

STEEL SERVICE CENTRE



CorePIR/PUR sandwich panels SPW-S COREPIR/PUR SPW-C COREPIR/PUR



CoreWOOL sandwich panels SPW-S CORE WOOL SPR COREWOOL









VSS - Steel Service Centre



Sandwich panels catalogue



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Sandwich panels

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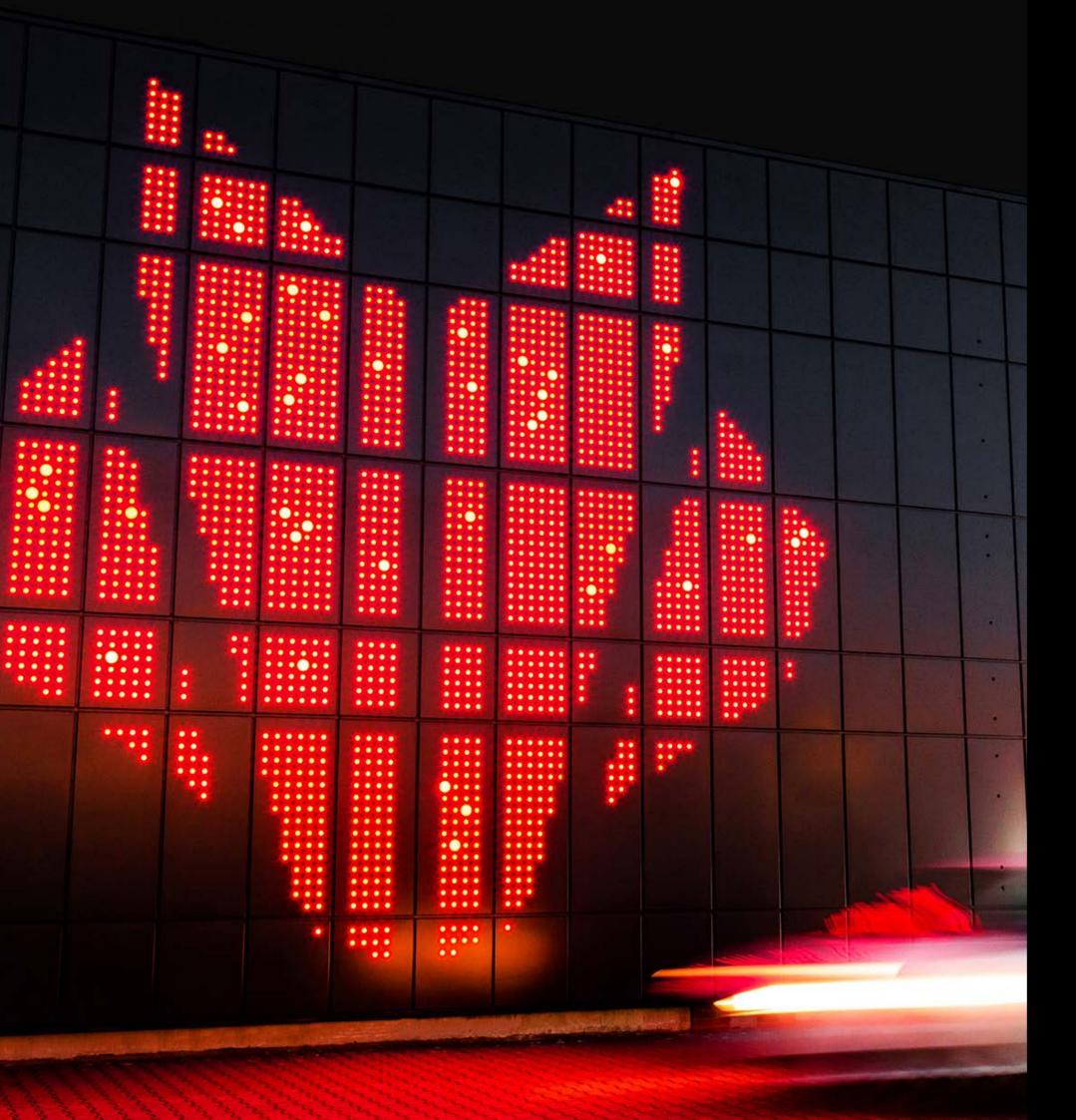
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Welcome to BP2 world

BP2 has been a valued manufacturer of complete solutions for residential and industrial construction since 1995. We also offer our services as part of the Steel Service Centre.

