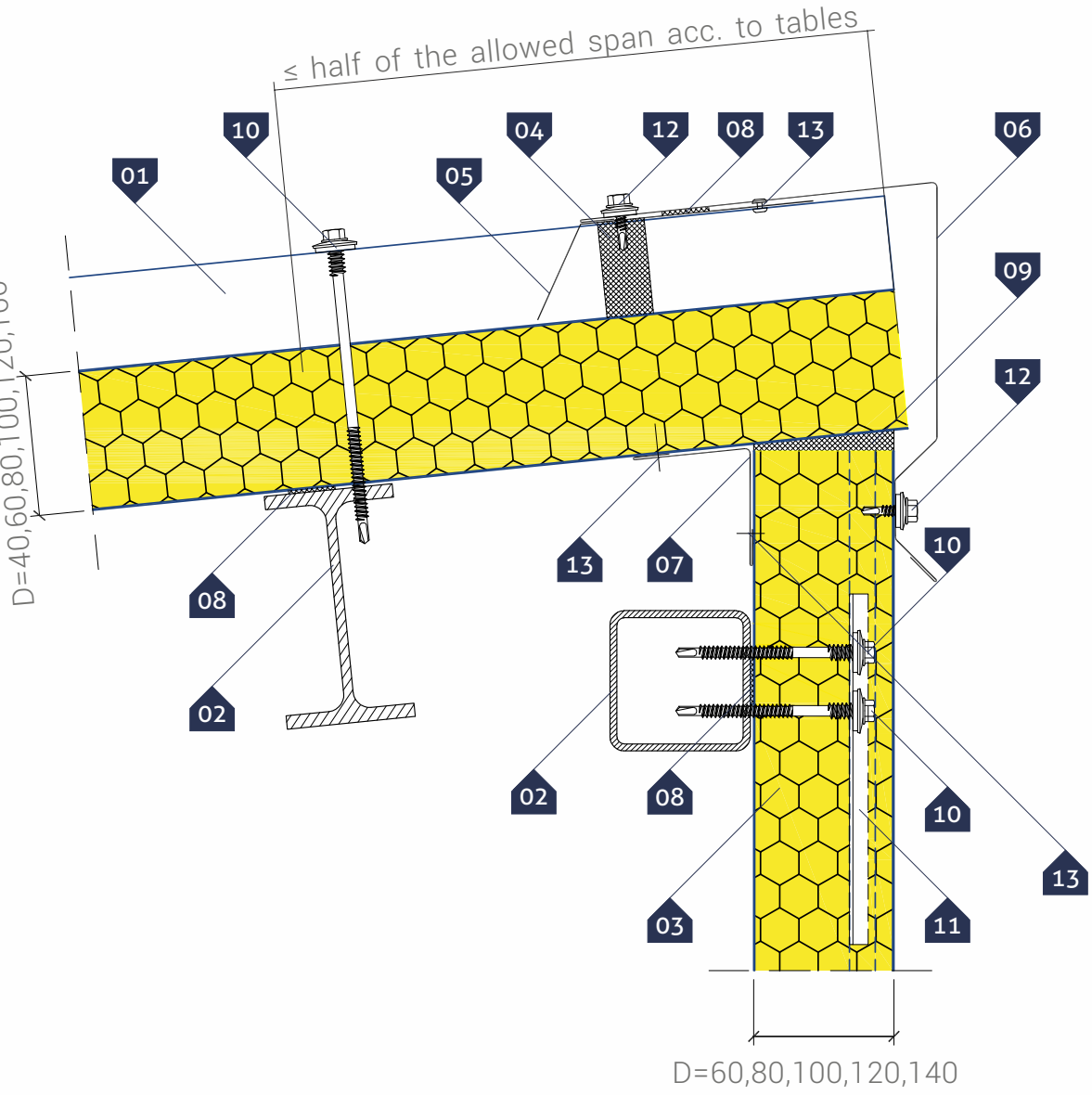
01. **GS PIR D** roof panel
02. Purlin acc. to structure design
03. **GS insPIRe® S** wall panel
04. **OB-29** slope masking flashing (for an angle α=90 horizontal measurement)
05. Corner treatment **OB-02**
06. Attic flashing **OB-35**
07. Polyethylene, self-adhesive sealing tape **(PES)***
08. Polyurethane caulking foam
09. Self-drilling connector for sandwich panels
10. Self-drilling connector with a hex head for steel sheets
11. Self-drilling connector with a flat pan head for steel sheets

* - a recommended item

GS PIR D roof sandwich panel (Roof fastener)

Detail of connection with the wall in the monopitch roof
Type I

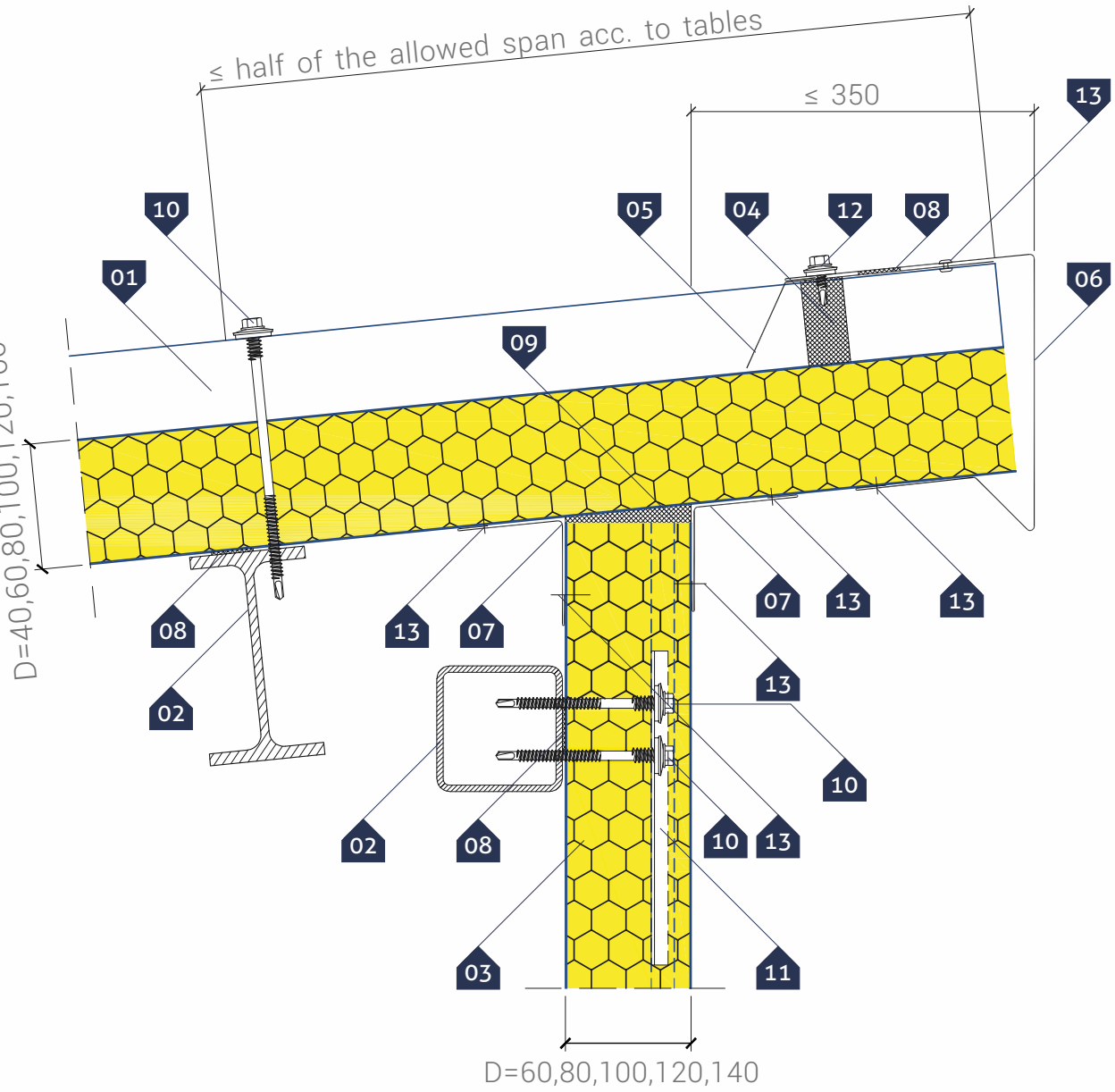
GÓR-STAL® SANDWICH PANELS



KEY:

01. **GS PIR D** roof panel
02. Structure acc. to structure design
03. **GS insPIRe® U** wall panel
04. Profiled seal **(PE)**
05. Profiled flashing **OB-28**
06. Top flashing **OB-32**
07. Corner treatment **OB-02**
08. Polyethylene, self-adhesive sealing tape **(PES)***
09. Polyurethane caulking foam
10. Self-drilling connector for sandwich panels
11. **PM1** spacer
12. Self-drilling connector with a hex head for steel sheets
13. Self-drilling connector with a flat pan head for steel sheets

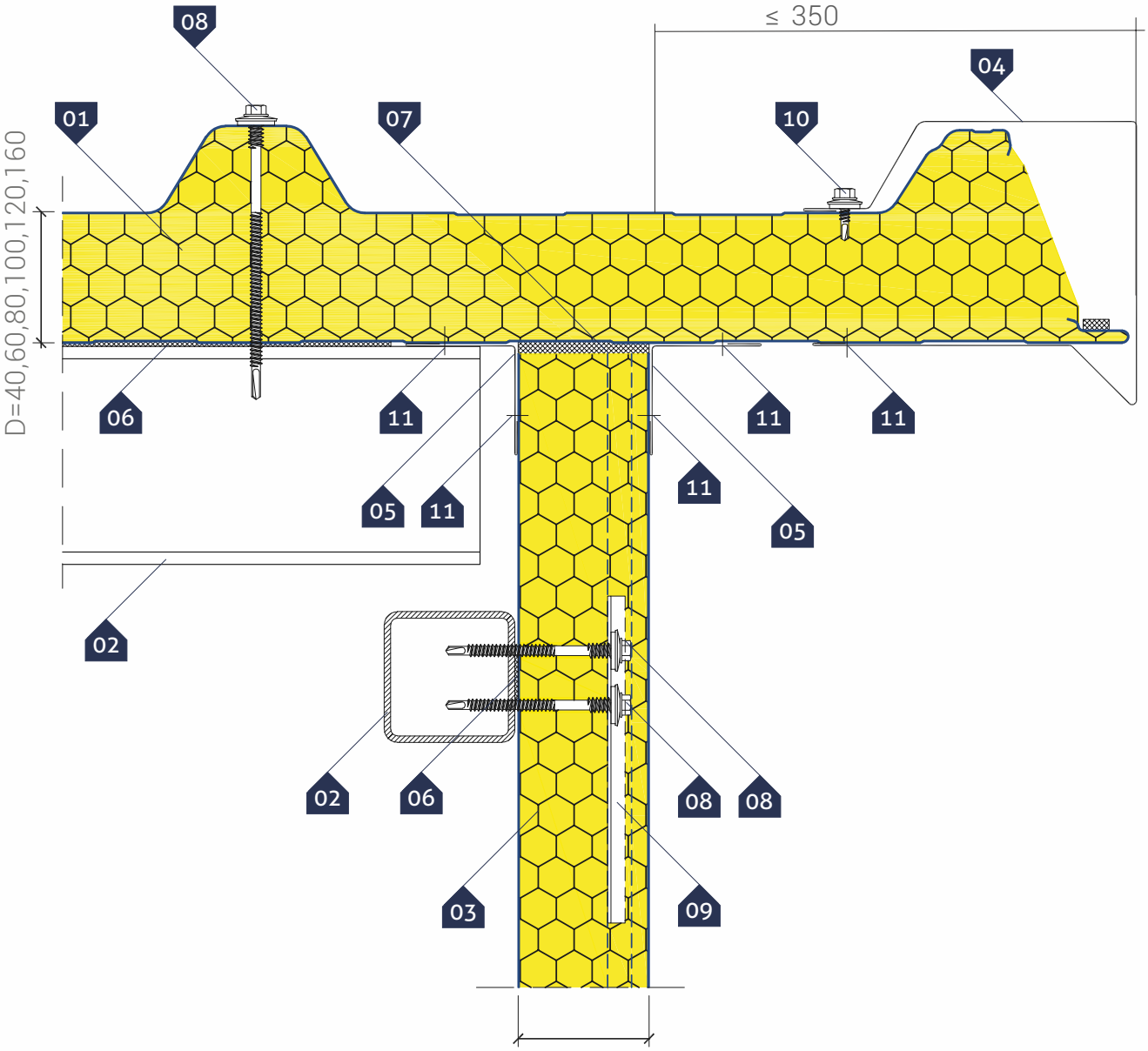
* - a recommended item



KEY:

01. **GS PIR D** roof panel
02. Structure acc. to structure design
03. **GS insPIRe® U** wall panel
04. Profiled seal **(PE)**
05. Profiled flashing **OB-28**
06. Top flashinga **OB-31**
07. Inner corner flashing **OB-02**
08. Polyethylene, self-adhesive sealing tape **(PES)***
09. Polyurethane caulking foam
10. Self-drilling connector for sandwich panels
11. **PM1** spacer
12. Self-drilling connector with a hex head for steel sheets
13. Self-drilling connector with a flat pan head for steel sheets

* - a recommended item



KEY:

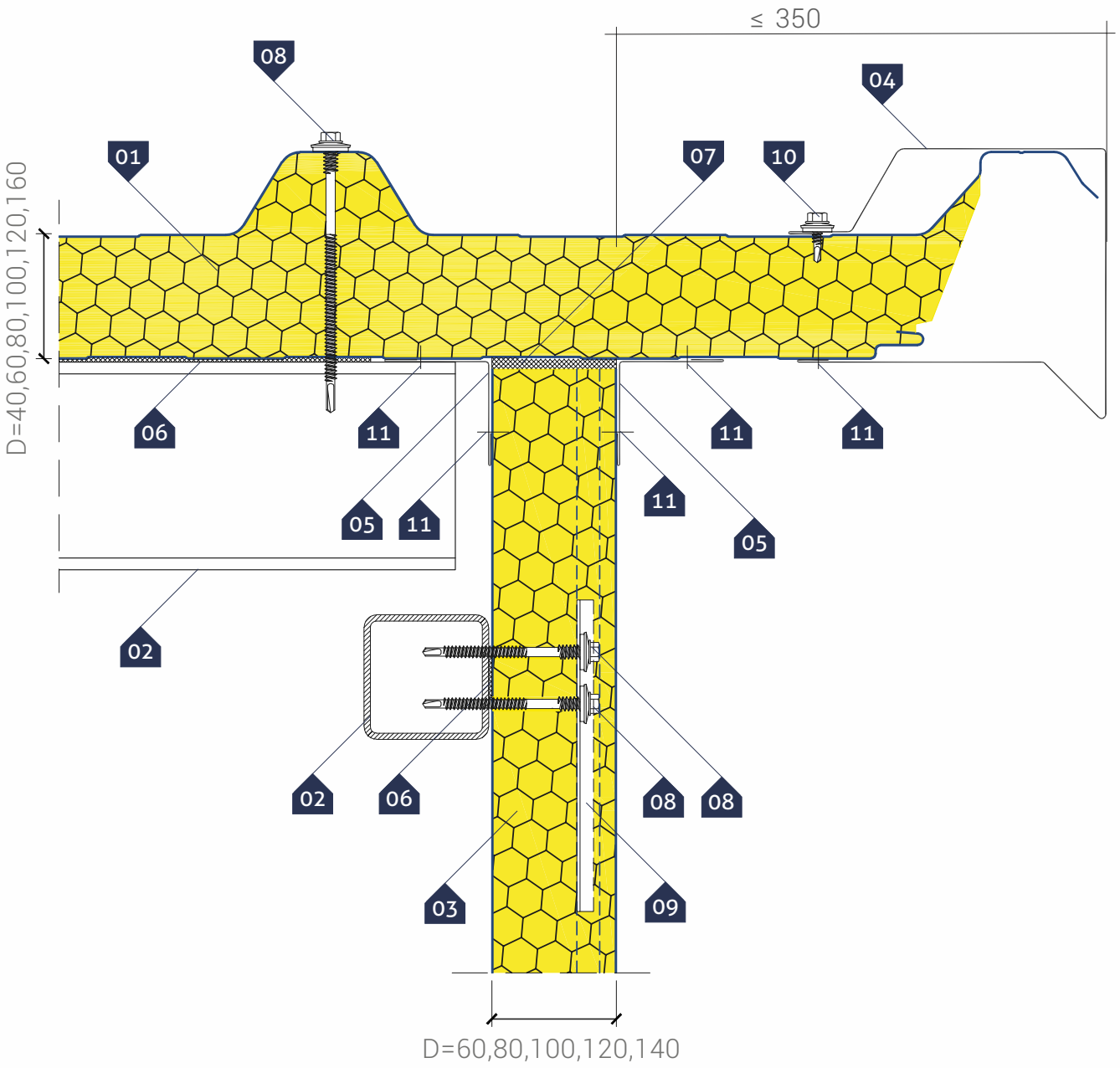
01. **GS PIR D** roof panel
02. Structure acc. to structure design
03. **GS insPIRe® U** wall panel
04. Covering flashing **OB-24**
05. Inner corner flashing **OB-02**
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Polyurethane caulking foam
08. Self-drilling connector for sandwich panels
09. **PM1** spacer
10. Self-drilling connector with a hex head for steel sheets
11. Self-drilling connector with a flat pan head for steel sheets

* - a recommended item

GS PIR D roof sandwich panel (Roof fastener)

Detail of eave transverse to the slope
Left side

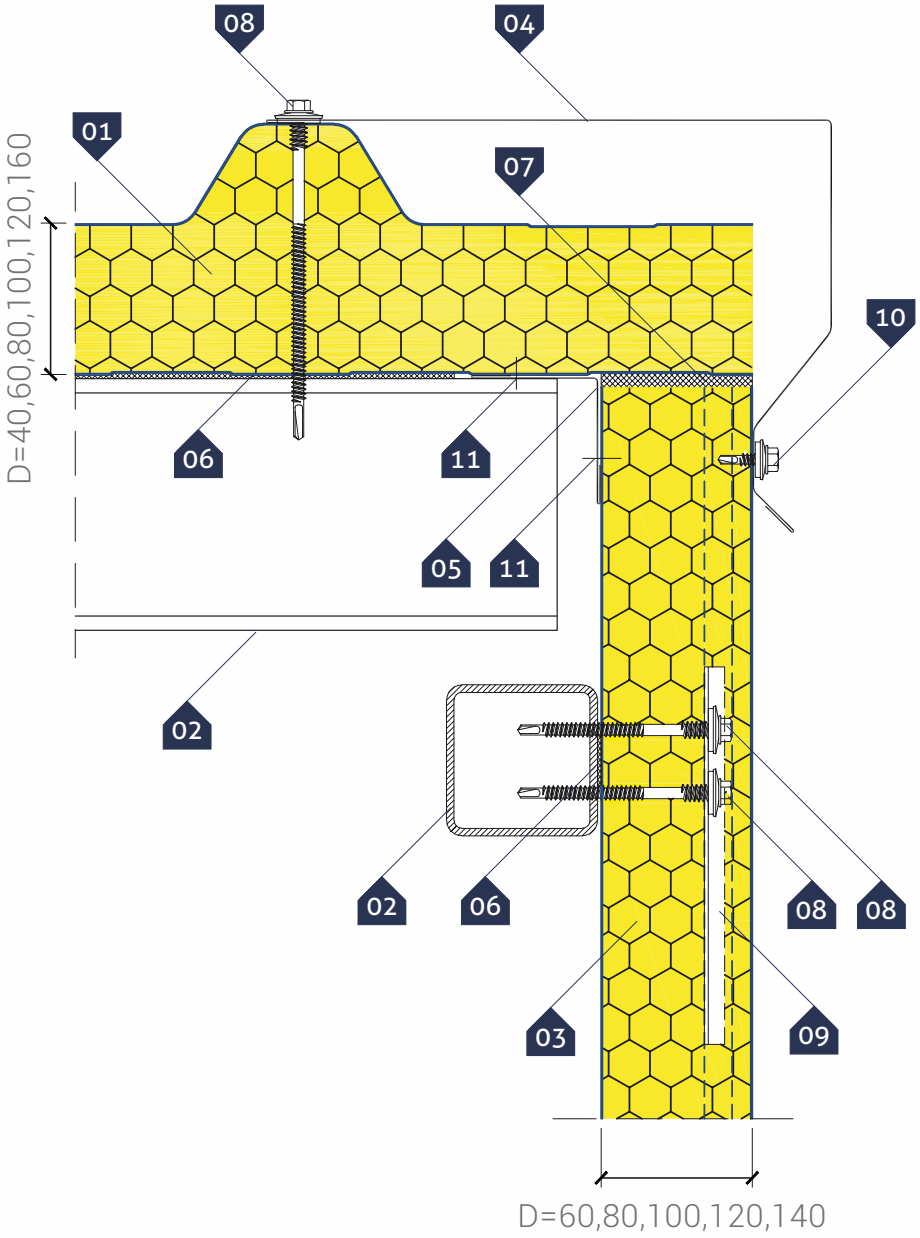
GÓR-STAL® SANDWICH PANELS



KEY:

