Gór-Stal offers a wide range of innovative walls, roofs and coldstore Sandwich Panels with the core made of polyisocyanurate foam (PIR) with density **40 kg/m³ (+/-10%)** and thermal conduction coefficient **λ=0,022 W/m*K**. (As of 2020 new panels will be available **MAX** with a core and a coefficient of **λ=0,019 W/m·K**).

These panels consist of two linings made of steel sheets galvanized on both sides, with organic polyester lacquer coating of **25 µm** and structural insulation core made of rigid, Freon-free, self-extinguishing PIR foam, with great thermal insulation and fire resistance.

PIR foams are characterized by improved resistance against high temperatures. Isocyanurate structures are decomposed **at temperatures above 300 °C.** The carbonized layer protects against penetration of high temperatures through the panel which results in a more efficient fire protection barrier.

Diversified colors and profiles result in various possibilities for architects.

Accessories

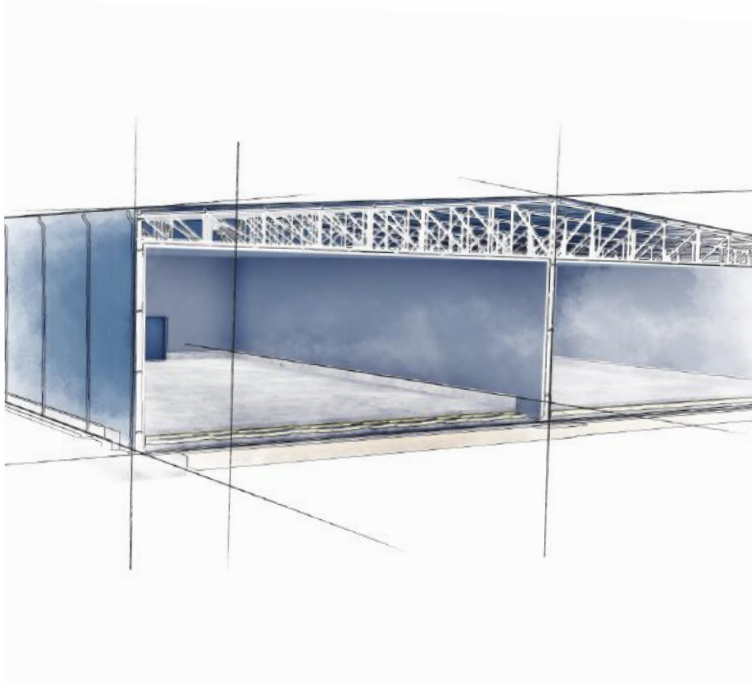
- **Gaskets for Sandwich Panels collars, sleeves and washers.** We provide self-adhesive, polyurethane (PUS and PURS), polyethylene (PES) and butyl, sealing tapes.
- **Self-drilling screws** for hot-rolled constructions and cold-formed, galvanized in the color of the outer panel claddings together with accessories to facilitate assembly.
- **Skylights and Refrigerating Accessories** of renowned suppliers.

GÓR-STAL®
SANDWICH PANELS

Sandwich Panels Factory
No. 11 Przemysłowa st., 38-300 Gorlice, Poland
tel./fax: +48 18 353 98 00
e-mail: gorlice@gor-stal.pl, **www.gor-stal.pl**

Factory of termPIR® Insulation Boards
No. 9 Adolfa Mitery st., 32-700 Bochnia, Poland
tel./fax: +48 14 698 20 60
e-mail: bochnia@gor-stal.pl, **www.termpir.eu**