We are the creators of the SOLROOF brand and products – integrated photovoltaic roof. BP2 has three production plants in Poland (Cracow, Dąbrowa Górnicza) and Slovakia (Košice).



Why us?

We believe in what we do and are true to our values.

We are characterised by a bond based on respect and trust, as well as the belief that every element of a great machine must fit together perfectly. Our company is built on four pillars, as strong as steel, that guarantee stability and enable continuous development.

The fundamental assumptions ensure not only high efficiency and quality, but above all build a sense of solidarity trust and make it possible to

The fundamental assumptions ensure not only high efficiency and quality, but above all build a sense of solidarity, trust and make it possible to focus on achieving a common goal



PEOPLE

The company and the positive atmosphere are created by people. We want every person on the BP2 team to feel comfortable and have the best tools to do their job. To this end, we are constantly improving the management process, ensuring transparent decision-making and a clear information flow. Like wolves, we act as a team and work together to achieve success.



RELATIONSHIPS

At BP2, we have been building professional relationships with our customers, suppliers and colleagues for many years. We are focused on transparent communication and open dialogue. We look after our customers by offering modern cooperation tools and support in marketing programmes. We know that the market is constantly changing, which is why we flexibly adapt to customer needs.



TECHNOLOGY

We focus on innovative solutions and modern technologies, thanks to which we can constantly optimise the production process, expand the offer, improve the quality of our products and services while maintaining the principles of sustainable development and employee safety.



QUALITY

Quality is our priority. All BP2 production plants have full control of processes and products in terms of ensuring the highest quality, which is why our company's in-house pro-quality activities are under constant supervision of the German DVS ZERT GmbH unit based in Dusseldorf. Our constant attention to product quality is confirmed by the issued and annually renewable Certificate, which confirms the perfect functioning of the Plant Production Control.



Residential construction

BP2 manufactures modular and compact metal roofing tiles and matching cut-to-size sheet products. We also boast three innovative models of roof panels, as well as a wide range of trapezoidal and corrugated sheets. Our product range is completed by gutter systems and dedicated roof flashings and accessories.



Industrial engineering

Our offer includes a wide range of products intended for the implementation of investment tasks, i.e. production halls, outbuildings or commercial and sports facilities. We offer comprehensive solutions for industrial construction, such as structural trapezoidal sheets, wall cladding and facade cassettes. We also offer sandwich panels with PIR, PUR and WOOL filling. Products dedicated to industrial construction are also available in perforated versions at the Customer's request. The available solutions have high parameters enabling their use in even the most demanding industrial applications.



Steel Service Centreb

It was created for customers looking for materials with specific properties and degrees of processing. We ensure constant availability and a wide selection of steel grades, thicknesses and coatings recommended by BP2. We carry out individual orders of any parameters. Sheet metal processing includes rewinding, longitudinal and transverse cutting, and protection with protective films. We can cut sheet metal into sheets or formats with the dimensions specified by the customer. We offer perforation of sheets with metallic and organic coatings.

History

1995 LET'S GET STARTED!

Initially focused on the Polish market. The headquarters of our company is in Cracow and it is here that the heart of production is located for the first few years.

FIRST LINE 1999

We launch the first roofing production line and start creating our own products.

- 2007 LOGISTIC CENTRE

We are opening a modern logistics and production centre located in Cracow, thanks to which we diversify our product offer and introduce new, competitive solutions to the market

IMPRO 2009

New directions of development led to the creation of the IMPRO brand, which belongs entirely to the BP2 capital group. The headquarters of the Romanian company looks almost identical to its prototype, i.e. BP2 in Cracow.

2009 INTO EUROPE

We create our own distribution network in Europe. Our permanent sales representatives operate in the Czech Republic, Slovakia, Lithuania, Hungary and Romania. In this way, we not only become important players on the European arena, but also have the opportunity to indicate new trends in roofing

AUTOMATION 2011

We believe in the power of technology, which not only ensures increased production, but also allows you to increase the comfort and safety of work. In 2011, we automated manufacturing processes in the logistics and production centre in Cracow.

2015 NEW PRODUCTION PLANT

We launch an innovative, automated production hall and expand the offer of structural sheets. From now on, our production plants are located not only in Małopolska, but also in the Silesian Voivodeship in Dąbrowa Górnicza.

CLUJ NAPOCA 2016

We open a modern production hall in the Transylvanian Highlands in north-western Romania. Thus, we create new jobs for the inhabitants of Cluj Napoca.