01. **GS PIR D** roof panel
02. Structure acc. to structure design
03. **GS insPIRe® U** wall panel
04. Covering flashing **OB-24**
05. Corner flashing **OB-02**
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Polyurethane caulking foam
08. Self-drilling connector for sandwich panels
09. **PM1** spacer
10. Self-drilling connector with a hex head for steel sheets
11. Self-drilling connector with a flat pan head for steel sheets

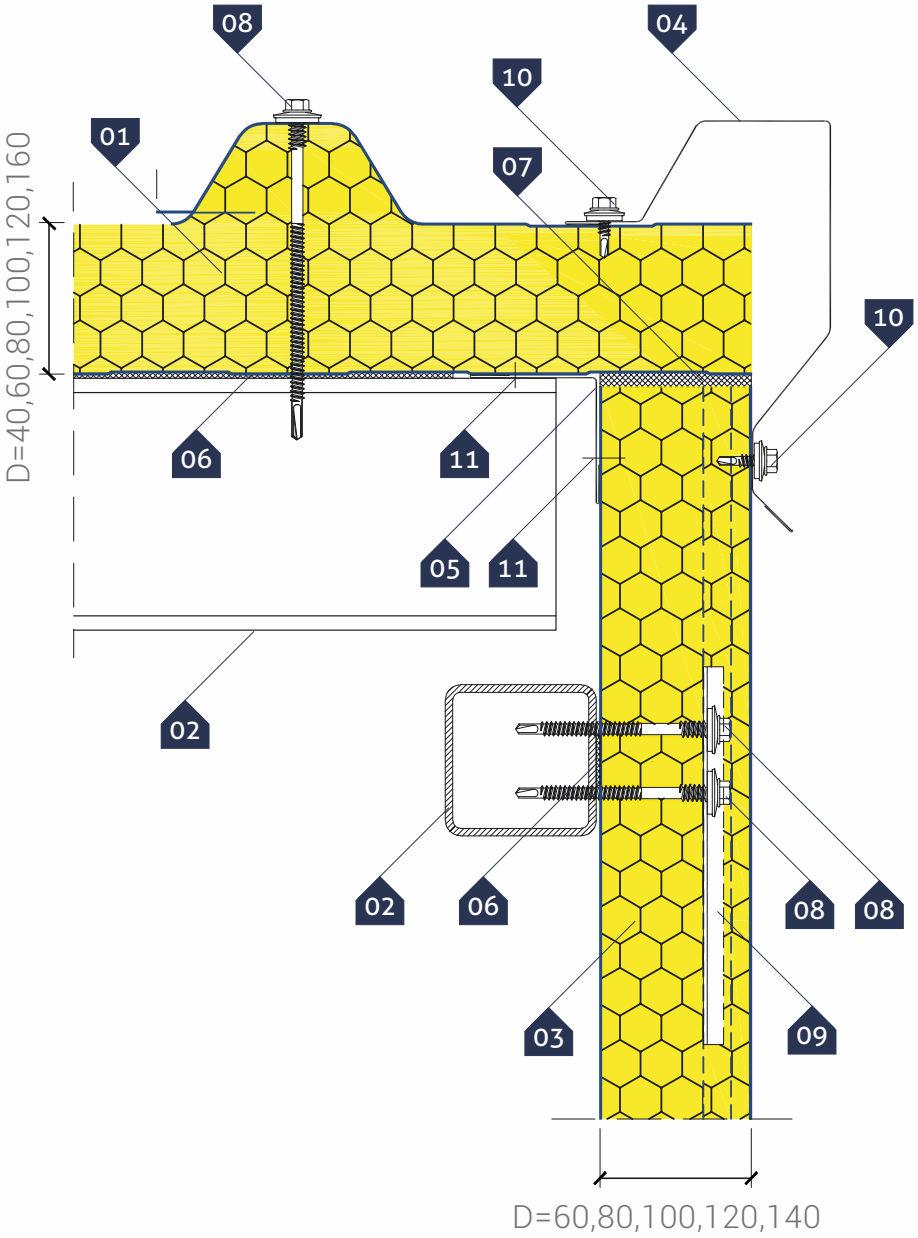
* - a recommended item



KEY:

01. **GS PIR D** roof panel
02. Structure acc. to structure design
03. **GS insPIRe® U** wall panel
04. Custom covering flashing
05. Inner corner flashing **OB-02**
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Polyurethane caulking foam
08. Self-drilling connector for sandwich panels
09. **PM1** spacer
10. Self-drilling connector with a hex head for steel sheets
11. Self-drilling connector with a flat pan head for steel sheets

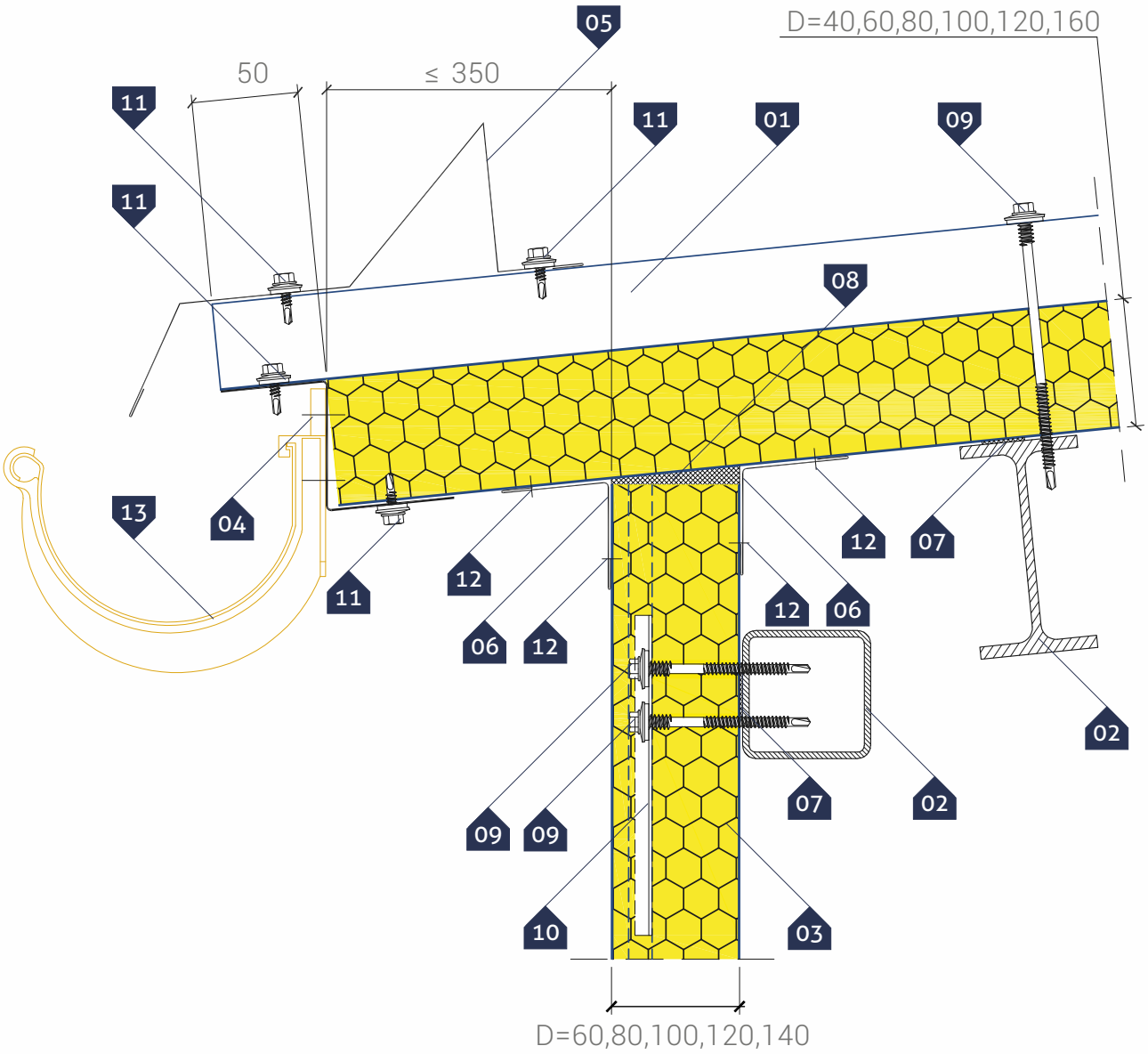
* - a recommended item



KEY:

01. **GS PIR D** roof panel
02. Structure acc. to structure design
03. **GS insPIRe® U** wall panel
04. Custom covering flashing
05. Inner corner flashing **OB-02**
06. Polyethylene, self-adhesive sealing tape **(PES)***
07. Polyurethane caulking foam
08. Self-drilling connector for sandwich panels
09. **PM1** spacer
10. Self-drilling connector with a hex head for steel sheets
11. Self-drilling connector with a flat pan head for steel sheets

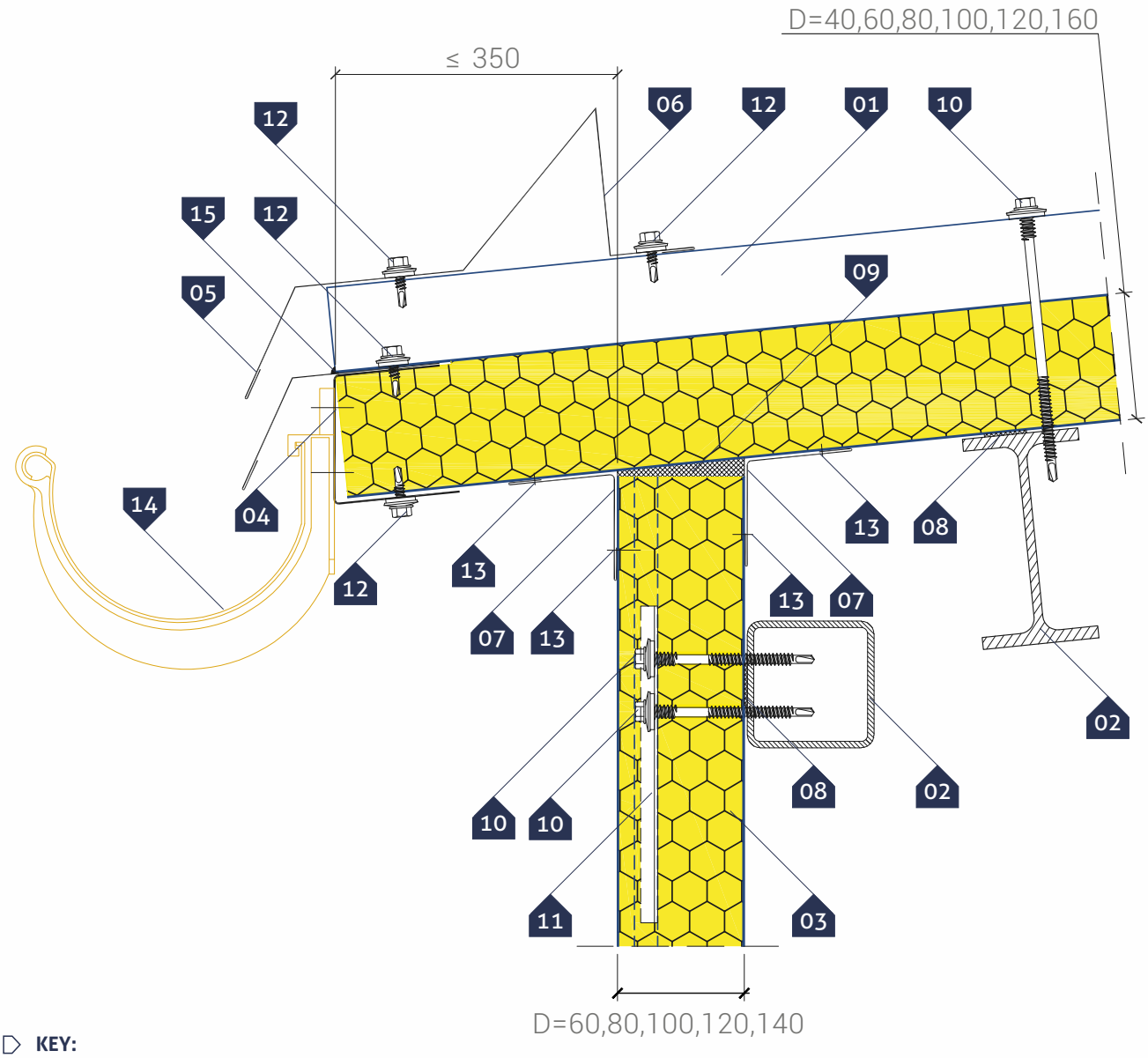
* - a recommended item



KEY:

01. **GS PIR D** roof panel (edge cut at the production stage)
02. Structure acc. to structure design
03. **GS insPIRe® U** wall panel
04. **OB-26** gutter zee (alternatively in the version made of coated metal sheet it is fitted with an additional flat bar between the back and the foam)
05. Snow barrier **OB-27** (alternatively drip tray **OB-33***)
06. Corner flashing **OB-02**
07. Polyethylene, self-adhesive sealing tape **(PES)****
08. Polyurethane caulking foam
09. Self-drilling connector for sandwich panels
10. **PM1** spacer
11. Self-drilling connector with a hex head for steel sheets
12. Self-drilling connector with a flat pan head for steel sheets
13. Gutter

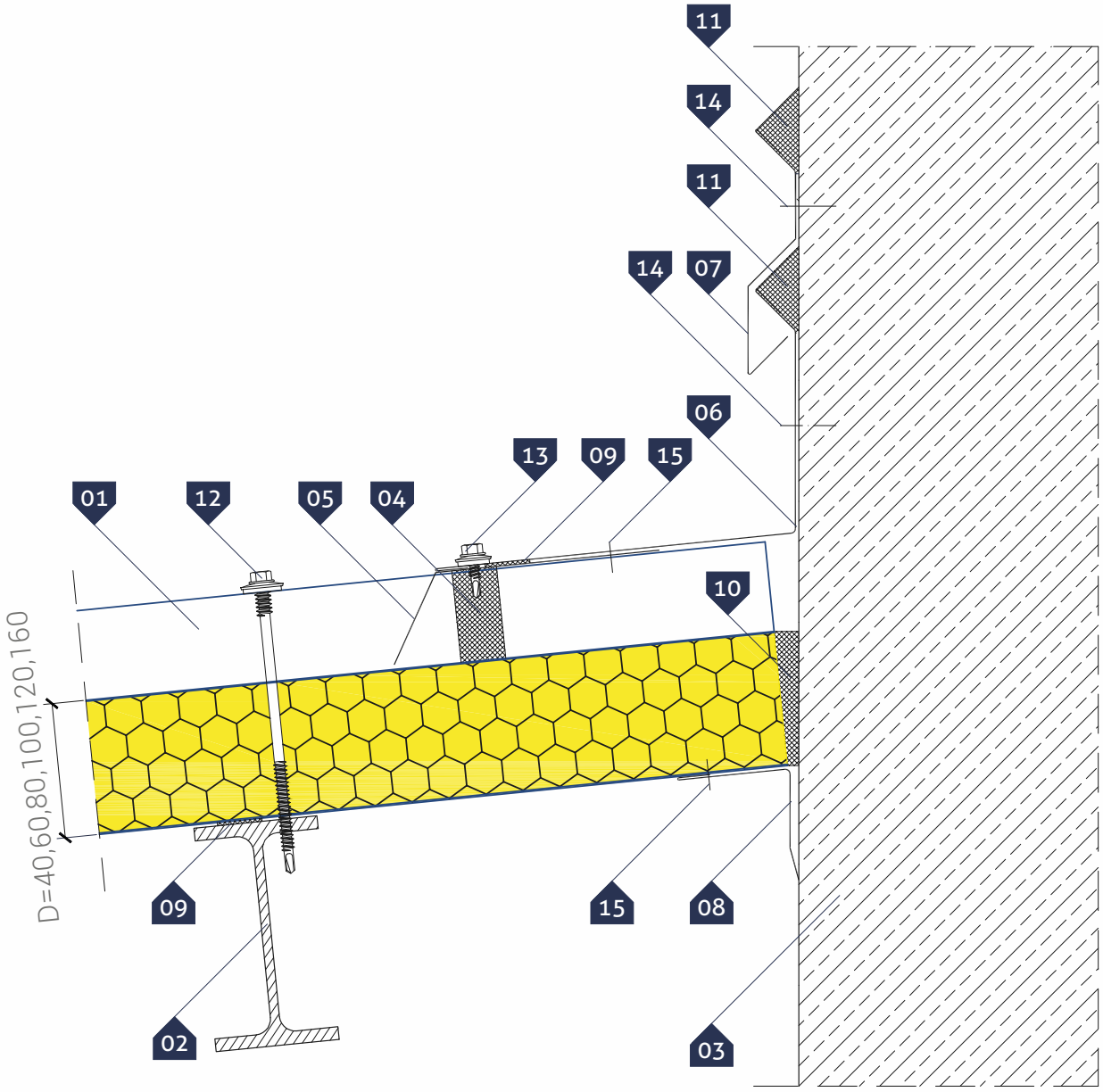
* - use in atypical version with notching on both sides
** - a recommended item



KEY:

01. **GS PIR D** roof panel
02. Structure acc. to structure design
03. **GS insPIRe® U** wall panel
04. Gutter channel **OB-25** (alternatively in the version made of coated metal sheet it is fitted with an additional flat bar between the back and the foam)
05. Drip edge **OB-33**
06. Snow barrier **OB-27** (alternatively drip tray **OB-33***)
07. Corner flashing **OB-02**
08. Polyethylene, self-adhesive sealing tape **(PES)****
09. Polyurethane caulking foam
10. Self-drilling connector for sandwich panels
11. **PM1** spacer
12. Self-drilling connector with a hex head for steel sheets
13. Self-drilling connector with a flat pan head for steel sheets
14. Gutter
15. Butyl sealing compound