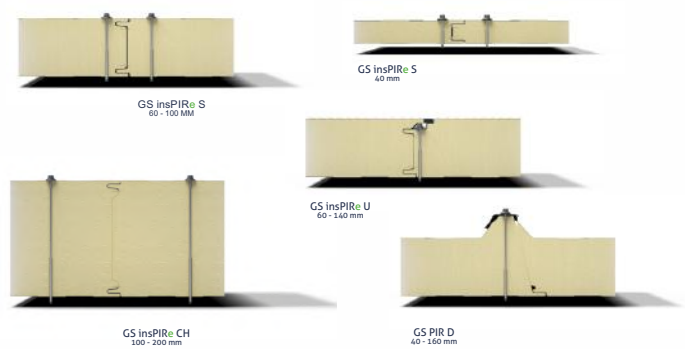
GÓR-STAL®
SANDWICH PANELS



Sandwich Panels
GS insPIRe
GS insPIRe MAX

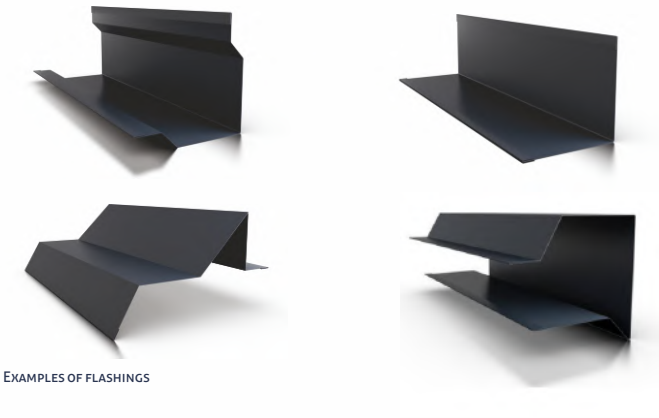
LOCK - PANEL CONSTRUCTION AND PANEL CONNECTION

Precisely shaped panel connections and suitably profiled edges enhance heat insulation and eliminate a linear thermal bridge. Thanks to this, the panels meet high requirements for fire integrity, rainwater tightness, air and water vapour infiltration. A tongue-and-groove joint with a double camlock in both outside and inside parts of wall panels and overlaying design used in roof panels, facilitate and shorten installation works. A double camlock in both external and internal parts improves fire integrity.



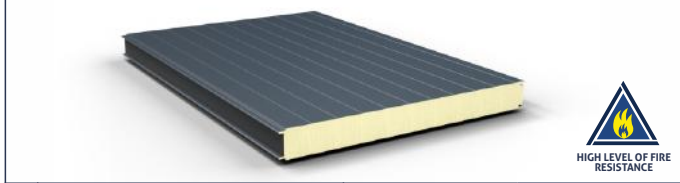
STEEL FLASHING

Steel flashing manufactured by Gór-Stal are part of the insulation panel system - Sandwich Panels. Additionally, they are used as a separate decorative element. Steel flashing is made of galvanized metal sheet with a thickness of 0.5 mm, 0.7 mm and 1.0 mm, colors according to the RAL palette. Standard length of metal flashing sheet is 6.0 m.



EXAMPLES OF FLASHINGS

WALL PANEL GS insPIRe S



HIGH LEVEL OF FIRE RESISTANCE

1	Type of core		Rigid polyisocyanurate foam (PIR)				
2	Density [kg/m³]		40 (+/-10%)				
3	Thickness [mm]		40	60	80	100	120
4	Weight [kg/m²]*		10,0	11,0	11,8	12,6	13,4
5	Maximum length [m]		16,5				
6	Total width [mm]		1000 / 1140 (for thick. ≥ 60 mm and lining profiling L, M and F)				
7	External lining profiling		L - Linear, M -Mikro-profiling, F - Wavy, R - Grooving, G - Smooth				
8	Internal lining profiling		L - Linear, G - Smooth				
9	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_{cs} [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				

COLDSTORE PANEL GS insPIRe CH

HIGH LEVEL OF FIRE RESISTANCE

1	Type of core		Rigid polyisocyanurate foam (PIR)			
2	Density [kg/m³]		40 (+/-10%)			
3	Thickness [mm]		100	120	160	200
4	Weight [kg/m²]*		12,6	13,4	15,0	16,6
5	Maximum length [m]		16,5			
6	Total width [mm]		1000 / 1140 (for thick. ≥ 60 mm and lining profiling L, M and F)			
7	External lining profiling		L - Linear, M -Mikro-profiling, F - Wavy			
8	Internal lining profiling		L - Linear, G - Smooth			
9	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_{cs} [W/m²K]	PIR core	0,22	0,18	0,14	0,11
		PIR MAX core	-	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			

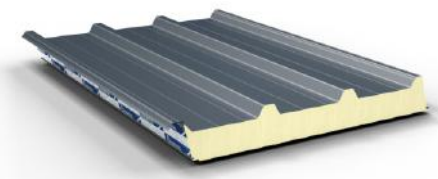
* panels with claddings 0,5/0,5 mm
** available colors depending on the thickness of the cladding, panels thicknesses and modular widths (details from the Sales Representative)
*** conditions according to fire resistance classification

WALL PANEL GS insPIRe U

HIGH LEVEL OF FIRE RESISTANCE

1	Type of core		Rigid polyisocyanurate foam (PIR)				
2	Density [kg/m³]		40 (+/-10%)				
3	Thickness [mm]		60	80	100	120	140
4	Weight [kg/m²]*		11,3	12,1	12,9	13,7	14,5
5	Maximum length [m]		16,5				
6	Total width [mm]		1000				
7	External lining profiling		L - Linear, M -Mikro-profiling, F - Wavy, R - Grooving, G - Smooth				
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_{cs} [W/m²K]	PIR core	0,44	0,29	0,23	0,19	0,16
		PIR MAX core	-	-	-	-	0,14
12	Fire propagation/Fire classification		NRO/B-s1, d0				
13	Fire resistance***		-		EI 15		EI 30
14	Certyfikaty, aprobaty, atesty		DWU CE according to EN 14509, Hygienic Certificate, Certificate of Business Continuity EN 14509, Fire resistance classification				

ROOF PANEL 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	15,2
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_{cs} [W/m²K]	PIR core	0,55	0,37	0,27	0,22	0,18	0,14
		PIR MAX core	-	-	-	-	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					