2017 ADAM MAŁYSZ AND THE ACADEMY OF MASTERS

Adam Małysz officially becomes the Ambassador of the BP2 brand! The best ski jumper among roofers, the best roofer among ski jumpers. In the same year, we also launched an original training program as part of mobile and stationary meetings of the ACADEMY OF MASTERS. Our trainings raise the standards of roofing knowledge and allow specialists to become even more competitive on the market.

WOLF

Choosing the image of a wolf for the BP2 signet ring. Wolves are herd animals whose lifestyle symbolizes the idea of teamwork that is close to our hearts

2018 INVESTMENTS

The former MARCEGAGLIA production plant in Romania was incorporated into the BP2 capital group. From now on, we start the production of sandwich panels in Romania.

IZI 2019

We introduce to our offer the original IZI flat modular tile, which is the latest trend in aesthetic and modern construction.

MODERN TRAINING CENTRE 2021

In order to provide the participants of the Academy of Masters with the best possible development opportunities, we have created a training room in our production plant in Dabrowa Górnicza. This is a special place that we have filled with the equipment necessary to expand roofing skills, raising the knowledge and practice of specialists to a different level.

SOLROOF - INTEGRATED PHOTOVOLTAIC ROOF 2023 -

In 2023, we launched our new brand and products SOLROOF, an integrated photovoltaic roof, which was developed in response to the growing demand for clean energy.

CONSOLIDATION 2024 -

In 2024, we decided to unify our brands and take decisive steps to respond to the market situation in the entire Central and Eastern Europe. As a result, we decided to phase out the operations of both production plants in Romania, operating under the IMPRO brand, and transfer the resources invested there to sectors with the greatest potential.

- 2020 COMPACT SERIES

We introduce COMPACT SERIES sheet metal roof tiles to our offer, manufactured on the basis of classic solutions in the form of light, two-module sheets. We have also introduced ready-made mounting holes that facilitate the installation of metal roof tiles and eliminate the risk of making a technical error.

2022 EXPANSION OF IMPRO ACTIVITIES

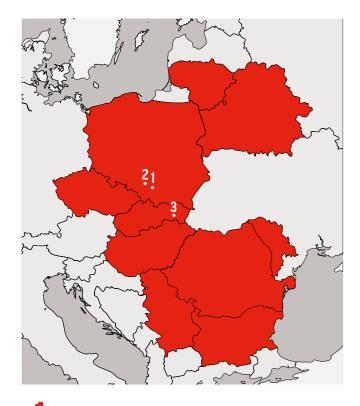
In 2022, we undertook many investment activities, including the expansion of the IMPRO production plant. We also established the Academy of Masters operating at one of the IMPRO production plants – for this purpose, a modern training centre was created, enabling the improvement of practical skills.

2023 VSS

We open a modern logistics and production centre in Košice – the largest city in eastern Slovakia. From that point on we start the production of sandwich panels in Slovakia.

Production plants





BP2 has 3 integrated production plants in Poland and Slovakia. The plants are connected logistically and systemically, creating a uniform structure of production plants of high product specialization.

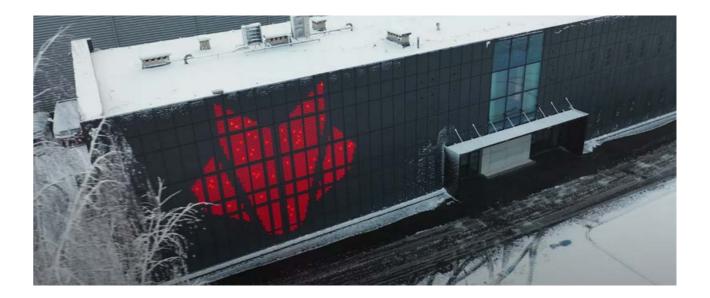
Production plant in Kraków

It is one of the first production plants built by BP2. It was brought to life in 2007. Its modern appearance and interior design became the starting point for subsequent BP2 investments. A well-thoughtout location, located at the A4 motorway, makes our plant an ideal logistics point. In the production plant, we focus on the production of products for housing construction.



Production plant in Dąbrowa Górnicza

The dynamic development has opened up new opportunities for us. In 2015, a production plant in Dąbrowa Górnicza was purchased. This part of the capital group quickly began to play an important role in the global production of BP2. There is also a BP2 training centre in Dąbrowa Górnicza, where, as part of the Academy of Masters – an original practical training program conducted by the Certified Roofing Master Waldemar Piela, we enable you to gradually optimize your work and improve your qualifications.