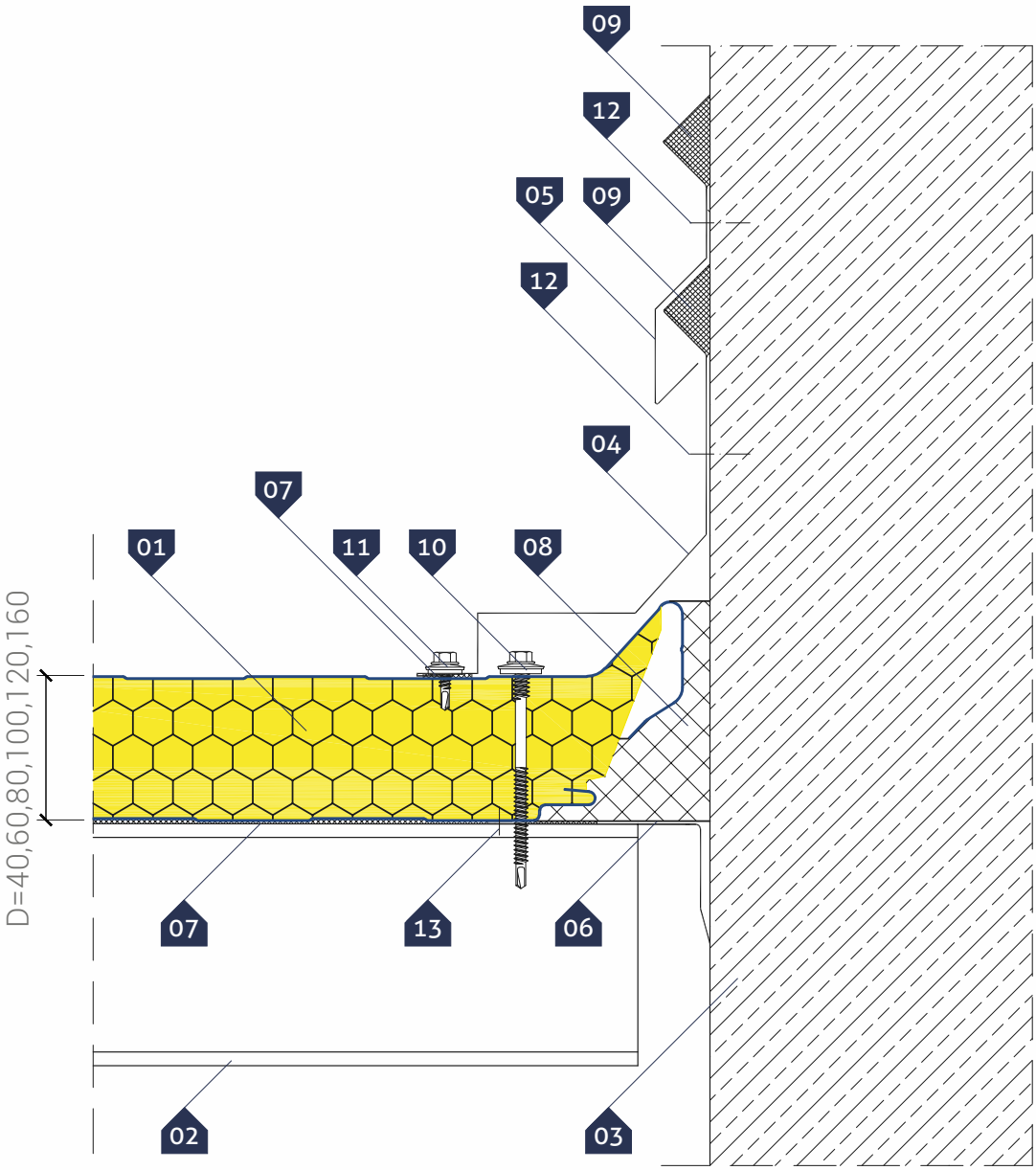
* - use in a typical version with notching on both sides
** - a recommended item



KEY:

01. **GS PIR D** roof panel
02. Purlin acc. to structure design
03. Reinforced concrete or masonry fire-wall
04. Profiled seal **(PE)**
05. Profiled flashing **OB-28**
06. Roof flashing **OB-30**
07. Drip edge **OB-12**
08. Internal corner flashing **OB-07**
09. 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 with a hex head for steel sheets
14. Steel expansion joint for quick assembly
15. Self-drilling connector with a flat pan head for steel sheets

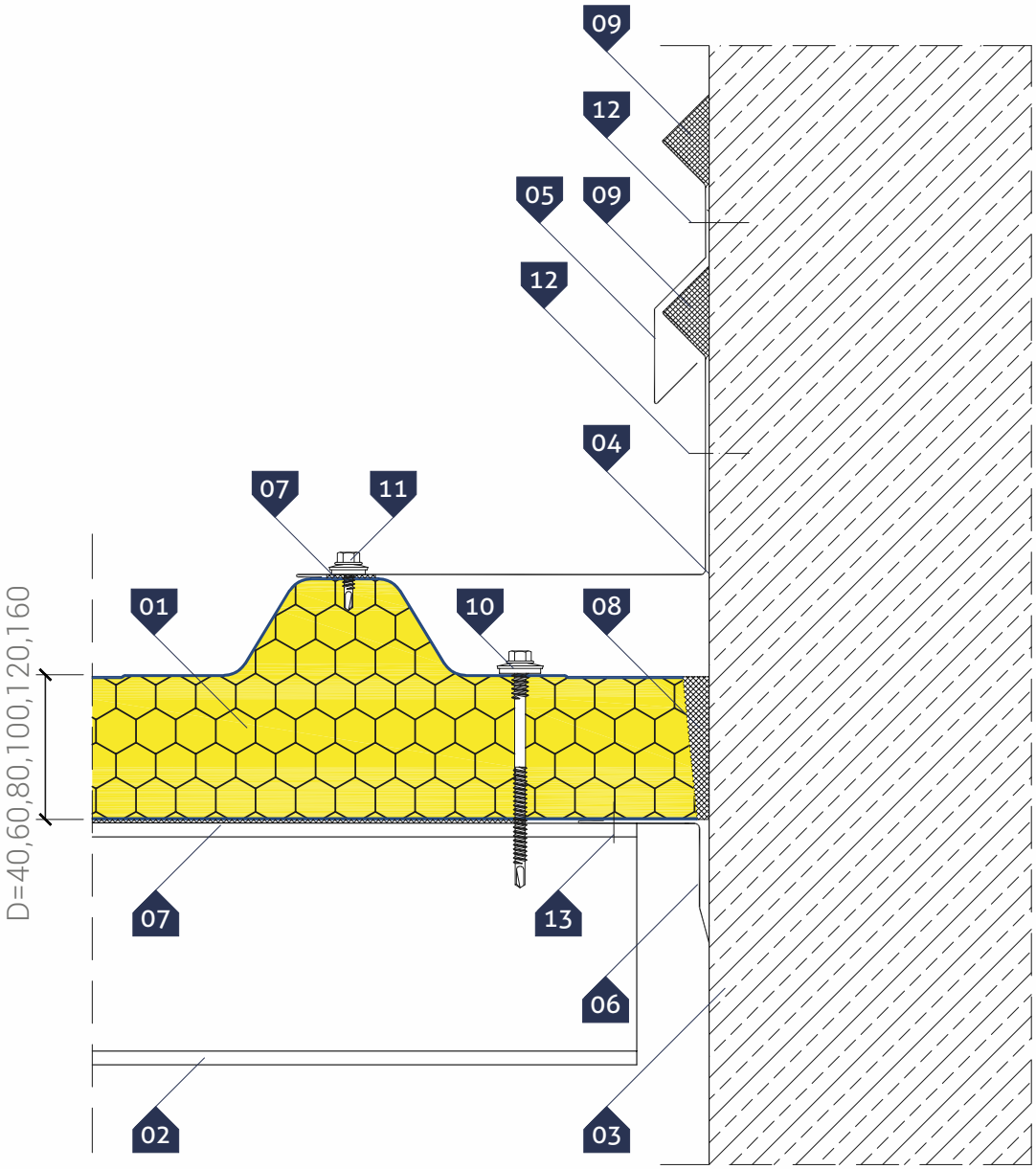
* - a recommended item



KEY:

01. **GS PIR D** roof panel
02. Purlin acc. to structure design
03. Reinforced concrete or masonry fire-wall
04. Non-standard masking flashing
05. Drip edge **OB-12**
06. Internal corner flashing **OB-07**
07. Polyethylene, self-adhesive sealing tape **(PES)***
08. Filling with thermal insulation material
09. Butyl sealing compound
10. Self-drilling connector for sandwich panels
11. Self-drilling connector with a hex head for steel sheets
12. Mechanical connector selected for the material of the wall
13. Self-drilling connector with a flat pan head for steel sheets

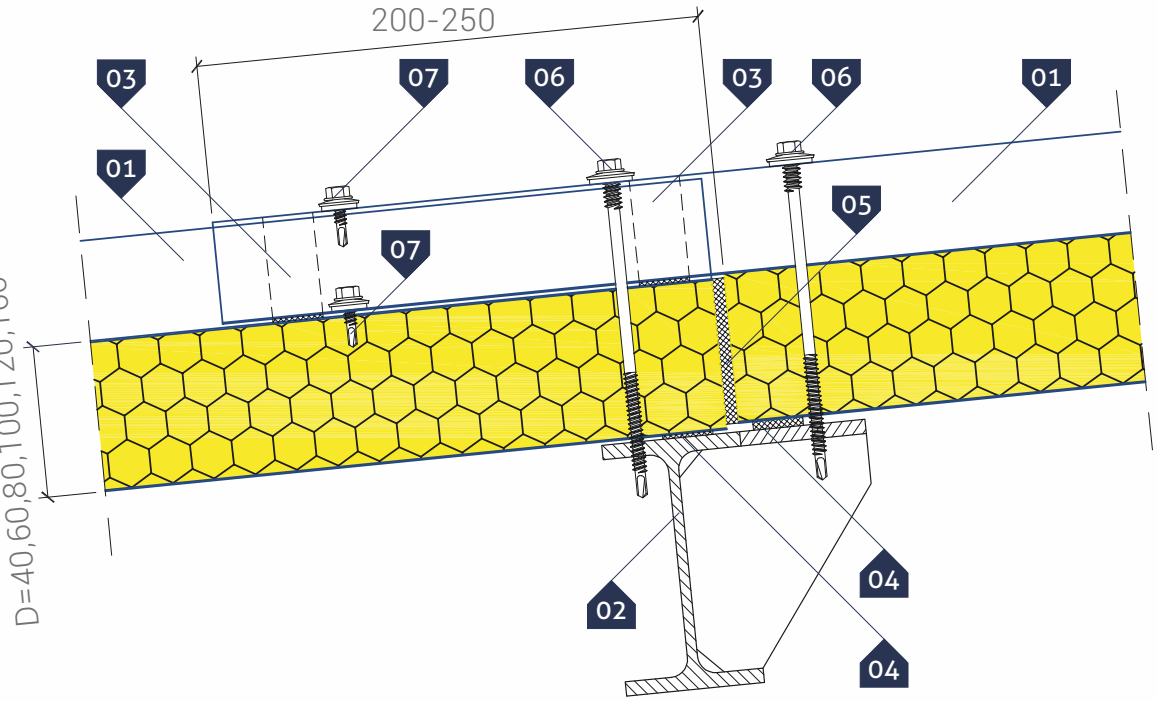
* - a recommended item



KEY:

01. **GS PIR D** roof panel
02. Purlin acc. to structure design
03. Reinforced concrete or masonry fire-wall
04. OB-30 slope flashing (for an angle α=90 horizontal measurement)
05. Drip edge **OB-12**
06. Internal corner flashing **OB-07**
07. Polyethylene, self-adhesive sealing tape **(PES)***
08. Polyurethane caulking foam
09. Butyl sealing compound
10. Self-drilling connector for sandwich panels
11. Self-drilling connector with a hex head for steel sheets
12. Steel expansion joint for quick assembly
13. Self-drilling connector with a flat pan head for steel sheets

* - a recommended item

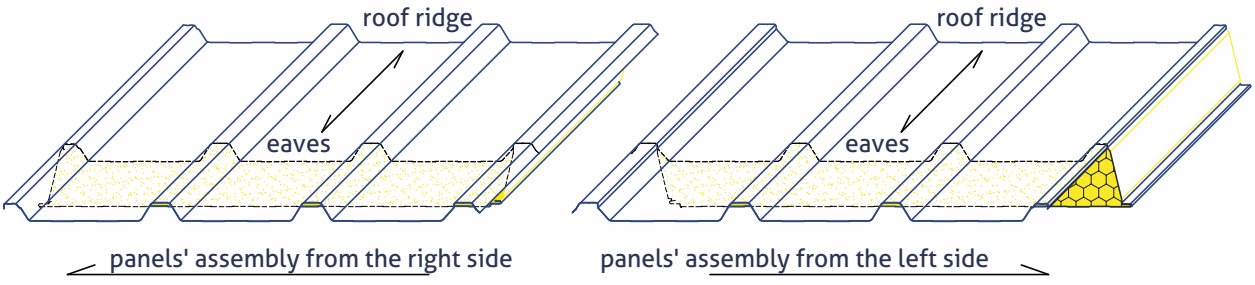


KEY:

01. **GS PIR D** roof panel
02. Purlin acc. to structure design
03. Butyl sealing compound
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Polyurethane caulking foam
06. Self-drilling connector for sandwich panels
07. Self-drilling connector with a hex head for steel sheets

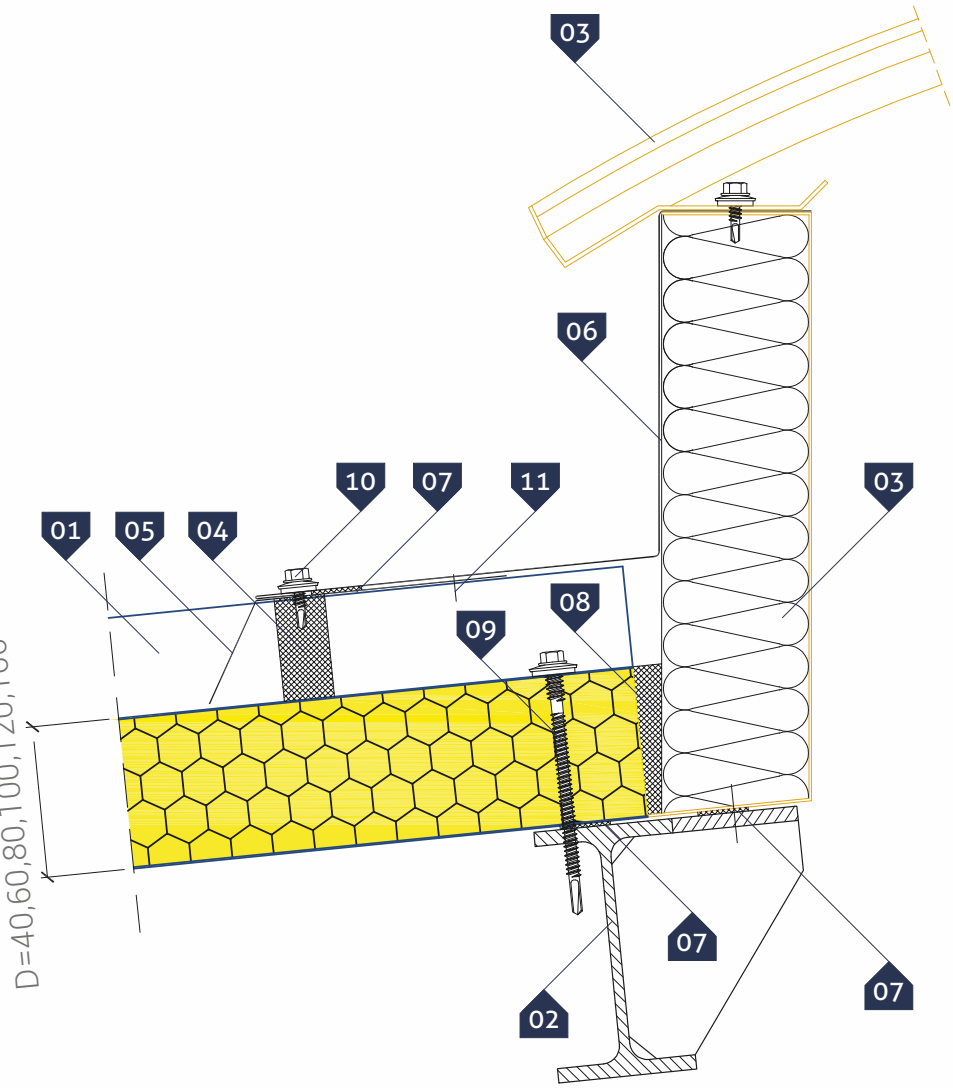
* - a recommended item

Panelcut options



RIGHT panelcut

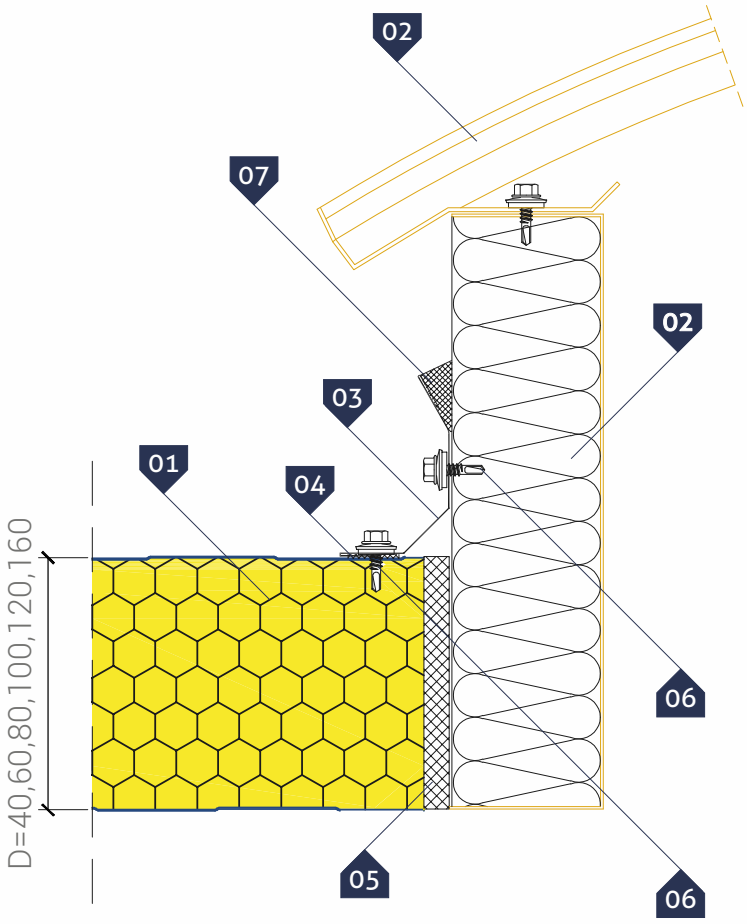
LEFT panelcut



KEY:

01. **GS PIR D** roof panel
02. Purlin acc. to structure design
03. Skylight with base
04. Profiled seal **(PE)**
05. Profiled flashing **OB-28**
06. Individual skylight flashing
07. Polyethylene, self-adhesive sealing tape **(PES)***
08. Polyurethane caulking foam
09. Self-drilling connector for sandwich panels
10. Self-drilling connector with a hex head for steel sheets
11. Self-drilling connector with a flat pan head for steel sheets