Production plant in Košice

Due to our dynamic development, in 2022 we opened another production plant in Slovakia, located in the second largest city of our southern neighbours. The plant has an area of 21,000 m² and is adapted to the production of sandwich panels. A Steel Service Centre was also launched at the production plant.



SandStat

At BP2 we use the latest technology, which is why we use one of the leading static software programs SandStat, developed by the German company iS-engineering GmbH, to assess the load-bearing capacity of the sandwich panels.

Thanks to the calculations performed in SandStat, we are able to ensure the selection of the right sandwich panels and their fasteners in accordance with European standard EN 14509. We can verify and calculate different cases by modelling different static systems, taking different loads and checking them as part of our case study.

Above all, we are committed to safety and high quality - by optimising the selection process of the sandwich panel, we look after the interests of the investor and the comfort of the designers and installers. This very often saves on the material needed to manufacture the panels, but also improves their transport and installation and minimises the volume of waste generated by production.



BP2 Laboratory

We focus on the quality of the products we offer, which is why we have set up our own professional laboratories in Poland and Romania, where we carry out rigorous tests in line with the latest academic knowledge and technical standards.

The quality of the sandwich panel production is continuously checked through mechanical and physical tests in accordance with the European standard set up in PN-EN 14509. Our laboratories carry out continuous checks on both the products we offer and the materials supplied to manufacture them. In the case of sandwich panels, we carry out, among other things: thermal conductivity tests, mechanical parameters and a small fire test for cores made of reinforced PIR polyurethane foam.

We rely not only on the best measuring equipment, but also on a team of top-class specialists. Thanks to the systematic improvement of production quality, our customers can enjoy long-term warranties.







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BIM BP2 Library

Are you working on a roof or wall project and looking for the best solution that will meet your requirements?

We give you the BP2 Library to design according to BIM technology. Thanks to precise models, you will prepare a complete 3D detailed design much faster and easier.

Building Information Modelling (BIM), is a digital record of the various physical and functional properties of a building. Often, designers working in Revit do not know how to independently model prepared objects, which is why below we have prepared an instructional video that will make it easier for you to work with our products.

The innovative features of the BP2 Revit Plugin help to reduce design time and prevent design errors.

Our plug-in makes designing easy and fun, and you spend a minimum of time on it!

You can find BP2 products in our library BP2 BIM for architects and designers bp2.eu/en/architects



Innovative production plant

BP2 is built on four rock-solid pillars. They include quality and technology, which have contributed to reaching the next stage of development.

Following innovation, we started producing lightweight and energy-efficient sandwich panels, which are made on our new production line - one of the most modern in Europe.

Successfully overcoming subsequent challenges in the industrial market, we have arrived at a place where we are able to meet the requirements of investors for the most complex constructions and provide sandwich panels with excellent performance and precision.



Sandwich panels installation instructions

The CORE PIR sandwich panel consists of two galvanised steel sheets as the outer and inner lining of the panel and a PIR foam core, which is also the load-bearing and insulating layer.

Double-sided galvanized steel sheet type S280GD or S320GD and zinc weight Z100 g/m² for indoor use only and Z225 g/m² or Z275 g/m² for indoor and outdoor use. As a standard, the sheet is coated with a 25 μm polyester coating. On special request, it can be coated with HDP35 or HDX55. The sandwich panel cladding is finished with a special film, which is designed to protect sandwich panels during transport, loading and unloading and during their storage in a warehouse or on the construction site.

The core of the board is a rigid polyisocyanurate foam, abbreviated colloquially called PIR foam, which is characterised by increased fire parameters increasing fire safety and excellent thermal and acoustic insulation properties significantly increasing the quality of the constructed or modernised facility. The density of the foam is 40 ± 3 kg/m3.

Scan the code or visit www.vss.sk to download

the assembly instructions.

Installation manual for sandwich panels

Core PIR technical catalogue

Sandwich panels are a modern product with a very wide range of applications in today's construction industry. They are used to develop both roofs and facades of new buildings as well as modernised ones. They are also used for interior walls and ceilings, ensuring the freedom to arrange interior production, storage or office areas. Due to the excellent thermal conductivity coefficient: $\lambda \lambda = 0.022 \, \text{W/mK}$, it is used, among others, in the construction of cold stores and freezers.

Attractive colours and varied profiling allow for the design and construction of public utility facilities. This technology makes it possible develop buildings in a very short time and, in addition, due to its attractive price, allows the use of sandwich panels to be so common on today's developments.









Sandwich panels

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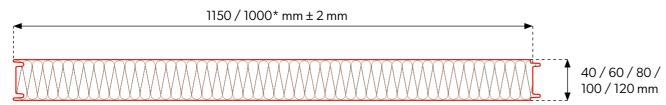




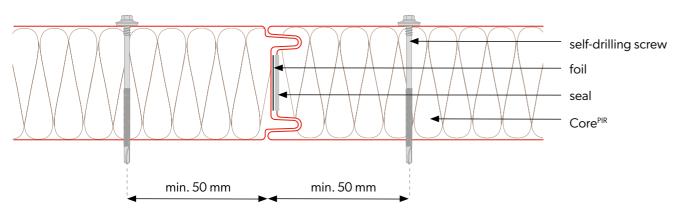
Wall panel with visible fastening



Panel cross-section



Joining the panels



Technical specifications

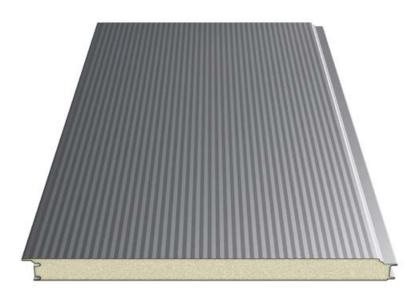
Core	PIR							
Density [kg/m³]	40 ± 3							
PIR panel thickness [mm]	40	120						
Weight [kg/m²]	8,7	9,5	10,3	11,1	11,9			
Effective width [mm]	1150, 1000*							
Total width [mm]	1171, 1021*							
Min. panel length [m]	2,5 2,0							
Max. panel length [m]	15,0							
Outer/inner sheet thickness [mm]	0,3-0,7 / 0,3-0,7							
U-value [W/m²K]	0,55	0,37	0,28	0,22	0,18			
Fire spread degree	NRO							
Type of external / internal profiling	[M],[T1],	[M], [T1], [R], [F] / [T1], [M], [F]						
External / internal corrosion resistance	C1, C2, C3	C1, C2, C3 (C4 ÷ C5) / A1 (A2 ÷ A5)						
Standard coatings		Poliester Interior [INT], Poliester Standard [RAL], HERCULIT [HC], MULTILAYER 40 [MLT]						
Special coatings	PVDF, PU	PVDF, PUR, PVC (P), PVC (F) - FoodSafe						
Accessories	fixing sys	tem, seals, flash	ings, rooflight					

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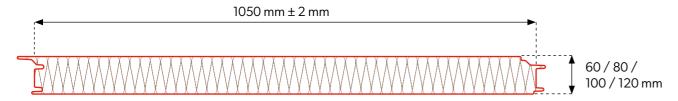
 $^{^{\}star}$ Module availability is agreed individually with the sales department.



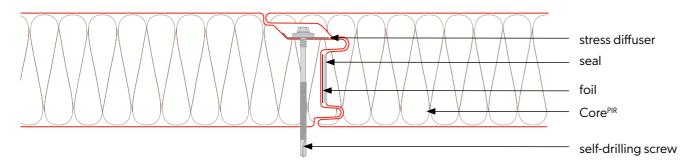
Sandwich wall panel with concealed fixing



Panel cross-section



Joining the panels



Technical specifications

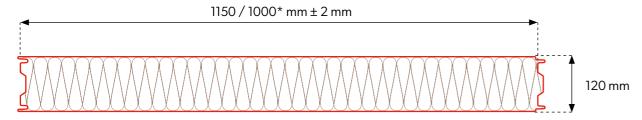
Core	PIR							
Density [kg/m³]	40 ± 3							
PIR panel thickness [mm]	60	120						
Weight [kg/m²]	9,5	10,3	11,1	11,9				
Effective width [mm]	1050							
Total width [mm]	1102							
Min. panel length [m]	2,0							
Max. panel length [m]	15,0							
Outer/inner sheet thickness [mm]	0,3-0,7 / 0,3-0,7							
U-value [W/m²K]	0,37	0,28	0,22	0,18				
Fire spread degree	NRO							
Type of external / internal profiling	[M],[T1],[R	[M],[T1],[R],[F]/[T1],[M],[F]						
External / internal corrosion resistance	C1, C2, C3 (C1, C2, C3 (C4 ÷ C5) / A1 (A2 ÷ A5)						
Standard coatings		Poliester Interior [INT], Poliester Standard [RAL], HERCULIT [HC], MULTILAYER 40 [MLT]						
Special coatings	PVDF, PUR,	PVC (P), PVC (F) - Fo	odSafe					
Accessories	fixing syste	em, seals, flashings, i	rooflight					