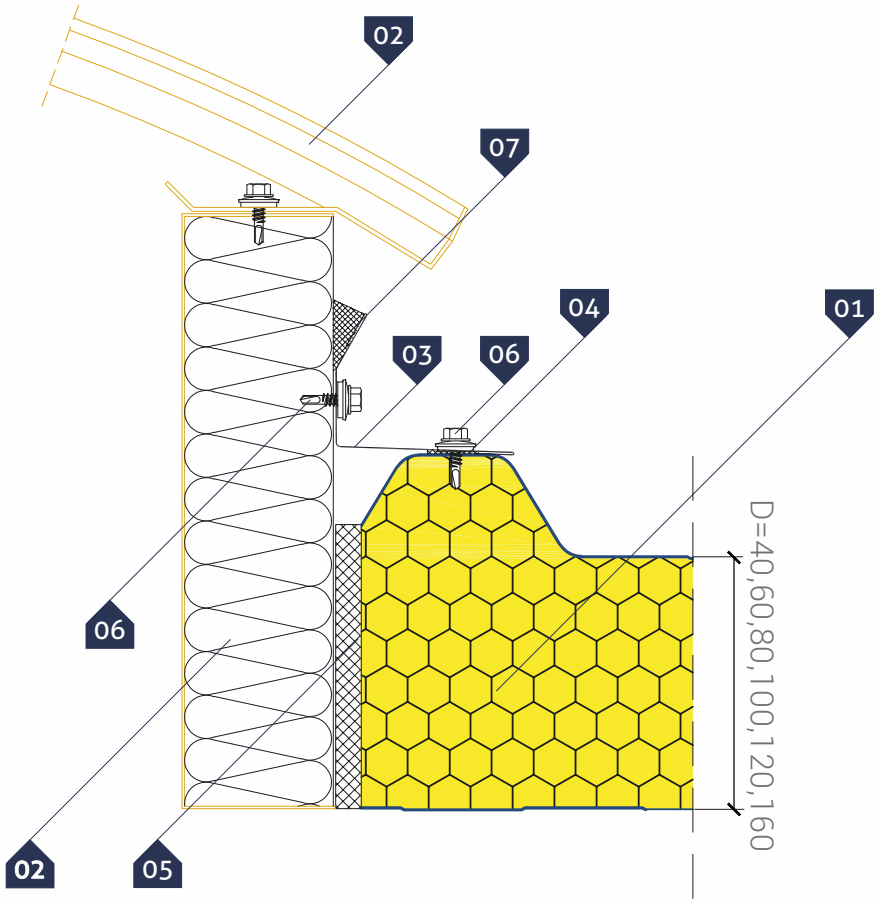
* - a recommended item



KEY:

01. **GS PIR D** roof panel
02. Skylight with base
03. Non-standard masking flashing
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Polyurethane caulking foam
06. Self-drilling connector with a hex head for steel sheets
07. Butyl sealing compound

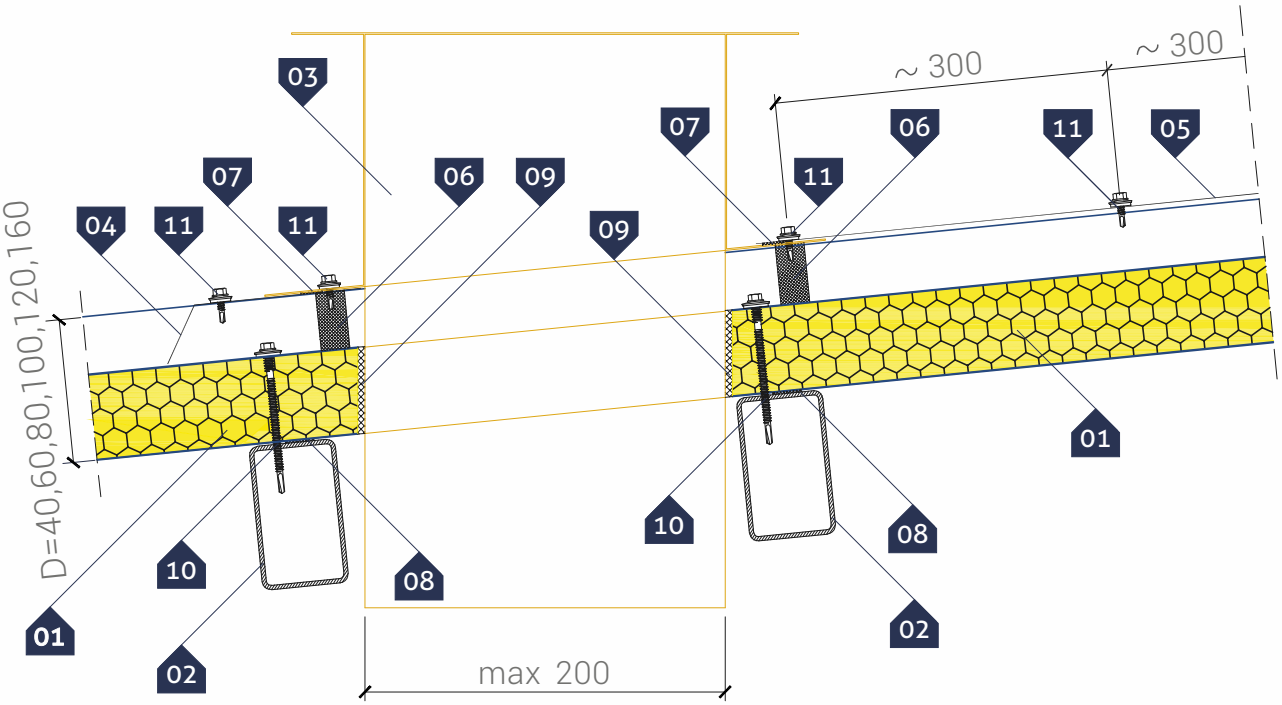
* - a recommended item



KEY:

01. **GS PIR D** roof panel
02. Skylight with base
03. Non-standard masking flashing
04. Polyethylene, self-adhesive sealing tape **(PES)***
05. Polyurethane caulking foam
06. Self-drilling connector with a hex head for steel sheets
07. Butyl sealing compound

* - a recommended item



KEY:

01. **GS PIR D** roof panel
02. Supporting structure (if necessary for strength reasons)
03. Wind-driven roof vent base (mounted in the centre of a panel)
04. Profiled flashing **OB-28**
05. Individual flashing at roof ridge flashing
06. Profiled seal **(PE)**
07. Butyl sealing compound
08. Polyethylene, self-adhesive sealing tape **(PES)***
09. Self-drilling connector for sandwich panels
10. Self-drilling connector for steel sheet
11. Self-drilling connector with a hex head for steel sheets

* - a recommended item

NOTE!

The following figures are illustrative and only show examples of machine configurations. Maximum load capacity of machines **Viavac = 1000 kg**. The machines have no restrictions on the length of the panel being lifted.

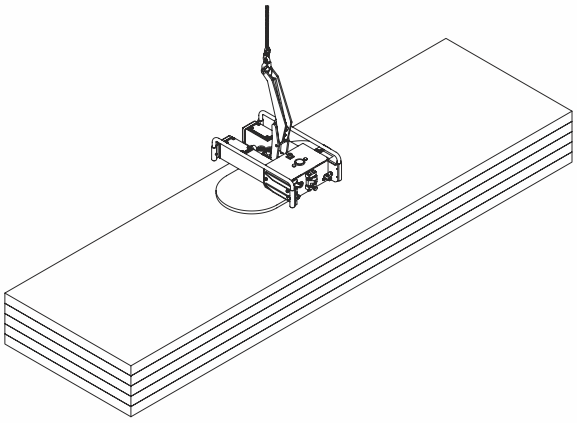
Use: for mounting roof and wall panels in vertical and horizontal layout.

The selection of a particular device from the **VIAVAC** offer depends on the type and extent of the material being lifted and the specificity of a specific installation. To eliminate the risk of damaging the panel during its transfer, always follow the instructions given by the appropriately trained technical department of the company dealing with the rental of **VIAVAC** machines. Therefore, please contact **VIAVAC** for detailed information on the selection of machines and instructions for specific installation.

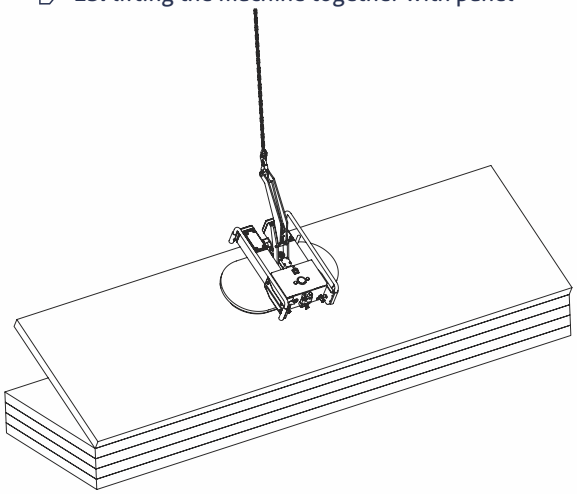
Contact:
tel. **+48 68 384 39 08**
http: **www.viavac.pl**

Scheme No. 1. Horizontal installation of a wall panel using the **GlassBoy** machine

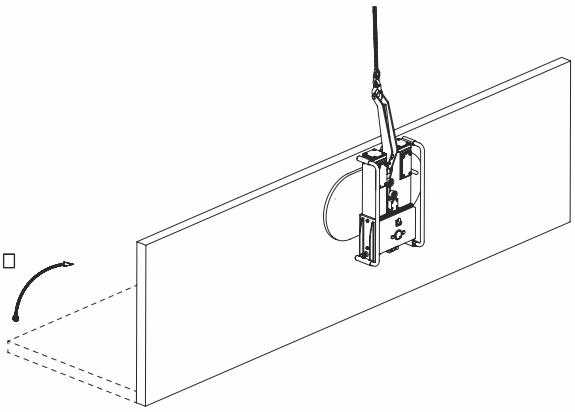
1a. situating the machine and its attachment to the panel



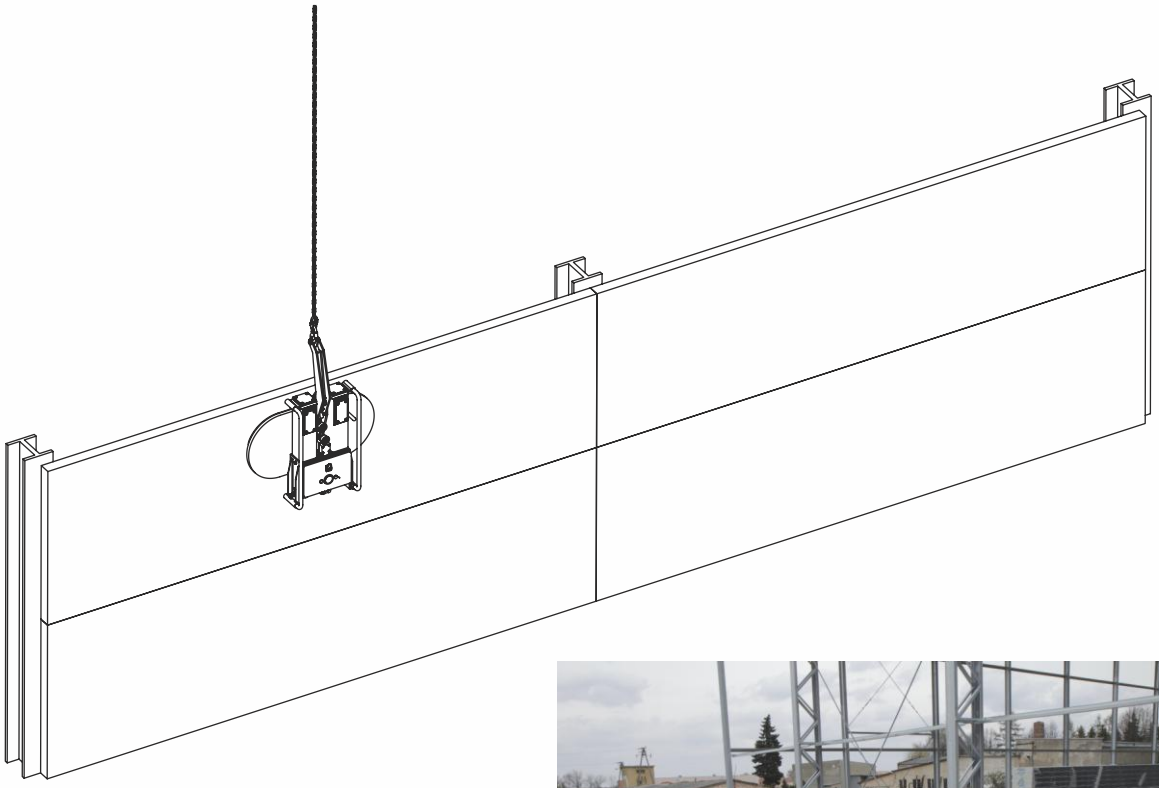
1b. lifting the machine together with panel



1c. changing the angle of the machine and transporting the plate to the place of installation

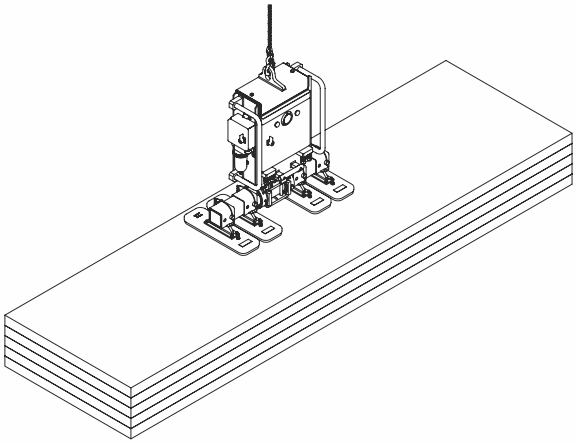


1d. installation of panel on the wall and detachment of the machine

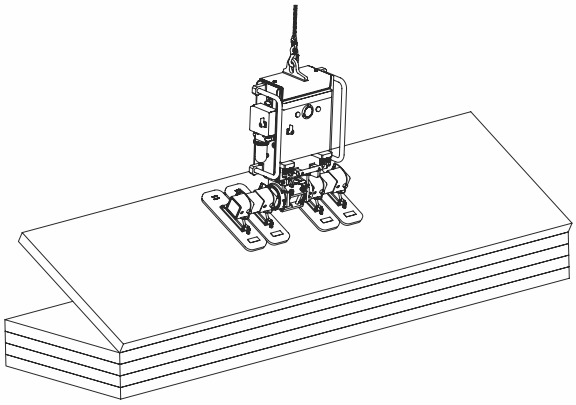


Scheme No. 2. Horizontal installation of a wall panel using the **CladBoy** machine

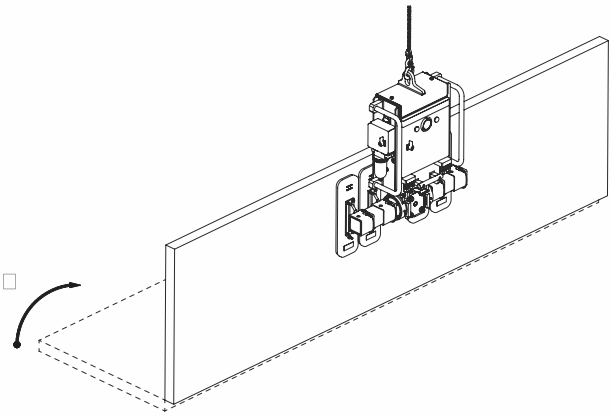
2a. situating the machine and its attachment to the panel



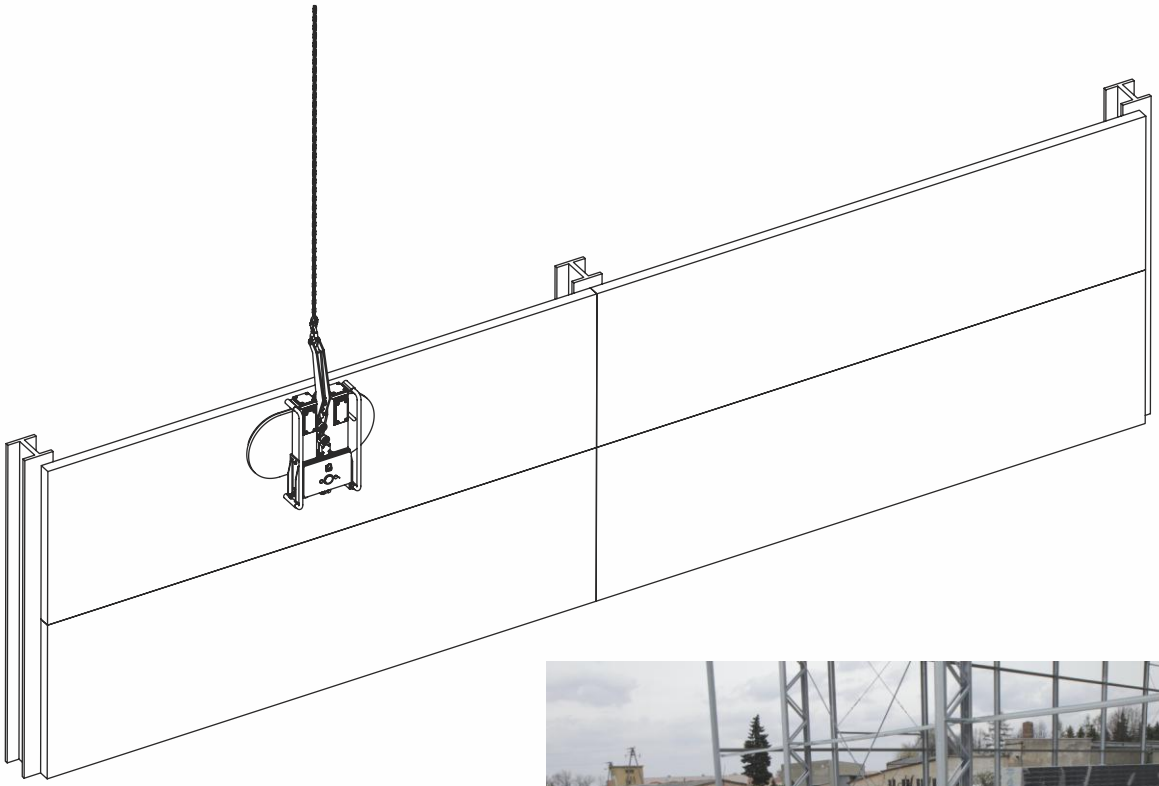
2b. lifting the machine together with panel



2c. change of the angle of the machine and transporting the panel to the place of installation

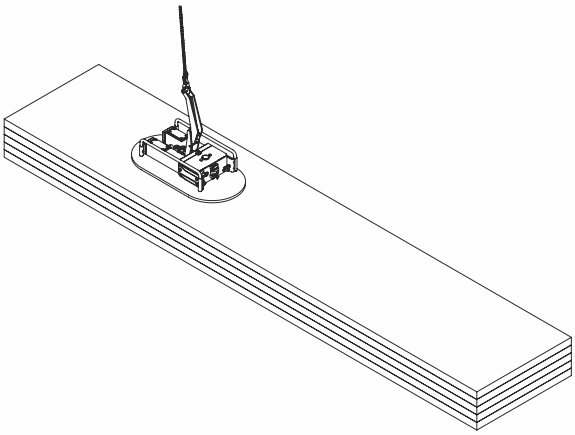


2d. installation of panel on the wall and detachment of the machine

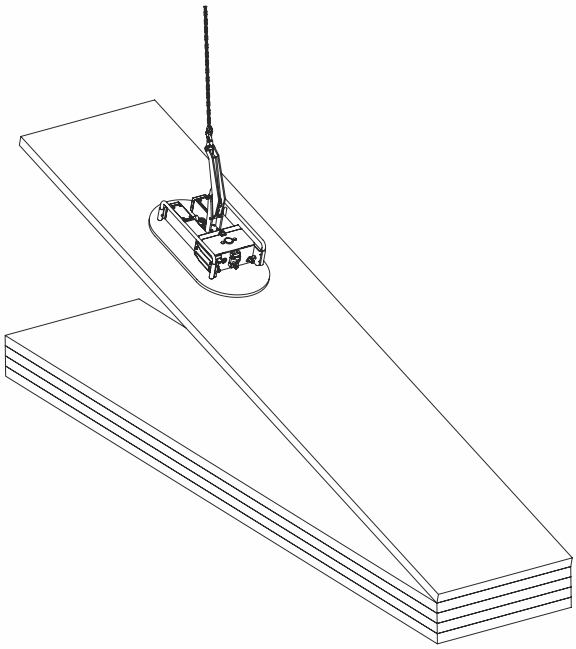


Scheme No. 3. Vertical installation of a wall panel using the **GlassBoy** machine

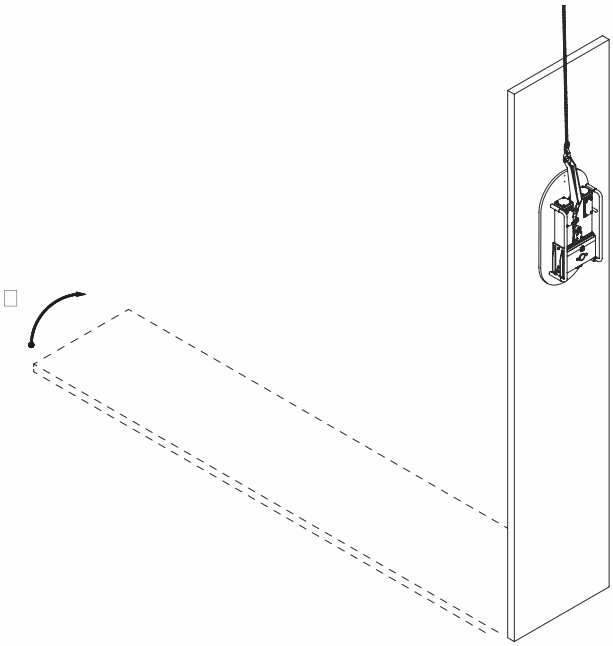
3a. situating the machine and its attachment to the panel



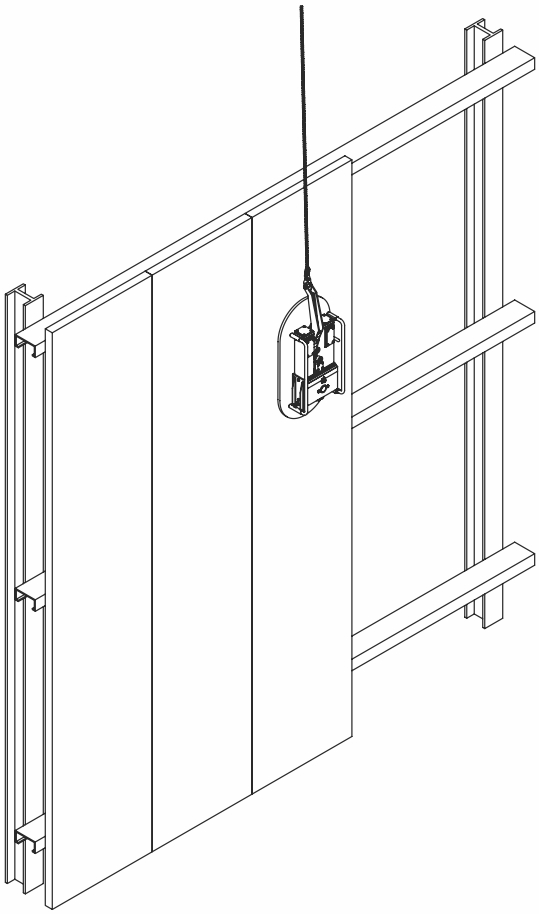
3b. lifting the machine together with panel



3c. changing the angle of the machine and transporting to the place of assembly

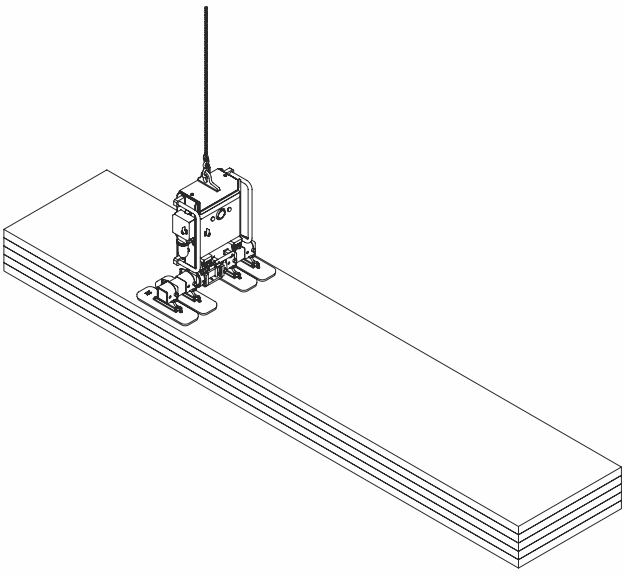


3d. installation of panel on the wall and detachment of the machine

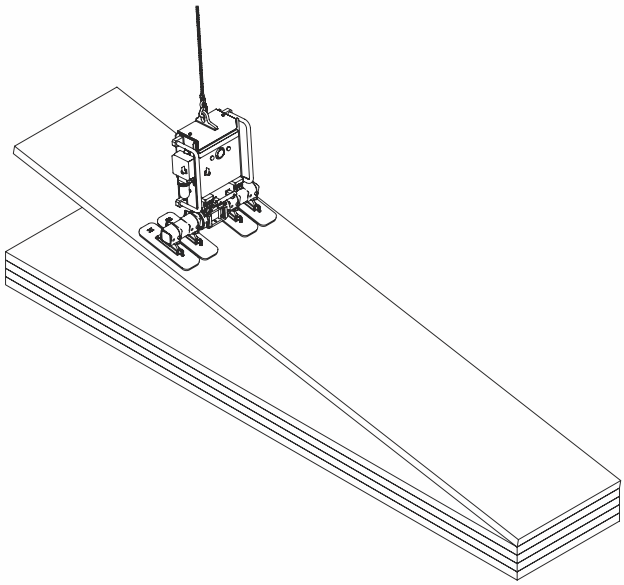


Scheme No. 4. Vertical installation of a wall panel using the **CladBoy** machine

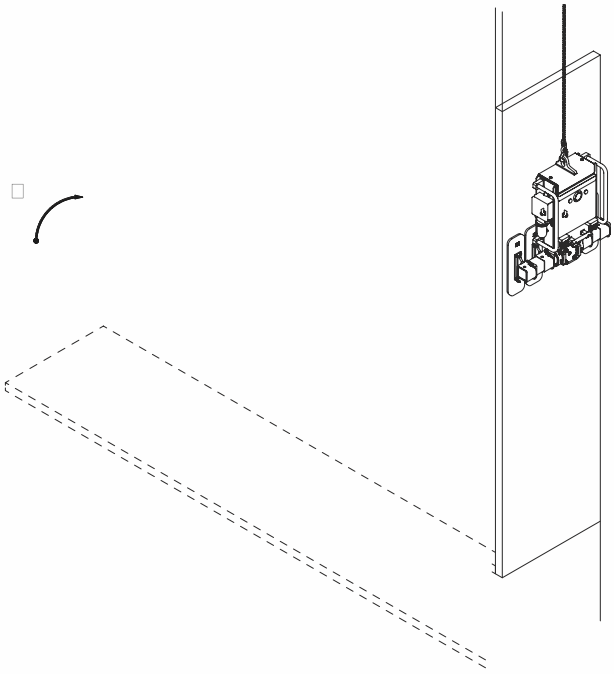
4a. situating the machine and its attachment to the panel



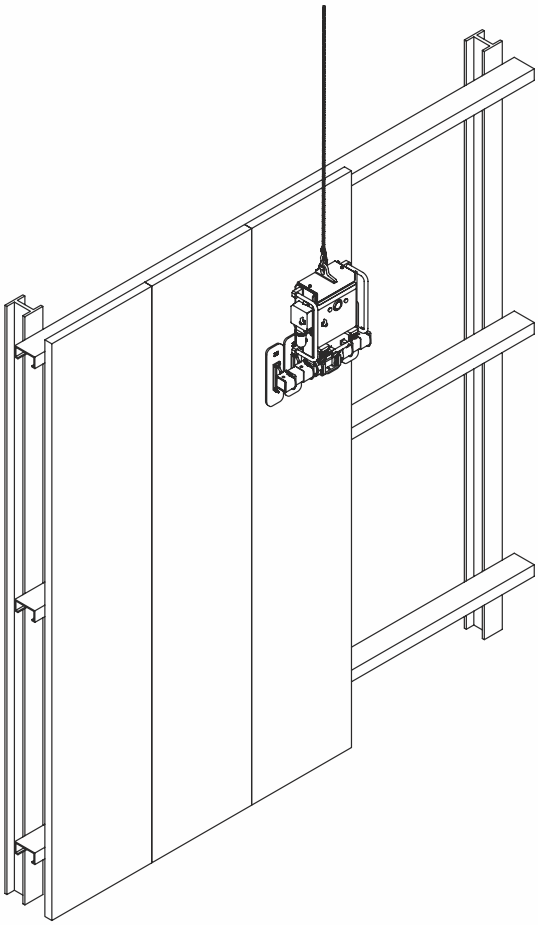
4b. lifting the machine together with panel



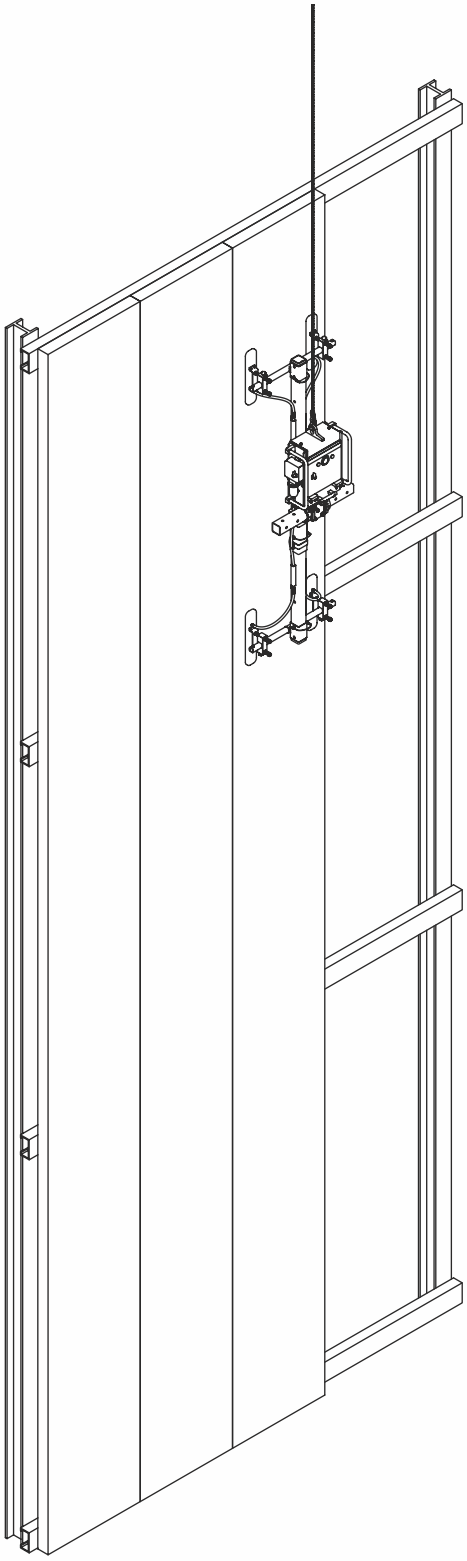
4c. change of the angle of the machine and transporting the panel to the place of installation



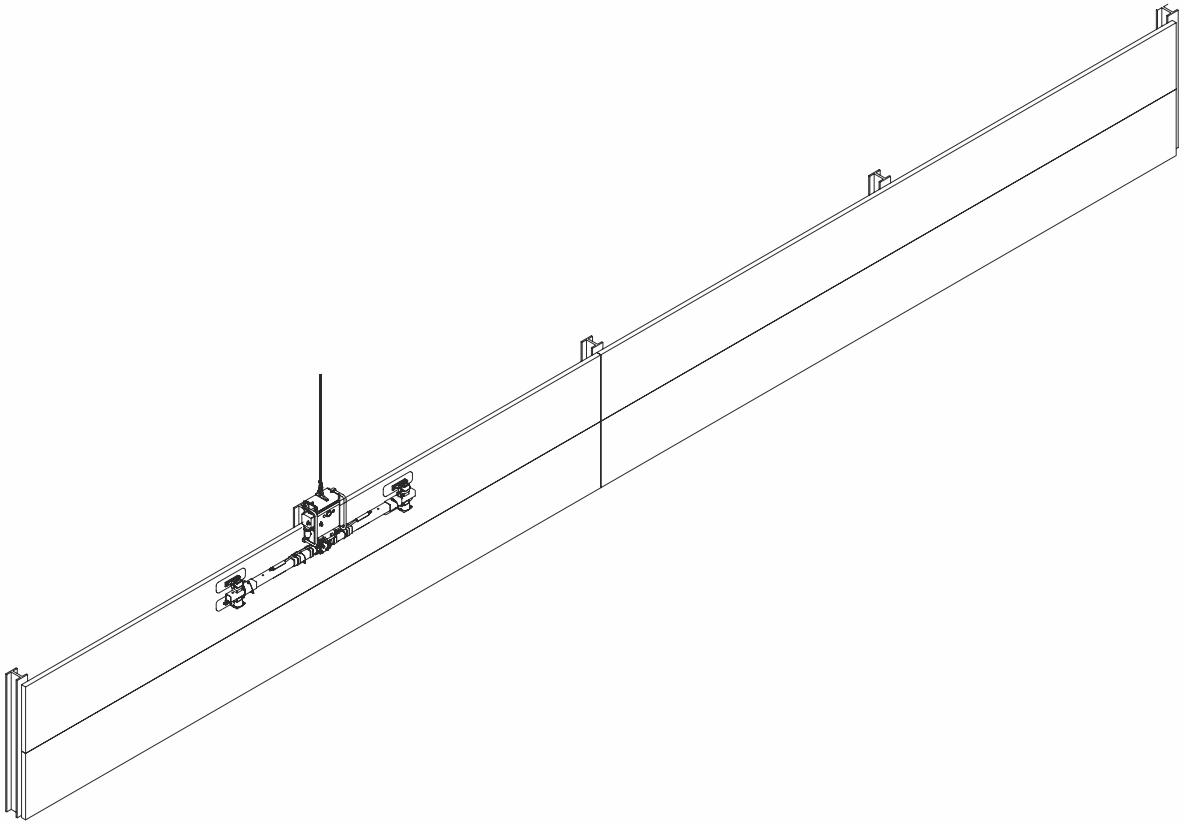
4d. installation of panel on the wall and detachment of the machine



Scheme No. 5. Sample configuration of **CladBoy** machine for vertical installation of long panels

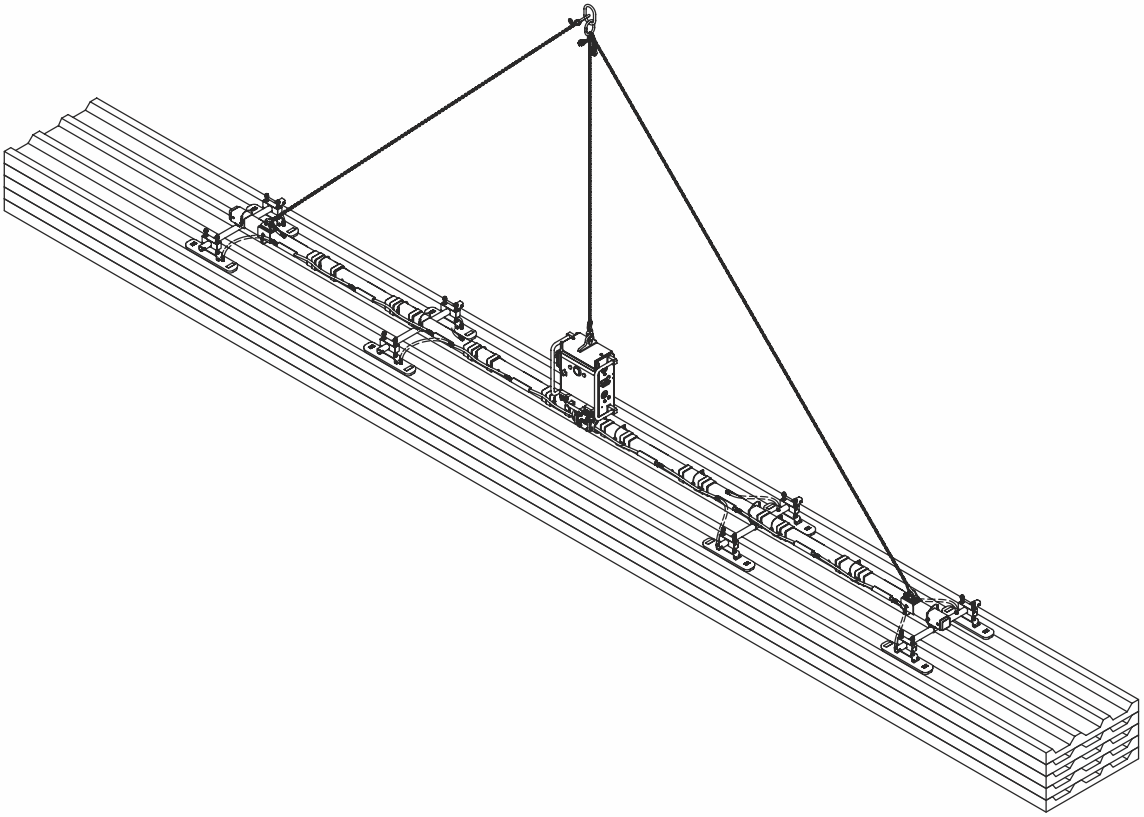


Scheme No. 6. Sample configuration of **CladBoy** machine for horizontal installation of long panels

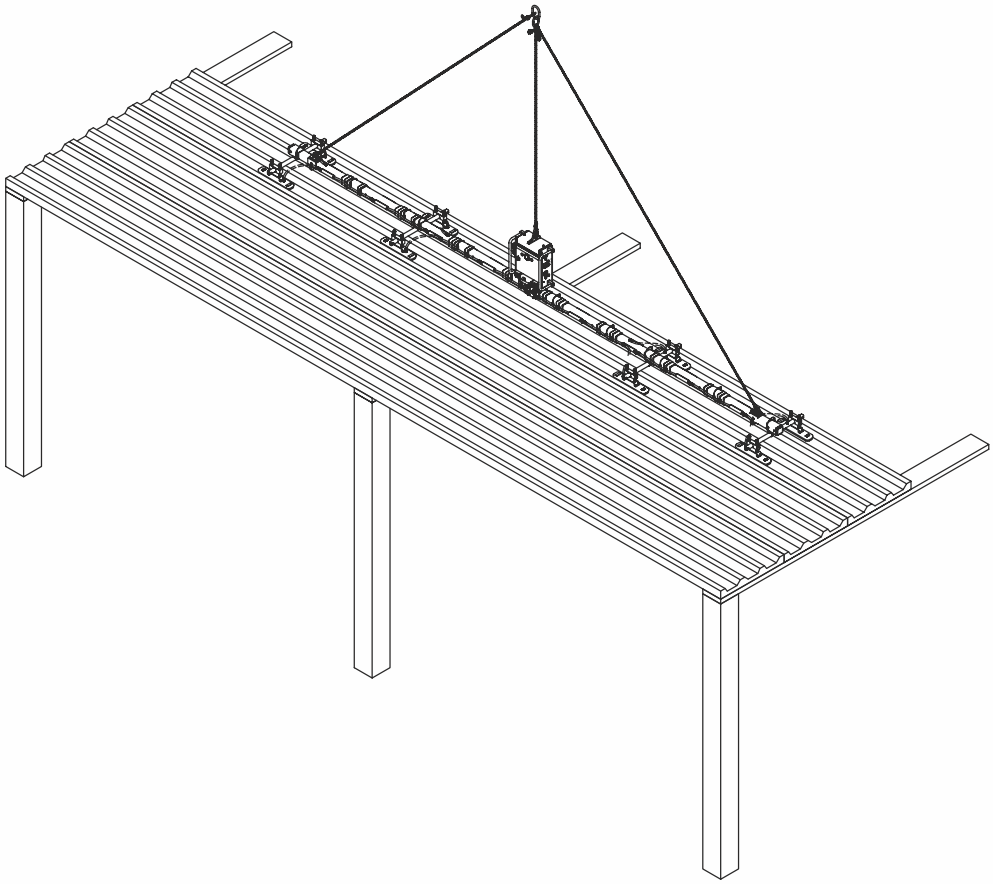


Scheme No. 7. Installation of a roof panel using **CladBoy** machine

7a. situating the machine and its attachment to the panel



7b. installation of panel on the roof and detachment of the machine



ACCESSORIES

The supplementation of the lightweight housing system from sandwich panels is made of flashings, fasteners and sealing tapes.

FLASHINGS

Gór-Stal is equipped with a profiler able to produce steel sheet flashings up to **1,0 mm** thick and **6,0 m** long, in catalogue-typical or custom-made shapes. Available thicknesses and standard colours of the sheets are provided in the table below. The flashings are secured for transportation by means of foiling the external layer.

ATTENTION:

- it is recommended that the flashing be fastened every 30 cm with self-drilling screws to steel sheets or rivets

Sheet thickness [mm]	Csheet weight [kg/m²]	Length of standard flashings [m]	Available length of flashings [m]	Sheet standard RAL colours
0,50	4,00	6,0	2,0 - 6,0	3000, 5010, 6011, 7016, 7035, 8017, 9002, 9006, 9007, 9010
0,70	6,00			
1,00	8,00			zinc coating

SEALS

We supply sealing tapes presented in the technical solutions of this catalogue, as well as in other dimensions on the client's request: self-adhesive polyurethane **(PUS, PURS)**, polyethylene **(PES)** and butyl.

FASTENERS

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

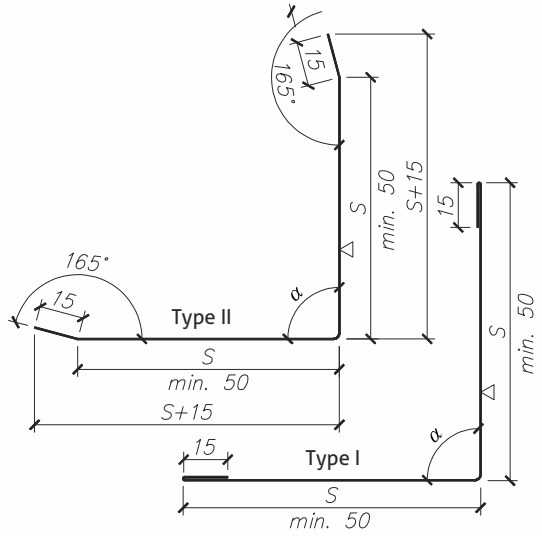
Connection	Connector dimensions [mm]
assembly of sandwich panels to steel and wooden structures	self-drilling screw with spacers – minimum length as per table below
assembly of sandwich panels to reinforced concrete structures	screws for concrete base with seals 6,4 x 100-210
assembly of flashings to sandwich panel	screw 4,8 x 20/ 4,2x16
	rivet 4,0 x 8,0
installation of flashings for thin-walled structures inside the facility	screw 4,8 x 19-25
	blind rivet 4,8 x 15,1
aesthetic finish	caps in panel colour

Sandwich panel type and thickness [mm]		Connector dimensions* [mm]
wall panel S	40	screw 5,5/6,4 x 65-100
	60	screw 5,5/6,4 x 85-120
	80	screw 5,5/6,4 x 110-140
	100	screw 5,5/6,4 x 125-155
	120	screw 5,5/6,4 x 140-180
wall panel U	60	screw 5,5/6,4 x 65-100
	80	screw 5,5/6,4 x 85-110
	100	screw 5,5/6,4 x 110-135
	120	screw 5,5/6,4 x 125-155
	140	screw 5,5/6,4 x 150-190
roof panel D	40/80	screw 5,5/6,4 x 110-135
	60/100	screw 5,5/6,4 x 125-155
	80/120	screw 5,5/6,4 x 150-190
	100/140	screw 5,5/6,4 x 175-190
	120/160	screw 5,5/6,4 x 200-215
	160/200	screw 5,5/6,4 x 225-260

* Necessary length of fastener depends on the structure thickness (details from Sales Representative)

Flashing OB-01
outer corner

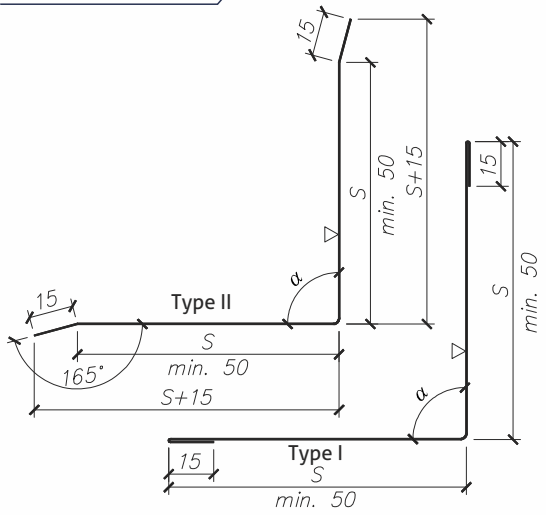
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-01/50	50	90	6000	3,12
02	OB-01/75	75			4,32
03	OB-01/100	100			5,52
04	OB-01/150	150			7,92
05	OB-01/200	200			10,32
06	OB-01/250	250			12,72
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
07	OB-01/ S=..... / α= ..... / L=				
08	OB-01/ S1=..... / S2=..... / α= ..... / L=				



The use is described in detail on page 68

Flashing OB-02
inner corner

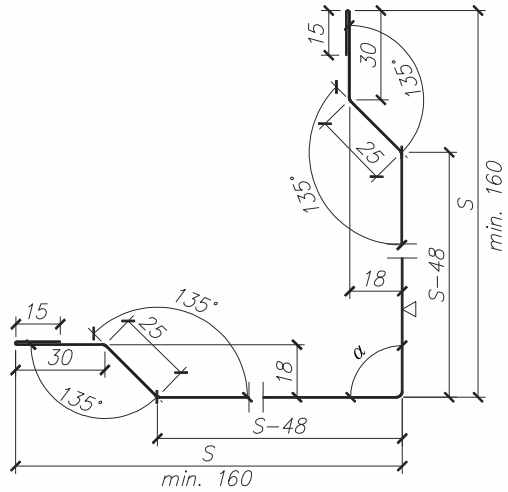
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-02/50	50	90	6000	3,12
02	OB-02/75	75			4,32
03	OB-02/100	100			5,52
04	OB-02/150	150			7,92
05	OB-02/200	200			10,32
06	OB-02/250	250			12,72
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
07	OB-02/ S=..... / α= ..... / L=				
08	OB-02/ S1=..... / S2=..... / α= ..... / L=				



The use is described in detail on page 19

Flashing OB-03
outer corner, covering connectors

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-03/160	160	90	6000	8,74
02	OB-03/180	180			9,70
03	OB-03/200	200			10,66
04	OB-03/220	220			11,62
05	OB-03/240	240			12,58
06	OB-03/260	260			13,54
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
07	OB-03/ S=..... / α= ..... / L=				
08	OB-03/ S1=..... / S2=..... / α= ..... / L=				



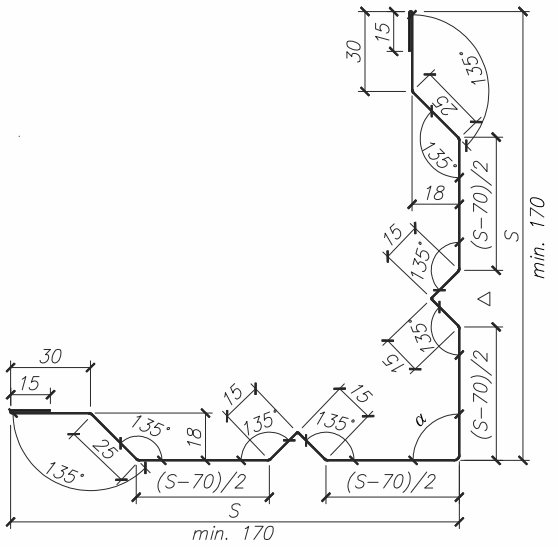
The use is described in detail on page 18

Flashing OB-03a

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

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-03a/180	180	90	6000	10,08
02	OB-03a/200	200			11,04
03	OB-03a/220	220			12,00
04	OB-03a/240	240			12,96
05	OB-03a/260	260			13,92
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
06	OB-03a/ S=..... / α= ..... / L=				
07	OB-03a/ S1=..... / S2=..... / α= ..... / L=				

NOTE:
Not described angles should be made as a right angle.



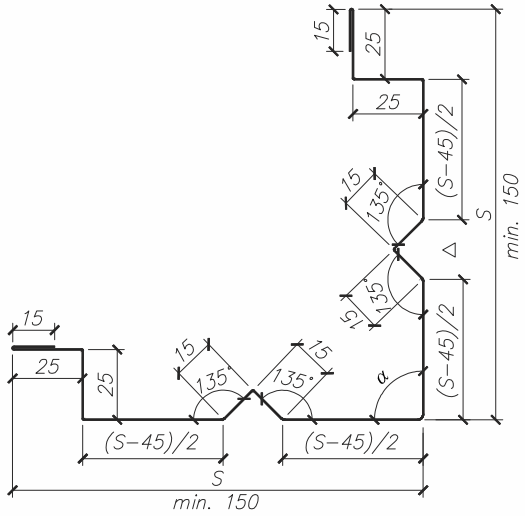
The use is described in detail on page 18

Flashing OB-03b

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

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-03b/160	160	90	6000	10,08
02	OB-03b/180	180			11,04
03	OB-03b/200	200			12,00
04	OB-03b/220	220			12,96
05	OB-03b/240	240			13,92
06	OB-03b/260	260			14,88
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
07	OB-03b/ S=..... / α= ..... / L=				
08	OB-03b/ S1=..... / S2=..... / α= ..... / L=				

NOTE:
Not described angles should be made as a right angle.

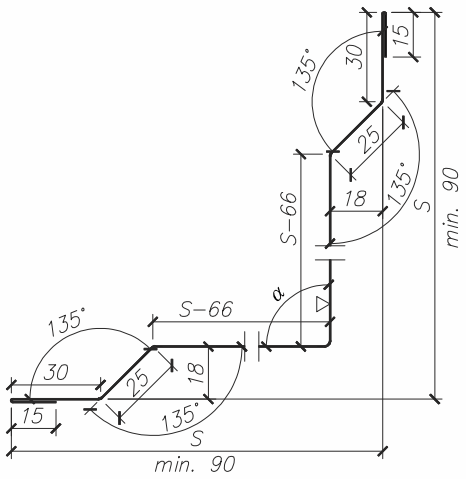


The use is described in detail on page 18

Flashing OB-04

inner corner, covering connectors

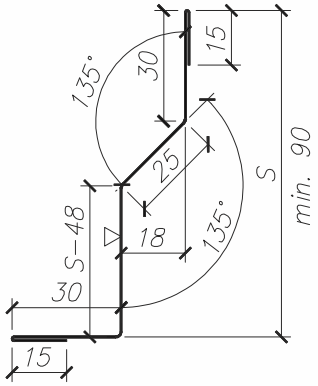
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-04/100	100	90	6000	4,99
02	OB-04/120	120			5,95
03	OB-04/150	150			7,39
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
04	OB-04/ S=..... / α= ..... / L=				
05	OB-04/ S1=..... / S2=..... / α= ..... / L=				



The use is described in detail on page -

Flashing OB-05
inner corner, covering at flooring

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-05/90	90	-	6000	3,77
02	OB-05/120	120			4,49
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
03	OB-05/ S=..... / L=				

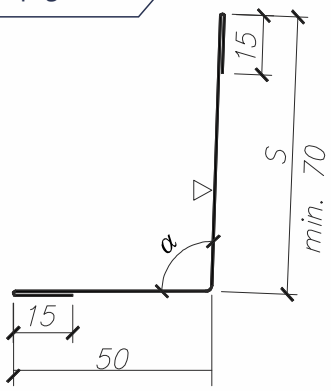


NOTE:
Not described angles should be made as a right angle.

The use is described in detail on page 16

Flashing OB-06
inner corner, covering at flooring

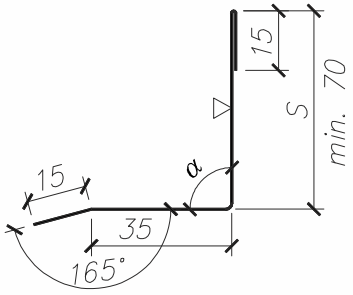
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-06/70	70	92	6000	3,60
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
02	OB-06/ S=..... / α= ..... / L=				



The use is described in detail on page 28

Flashing OB-07
covering corner

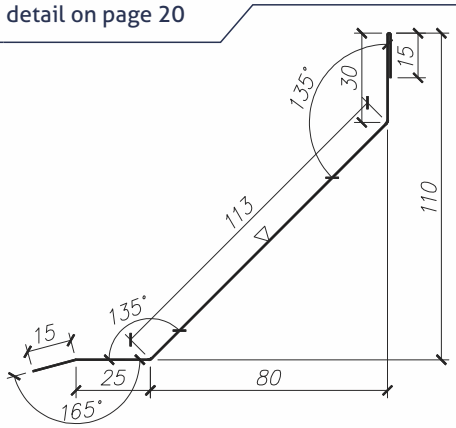
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-07/70	70	90	6000	3,24
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
02	OB-07/ S=..... / α= ..... / L=				



The use is described in detail on page 20

Flashing OB-08
inner corner, covering at grade beam

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-08	-	-	6000	4,75

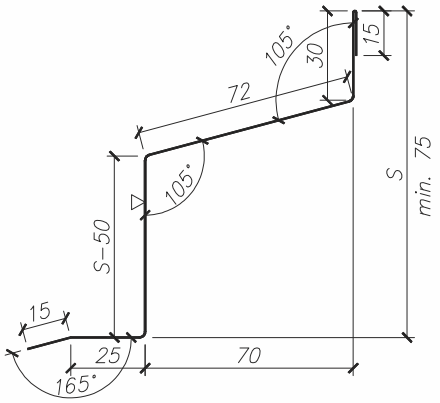


The use is described in detail on page 14

Flashing OB-09
inner corner, covering at grade beam

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-09/110	110	-	6000	5,21
02	OB-09/150	150			6,17
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
03	OB-09/ S=..... / L=				

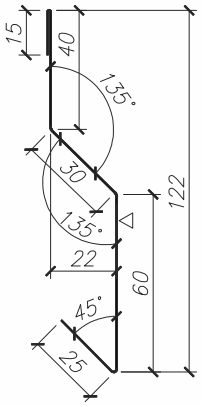
NOTE:
Not described angles should be made as a right angle.



The use is described in detail on page 50

Flashing OB-10
narrow wall drip edge

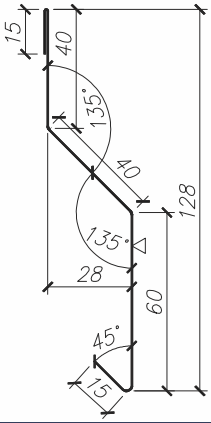
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-10	-	-	6000	4,08



The use is described in detail on page 14

Flashing OB-11
wide wall drip edge

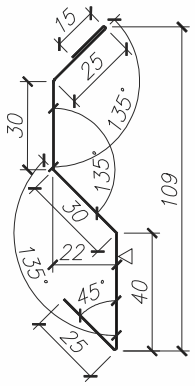
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-11	-	-	6000	4,08



The use is described in detail on page 26

Flashing OB-12
wall drip edge

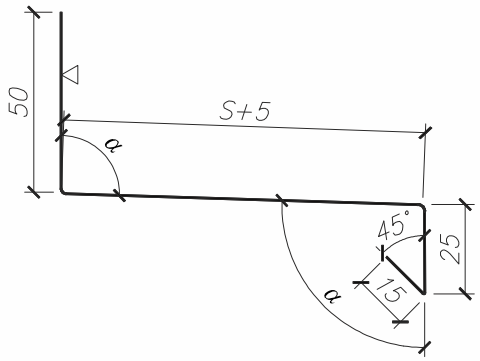
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-12	-	-	6000	3,96



The use is described in detail on page 101

Flashing OB-13
plinth drip tray

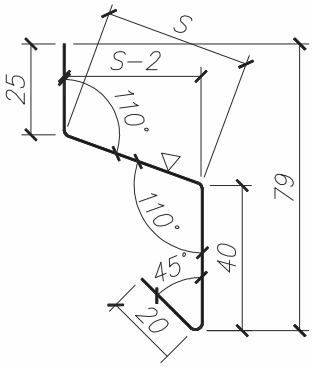
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-13/60	60	92	6000	3,72
02	OB-13/80	80			4,20
03	OB-13/100	100			4,68
04	OB-13/120	120			5,16
05	OB-13/140	140			5,64
06	OB-13/160	160			6,12
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
07	OB-13/ S=..... / α= ..... / L=				



The use is described in detail on page 14

Flashing OB-14
small plinth drip tray

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-14/30	30	-	6000	2,76
02	OB-14/40	40			3,00

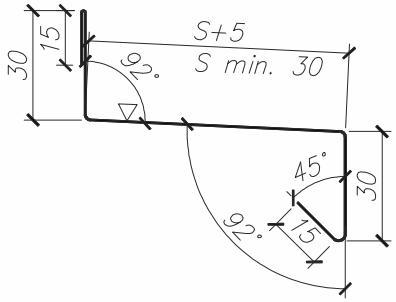


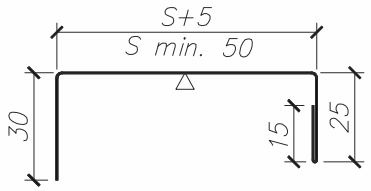
The use is described in detail on page 28

Flashing OB-15 plinth drip tray with stiffening OB-15 + OB-15a

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-15/70	70	-	6000	3,96
02	OB-15/90	90			4,44
03	OB-15/110	110			4,92
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
04	OB-15/ S=..... / L=.....				
	Standard – steel sheet 0,5 mm thick				
05	OB-15a/70	70	-	6000	3,48
06	OB-15a/90	90			3,96
07	OB-15a/110	110			4,44
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
08	OB-15a/ S=..... / L=.....				

NOTE:
Not described angles should be made as a right angle.

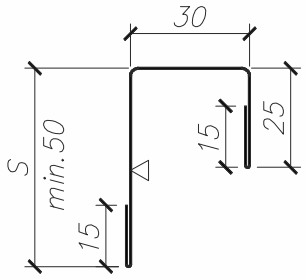




The use is described in detail on page 29

Flashing OB-16
under-gutter rigid flashing

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-16/50	50	-	6000	3,24
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
02	OB-16/ S=..... / L=				

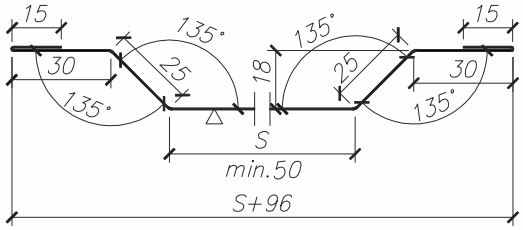


NOTE:
Not described angles should be made as a right angle.

The use is described in detail on page 24

Flashing OB-17
covering panels connection

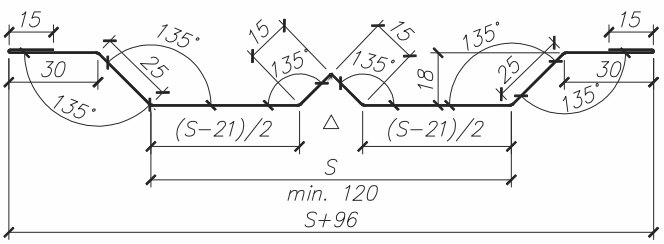
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-17/40	40	-	6000	4,32
02	OB-17/60	60			4,80
03	OB-17/80	80			5,28
04	OB-17/100	100			5,76
05	OB-17/120	120			6,24
06	OB-17/140	140			6,72
07	OB-17/160	160			7,20
08	OB-17/180	180			7,68
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
09	OB-17/ S=..... / L=				



The use is described in detail on page 21

Flashing OB-17a
covering panels connection
(alternative for OB-17)

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-17a/120	120	-	6000	6,46
02	OB-17a/140	140			6,94
03	OB-17a/160	160			7,42
04	OB-17a/180	180			7,90
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
05	OB-17a/ S=..... / L=				



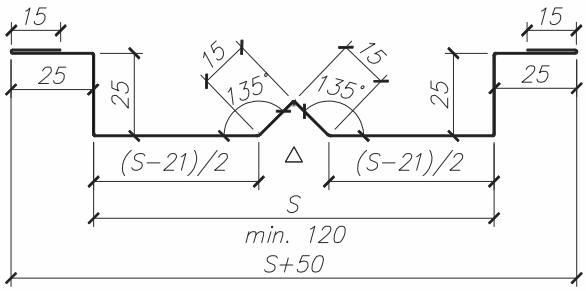
NOTE:
Not described angles should be made as a right angle.

The use is described in detail on page 21

Flashing OB-17b

covering panels connection
(alternative for OB-17)

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-17b/120	120	-	6000	6,22
02	OB-17b/140	140			6,70
03	OB-17b/160	160			7,18
04	OB-17b/180	180			7,66
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
05	OB-17b/ S=..... / L=				



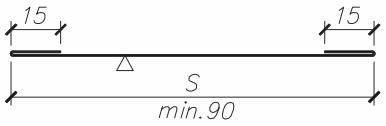
NOTE:
Not described angles should be made as a right angle.

The use is described in detail on page 21

Flashing OB-18

covering

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-18/90	90	-	6000	2,88
02	OB-18/100	100			3,12
03	OB-18/120	120			3,60
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
04	OB-18/ S=..... / L=				

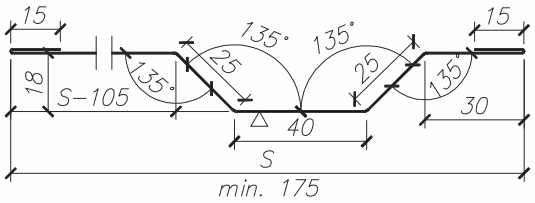


The use is described in detail on page 70

Flashing OB-19

covering

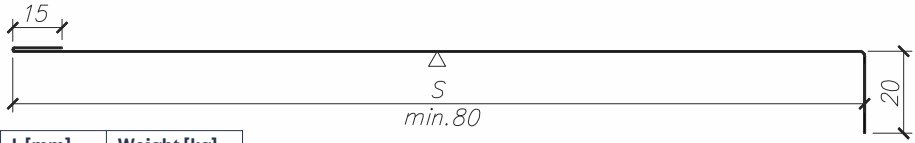
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-19/175	175	-	6000	5,28
02	OB-19/195	195			5,76
03	OB-19/215	215			6,24
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
04	OB-19/ S=..... / L=				



The use is described in detail on page 20

Flashing OB-20

covering door lintel



No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
01	OB-20/ S=..... / L=.....				

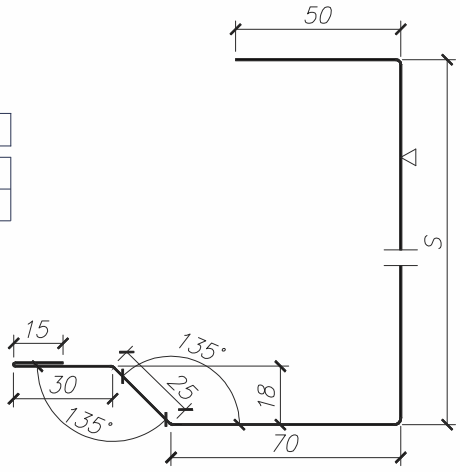
NOTE:
Not described angles should be made as a right angle.

The use is described in detail on page 23

Flashing OB-21
covering door post

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
01	OB-21/ S=..... / L=.....				

NOTE:
Not described angles should be made as a right angle.

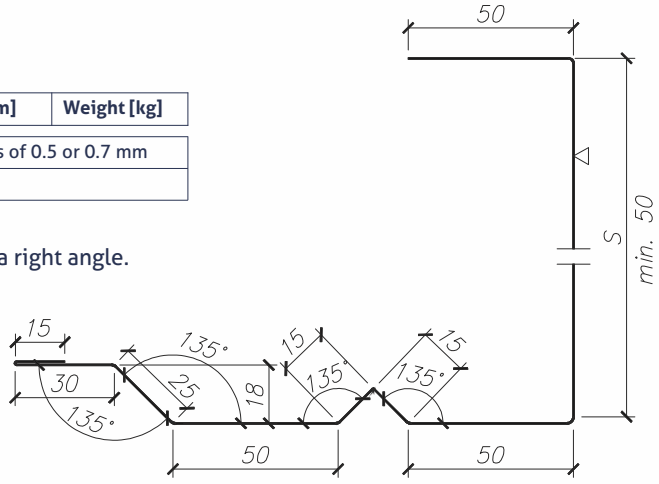


The use is described in detail on page 22

Flashing OB-21a
covering door post
(alternative for OB-21)

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
01	OB-21a/ S=..... / L=.....				

NOTE:
Not described angles should be made as a right angle.

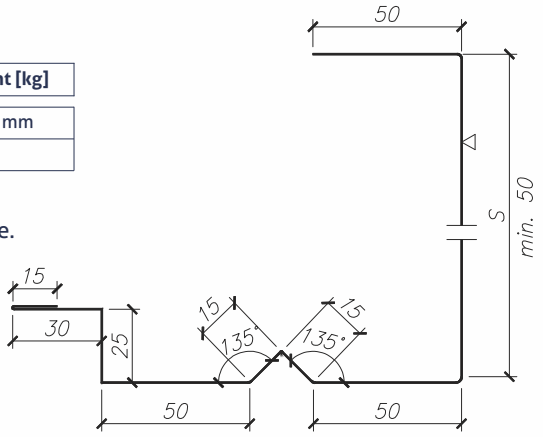


The use is described in detail on page 22

Flashing OB-21b
masking junction of panels
(alternative for OB-21)

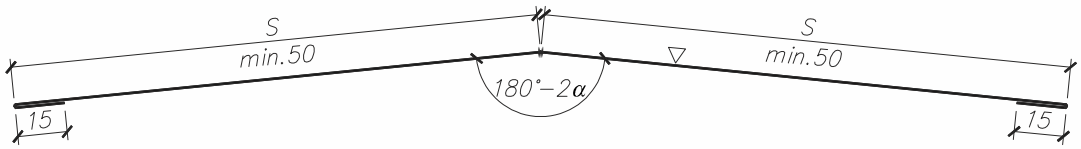
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
01	OB-21b/ S=..... / L=.....				

NOTE:
Not described angles should be made as a right angle.



The use is described in detail on page 22

Flashing OB-22
top roof ridge

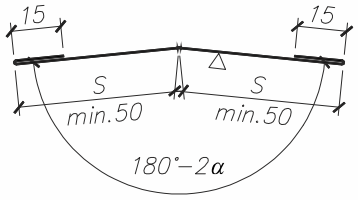


No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-22/160	160	according to the order	6000	8,40
02	OB-22/200	200			10,32
03	OB-22/250	250			12,72
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
04	OB-22/ S=..... / α= ..... / L=				

The use is described in detail on page 88

Flashing OB-23
bottom roof ridge

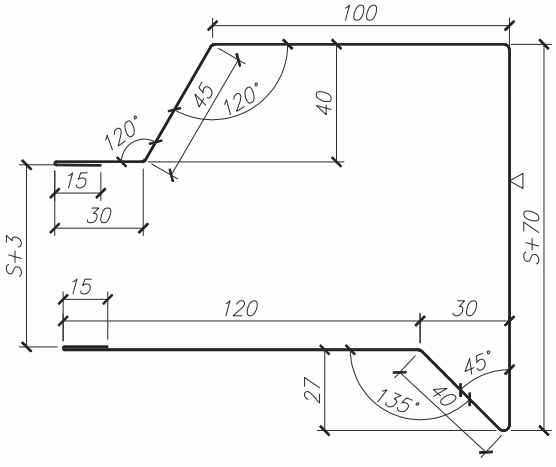
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-23/50	50	according to the order	6000	3,12
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
02	OB-23/ S=..... / α= ..... / L=				



The use is described in detail on page 88

Flashing OB-24
side drip edge

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-24/40	40	-	6000	11,40
02	OB-24/60	60			11,88
03	OB-24/80	80			12,36
04	OB-24/100	100			12,84
05	OB-24/120	120			13,32
06	OB-24/140	140			14,28
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
07	OB-24/ S=..... / α= ..... / L=				



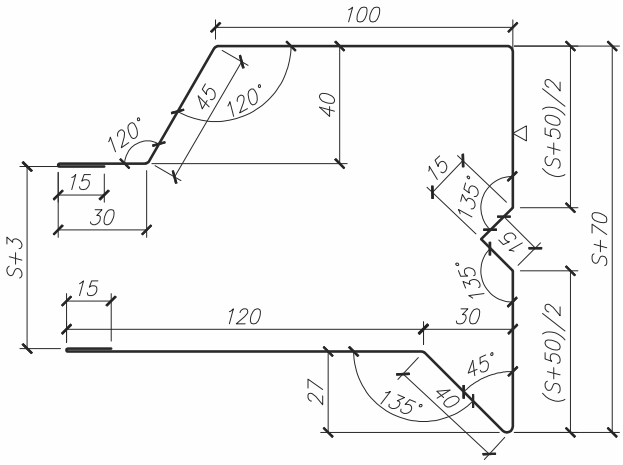
NOTE:
Not described angles should be made as a right angle.

The use is described in detail on page 95

Flashing OB-24a

side drip edge
(alternative for OB-24)

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-24a/100	100	-	6000	13,08
02	OB-24a/120	120			13,56
03	OB-24a/160	160			14,52
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
04	OB-24a/ S=..... / α= ..... / L=				



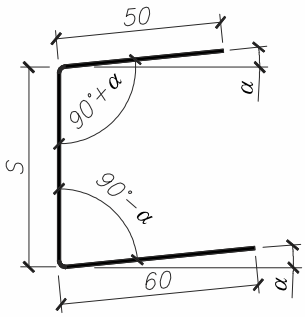
NOTE:
Not described angles should be made as a right angle.

The use is described in detail on page 95

Flashing OB-25

under-gutter channel section

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 1,0 mm thick				
01	OB-25/40	40	according to the order	6000	7,20
02	OB-25/60	60			8,16
03	OB-25/80	80			9,12
04	OB-25/100	100			10,08
05	OB-25/120	120			11,04
06	OB-25/160	160			12,96



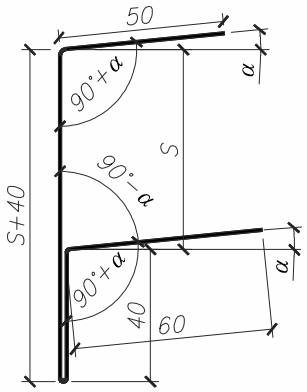
NOTE:
For roofs with an inclination of α > 7 °, an individual flashing plan is required.

The use is described in detail on page 100

Flashing OB-25a

under-gutter channel section (alternative for OB-25)

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 1,0 mm thick				
01	OB-25a/40	40	according to the order	6000	11,04
02	OB-25a/60	60			12,00
03	OB-25a/80	80			12,96
04	OB-25a/100	100			13,92
05	OB-25a/120	120			14,88
06	OB-25a/160	160			16,80

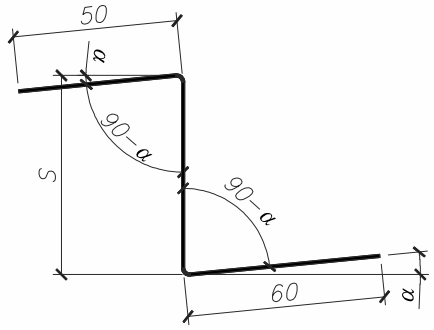


NOTE:
For roofs with an inclination of α > 7 °, an individual flashing plan is required.

The use is described in detail on page 100

Flashing OB-26
under-gutter Z-bar

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 1,0 mm thick				
01	OB-26/40	40	according to the order	6000	7,20
02	OB-26/60	60			8,16
03	OB-26/80	80			9,12
04	OB-26/100	100			10,08
05	OB-26/120	120			11,04
06	OB-26/160	160			12,96

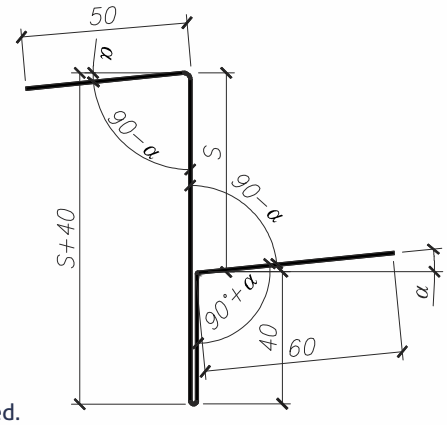


NOTE:
For roofs with an inclination of α > 7 °, an individual flashing plan is required.

The use is described in detail on page 99

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

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 1,0 mm thick				
01	OB-26a/40	40	according to the order	6000	11,04
02	OB-26a/60	60			12,00
03	OB-26a/80	80			12,96
04	OB-26a/100	100			13,92
05	OB-26a/120	120			14,88
06	OB-26a/160	160			16,80



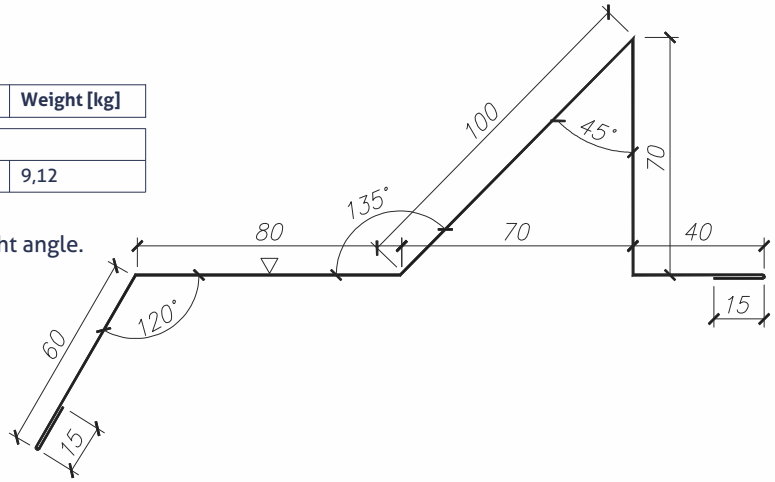
NOTE:
For roofs with an inclination of α > 7 °, an individual flashing plan is required.

The use is described in detail on page 99

Flashing OB-27
snow barrier - drip edge

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-27	-	-	6000	9,12

NOTE:
Not described angles should be made as a right angle.

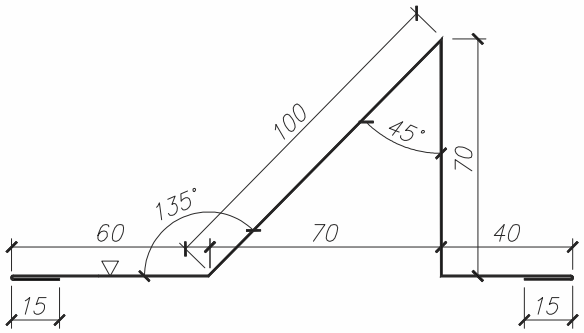


The use is described in detail on page 99

Flashing OB-27a
roof snow barrier
(alternative for OB-27)

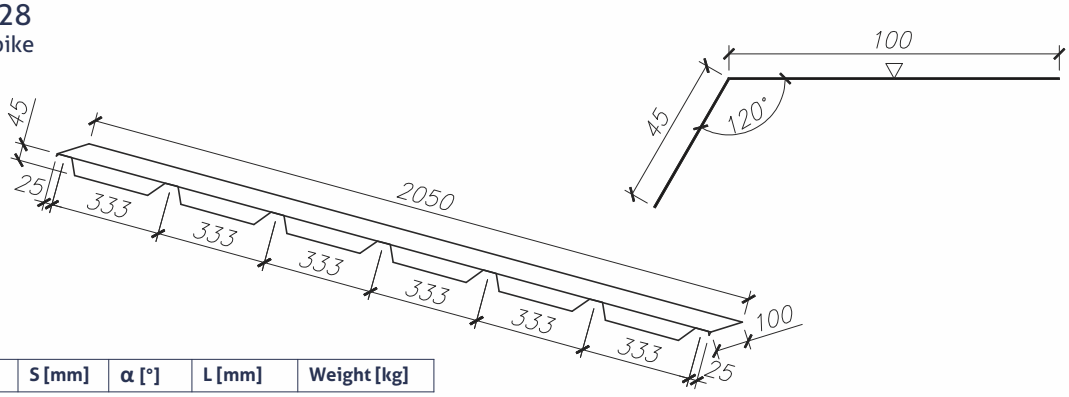
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-27a	-	-	6000	7,20

NOTE:
Not described angles should be made as a right angle.



The use is described in detail on page 99

Flashing OB-28
roof ridge bird spike

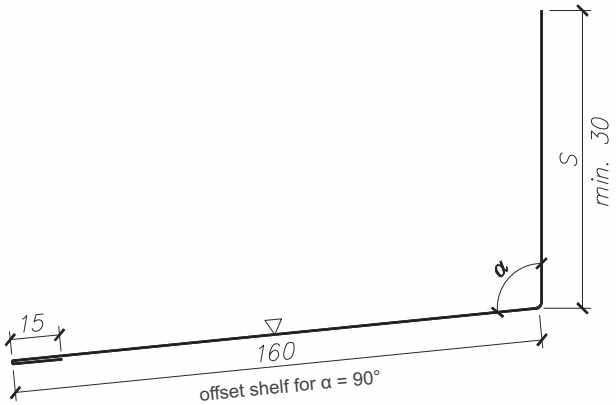


No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-28	-	-	2050	1,19

The use is described in detail on page 90

Flashing OB-29
roof covering flashing

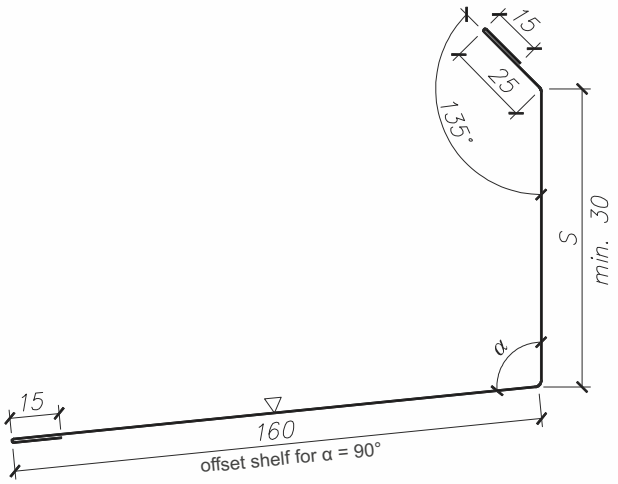
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-29/100	100	according to the order	6000	6,60
02	OB-29/150	150			7,80
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
03	OB-29/ S=..... / α= ..... / L=				



The use is described in detail on page 90

Flashing OB-30
roof covering flashing

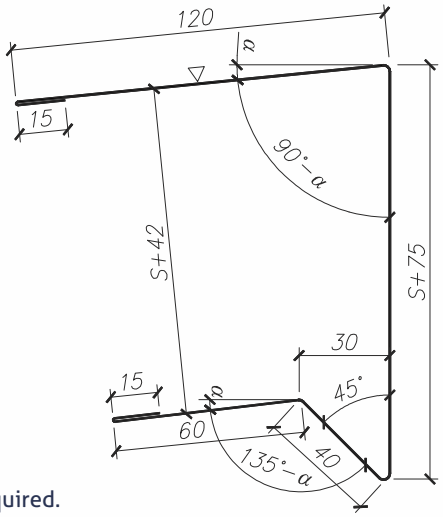
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-30/100	100	according to the order	6000	7,56
02	OB-30/150	150			8,76
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
03	OB-30/ S=..... / α= ..... / L=				



The use is described in detail on page 101

Flashing OB-31
roof ridge

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-31/40	40	according to the order	6000	8,76
02	OB-31/60	60			9,24
03	OB-31/80	80			9,72
04	OB-31/100	100			10,20
05	OB-31/120	120			10,68
06	OB-31/160	160			11,64
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
07	OB-31/ S=..... / α= ..... / L=				

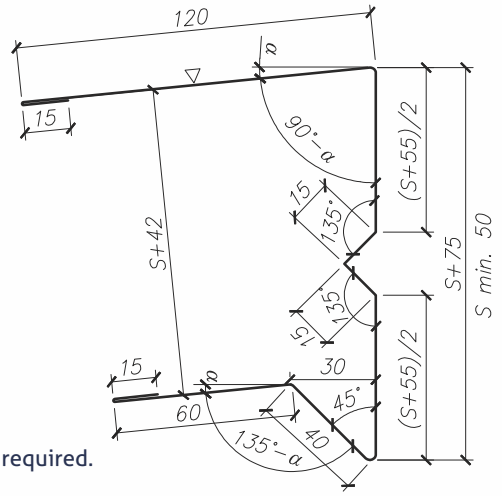


NOTE:
For roofs with an inclination of α > 7 °, an individual flashing plan is required.

The use is described in detail on page 94

Flashing OB-31a
roof ridge
(OB-31 alternative)

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-31a/60	60	according to the order	6000	9,48
02	OB-31a/80	80			9,96
03	OB-31a/100	100			10,44
04	OB-31a/120	120			10,92
05	OB-31a/160	160			11,88
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
06	OB-31a/ S=..... / α= ..... / L=				

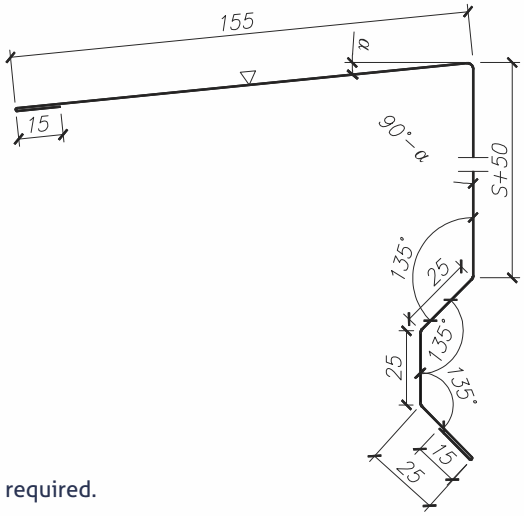


NOTE:
Not described angles should be made as a right angle.
For roofs with an inclination of α > 7 °, an individual flashing plan is required.

The use is described in detail on page 94

Flashing OB-32
roof ridge

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-32/40	40	according to the order	6000	8,40
02	OB-32/60	60			8,88
03	OB-32/80	80			9,36
04	OB-32/100	100			9,84
05	OB-32/120	120			10,32
06	OB-32/160	160			11,28
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
07	OB-32/ S=..... / α= ..... / L=				

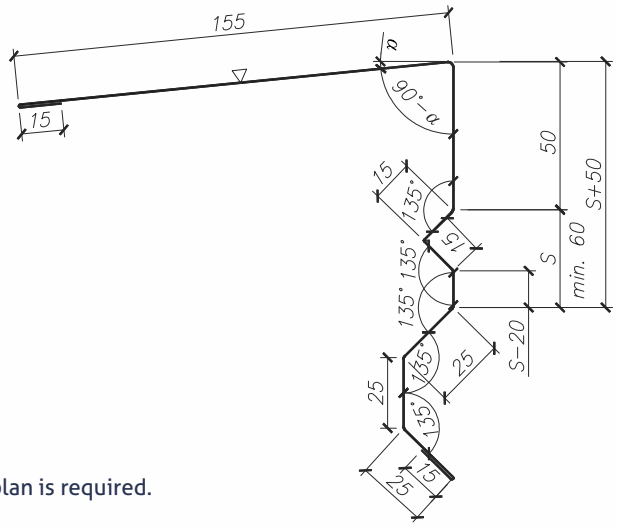


NOTE:
For roofs with an inclination of α > 7 °, an individual flashing plan is required.

The use is described in detail on page 93

Flashing OB-32a
roof ridge
(alternative for OB-32)

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-32a/60	60	according to the order	6000	9,12`
02	OB-32a/80	80			9,60
03	OB-32a/100	100			10,08
04	OB-32a/120	120			10,56
05	OB-32a/160	160			11,52
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
06	OB-32a/ S=..... / α= ..... / L=				

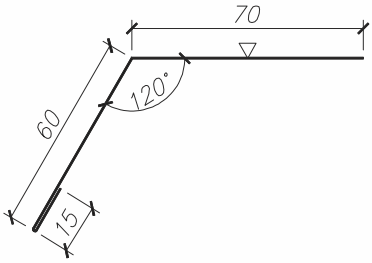


NOTE:
Not described angles should be made as a right angle.
For roofs with an inclination of α > 7 °, an individual flashing plan is required.

The use is described in detail on page 93

Flashing OB-33
drip edge

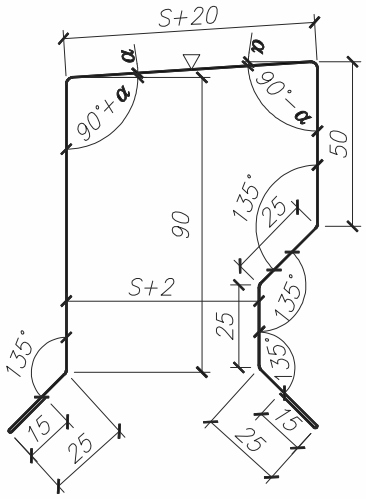
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-33	-	-	6000	3,48
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
02	OB-33/ L=				



The use is described in detail on page 100

Flashing OB-34
attic wall - type I

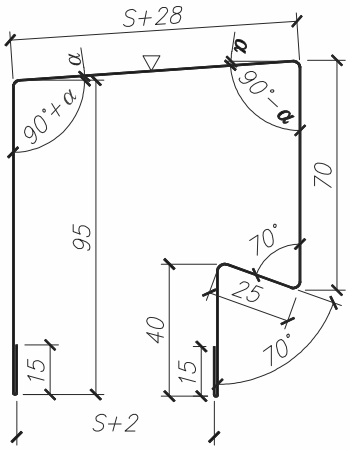
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-34/40	40	according to the order	6000	7,92
02	OB-34/60	60			8,40
03	OB-34/80	80			8,88
04	OB-34/100	100			9,36
05	OB-34/120	120			9,84
06	OB-34/140	140			10,32
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
07	OB-34/ S=..... / α= ..... / L=				



The use is described in detail on page 90

Flashing OB-35
attic wall - type II

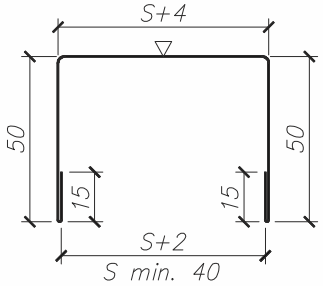
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-35/40	40	according to the order	6000	7,87
02	OB-35/60	60			8,35
03	OB-35/80	80			8,83
04	OB-35/100	100			9,31
05	OB-35/120	120			9,79
06	OB-35/140	140			10,27
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
07	OB-35/ S=..... / α= ..... / L=				



The use is described in detail on page 92

Flashing OB-36
U channel section

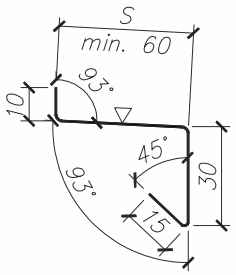
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-36/40	40	-	6000	4,18
02	OB-36/60	60			4,66
03	OB-36/80	80			5,14
04	OB-36/100	100			5,62
05	OB-36/120	120			6,10
06	OB-36/160	160			7,06
07	OB-36/200	200			8,02
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
08	OB-36/ S=..... / L=				



NOTE:
Not described angles should be made as a right angle.

The use is described in detail on page -

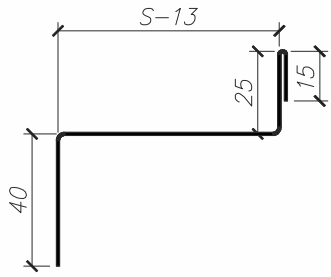
Flashing OB-37
window cill



No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 0,5 mm thick				
01	OB-37/60	60	-	6000	2,76
02	OB-37/80	80			3,24
03	OB-37/100	100			3,72
	Unusual from sheet metal with a thickness of 0.5 or 0.7 mm				
04	OB-37/ S=...../ L=				

The use is described in detail on page 24

Flashing OB-38
edge bar for S panels

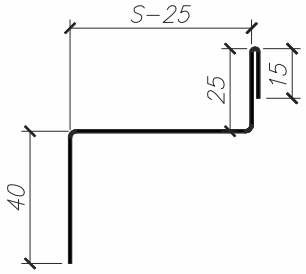


No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 1,0 mm thick				
01	OB-38/60	60	-	6000	6,10
02	OB-38/80	80			7,06
03	OB-38/100	100			8,02

NOTE:
Not described angles should be made as a right angle.

The use is described in detail on page 28

Flashing OB-39
edge bar for U panels

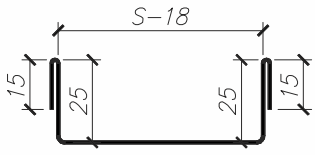


No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 1,0 mm thick				
01	OB-39/60	60	according to the order	6000	5,52
02	OB-39/80	80			6,48
03	OB-39/100	100			7,44
04	OB-39/120	120			8,40
05	OB-39/140	140			9,36

NOTE:
Not described angles should be made as a right angle.

The use is described in detail on page 65

Flashing OB-40
starting



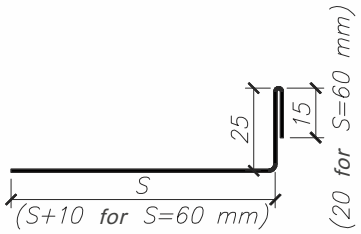
No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 1,0 mm thick				
01	OB-40/60	60	-	6000	5,86
02	OB-40/80	80			6,82
03	OB-40/100	100			7,78
04	OB-40/120	120			8,74
05	OB-40/160	160			10,66
06	OB-40/200	200			12,58

NOTE:
Not described angles should be made as a right angle.

The use is described in detail on page -

Flashing OB-41
edge bar

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 1,0 mm thick				
01	OB-41/60	60	-	6000	5,52
02	OB-41/80	80			5,76
03	OB-41/100	100			6,72
04	OB-41/120	120			7,68
05	OB-41/140	140			8,64

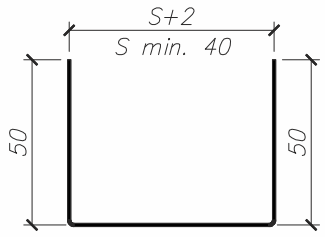


NOTE:
Not described angles should be made as a right angle.

The use is described in detail on page 64

Flashing OB-42
edge bar

No.	Symbol	S [mm]	α [°]	L [mm]	Weight [kg]
	Standard – steel sheet 1,0 mm thick				
01	OB-42/40	40	-	6000	6,82
02	OB-42/60	60			7,78
03	OB-42/80	80			8,74
04	OB-42/100	100			9,70
05	OB-42/120	120			10,66
06	OB-42/160	160			12,58
07	OB-42/200	200			14,50
	Unusual from sheet metal with a thickness of 1.0				
08	OB-42/ S=..... / L=				



NOTE:
Not described angles should be made as a right angle.

The use is described in detail on page 16

Flat metal sheets

width [mm]	available thicknesses [mm]	typical lengths [mm]	panel used **		available colours
			external facing	internal facing	
1073	0,5 i 0,7*	3000 i 6000	GS insPIRe® S thickness 40 mm module 1000	GS insPIRe® S thickness 40 mm module 1000, GS PIR D	compatible with plate tables
1108			GS insPIRe® S (apart from a thickness of 40 mm) module 1000, GS insPIRe® CH module 1000	GS insPIRe® S (apart from a thickness of 40 mm) module 1000, GS insPIRe® U, GS insPIRe® CH module 1000	
1183			GS insPIRe® U, GS PIR D	-	
1250			GS insPIRe® S module 1140, GS insPIRe® CH module 1140	GS insPIRe® S module 1140, GS insPIRe® CH module 1140	

*- offered upon special order
** - to avoid the difference in colour, it is recommended to choose metal sheet width appropriate to the kind of panel used

GÓR-STAL®
SANDWICH PANELS

Order:
No _____ of _____

Agent:
_____

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

Gór-Stal sp. z o.o.
No. 11 Przemysłowa st.
38-300 Gorlice, Poland
Tel./Fax: + 48 18 353 98 00
Account No: 79 1140 1081 0000 5859 5500 1001

Commercial Terms:	
Payment method:	
Advance (%):_____	payable until:_____
Full payment:	
Credit limit:	
Remarks:	

Ordering pary: (name, company address, phone/fax, TIN)

Agent:
Remarks:

Delivery place: (recipient, address, city, post code, phone/fax)

No.	**Plate type:** GS insPIRe® S GS insPIRe® S MAX GS insPIRe® U GS insPIRe® U MAX GS PIR D GS PIR D MAX GS insPIRe® CH GS insPIRe® CH MAX	40 60 80 100 120 60 80 100 120 140 40 60 80 100 120 160 100 120 160 200			**Plate width [mm]:** 1000 1140	**Colour RAL:**		**Quantity:**		**Net price Unit/value:**	
			ext.	int.		ext.	int.	L. [m]	pcs.	EUR/m²	EUR
01											
02											
03											
04											
05											
06											
07											
08											
09											
10											
11											
12											
13											
14											
15											
							In total:	**[m²]:**		**[EUR]:**	

Party's Signature Ordering:

GÓR-STAL®
SANDWICH PANELS

Order:
no _____ **of** _____

To sandwich panels order:
No _____ **of** _____

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

Gór-Stal sp. z o.o.
No. 11 Przemysłowa st.
38-300 Gorlice. Poland
Tel./Fax: + 48 18 353 98 00
Account No: 79 1140 1081 0000 5859 5500 1001

Commercial Terms:

Payment method:

Advance (%):_____ payable until:_____

Full payment:

Credit limit:

Remarks:

Ordering pary: (name, company address, phone/fax, TIN)

Delivery place: (recipient, address, city, post code, phone/fax)

Flashing length: 6 m.
Defaultα = 90°
Shape of flashing acc. to technological catalogue

Ordering Party's signature:

Symbol	S [mm]	α [°]	Thickness [mm]	Length [mm]	Quantity [szt.]	Total weight	Colour RAL
OB-01							
OB-02							
OB-03							
OB-03a							
OB-03b							
OB-04							
OB-05		-					
OB-06							
OB-07							
OB-08	-	-					
OB-09		-					
OB-10	-	-					
OB-11	-	-					
OB-12	-	-					
OB-13							
OB-14	-	-					
OB-15							
OB-15a		-					
OB-16	-	-					
OB-17		-					
OB-17a		-					
OB-17b		-					
OB-18		-					
OB-19		-					
OB-20		-					
OB-21		-					
OB-21a		-					
OB-21b		-					
OB-22							
OB-23							
OB-24		-					
OB-24a							
OB-25							
OB-25a							
OB-26							
OB-26a							
OB-27	-	-					
OB-27a							
OB-28	-	-					
OB-29							
OB-30							
OB-31							
OB-31a							
OB-32							
OB-32a							
OB-33		-					
OB-34	-	-					
OB-35		-					
OB-36		-					
OB-37		-					
OB-38		-					
OB-39		-					
OB-40		-					
OB-41		-					
OB-42		-					
				Total:			
				Net price:			
				Net value:			

ACCESSORIES	Type	Size [mm]	Quantity [pcs./Lm]	Colour RAL	
Bolts fixing the plate to the structure	Steel GT6				
	Steel G12				
	Wood / Concrete				
Screws for flashings					
Rivets					
Gasket	PE				
Gasket	PES				
Gasket	PUS				
Gasket					
Saddle washer	35-35	-			
Washer	Pm1	-			
Covering caps	-----				
Connector	ALF				

GÓR-STAL®
SANDWICH PANELS

Order:
No _____ of _____

Agent:

_____

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

Gór-Stal sp. z o.o.
No. 11 Przemysłowa st.
38-300 Gorlice
Tel./Fax: + 48 18 353 98 00
Account No: 79 1140 1081 0000 5859 5500 1001

Ordering pary: (name, company address, phone/fax, TIN)

Delivery place: (recipient, address, city, post code, phone/fax)

No.	Sheet thickness [mm]:	Colour RAL:	Length [m]:	Quantity:

Nr.	Sheet thickness [mm]:	Colour RAL:	Length [m]:	Quantity:

Remark:

01. Boundary conditions:
- unfolding -> min 114 mm
- shelf width -> min 25 mm
- width of the notching/bend -> min 15 mm
- bending angle -> min 45°
- with an unfolding of above 350 mm, it is recommended to shorten the processing to 3.0 mb.

02. The flashings will be made in accordance with the above drawings and their dimensions.

Remark:

Ordering Party's signature:

The author and Gór-Stal sp. z o.o. company reserve the right to make amendments or corrections in the contents of the catalogue and technical specification without prior notice. This study does not constitute an offer within the meaning of the law.
They should be treated as the manufacturer's guidelines regarding the correct application of Gór-Stal products.
The document does not replace technical construction knowledge and cannot constitute grounds for asserting any claims against the Gór-Stal company.
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