SPW-C COREPIR

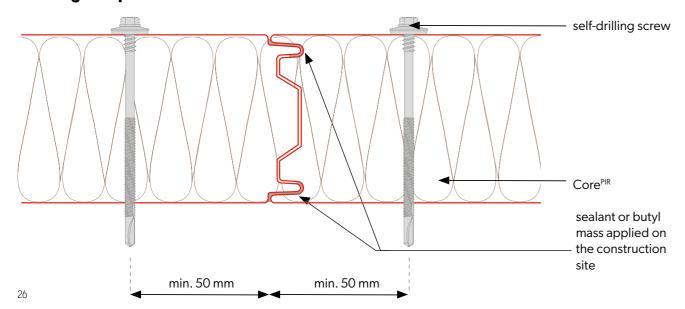
Cooling sandwich panel



Panel cross-section



Joining the panels



Technical specifications

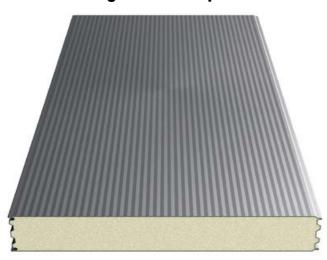
Core	PIR
Density [kg/m³]	40 ± 3
PIR panel thickness [mm]	120
Weight [kg/m²]	11,9
Effective width [mm]	1150,1000*
Total width [mm]	1171,1021*
Min. panel length [m]	2,0
Max. panel length [m]	15,0
Outer/inner sheet thickness [mm]	0,3-0,7 / 0,3-0,7
U-value [W/m²K]	0,18
Fire spread degree	NRO
Type of external / internal profiling	[M],[T1],[R],[F]/[T1],[M],[F]
External / internal corrosion resistance	C1, C2, C3 (C4 ÷ C5) / A1 (A2 ÷ A5)
Standard coatings	Poliester Interior [INT], Poliester Standard [RAL], HERCULIT [HC], MULTILAYER 40 [MLT]
Special coatings	PVDF, PUR, PVC (P), PVC (F) - FoodSafe
Accessories	fixing system, seals, flashings, rooflight



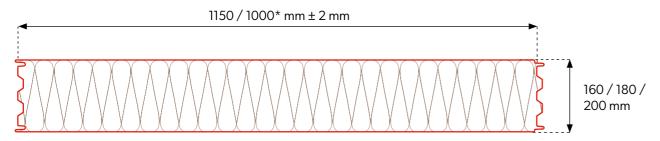
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SPW-C COREPIR

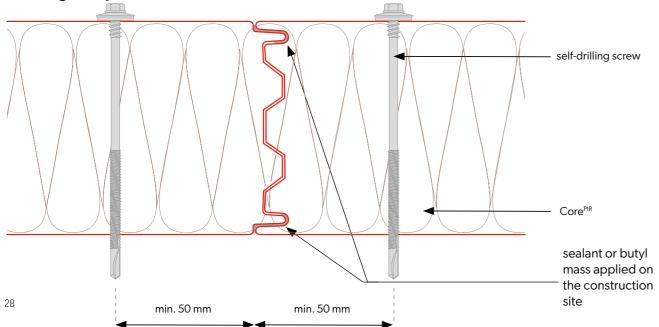
Cooling sandwich panel



Panel cross-section



Joining the panels



Technical specifications

Core	PIR	PIR						
Density [kg/m³]	40 ± 3							
PIR panel thickness [mm]	160	160 180 200						
Weight [kg/m²]	13,5	14,3	15,1					
Effective width [mm]	1150, 1000	1150,1000*						
Total width [mm]	1171,1021*	1171, 1021*						
Min. panel length [m]	2,0	2,0						
Max. panel length [m]	15,0	15,0						
Outer/inner sheet thickness [mm]	0,3-0,7 / 0	0,3-0,7 / 0,3-0,7						
U-value [W/m²K]	0,14	0,12	0,11					
-ire spread degree	NRO							
Type of external / internal profiling	[M],[T1],[I	R],[F] / [T1],[M],	[F]					
External / internal corrosion resistance	C1, C2, C3	(C4 ÷ C5) / A1 (A2	2 ÷ A5)					
Standard coatings		Poliester Interior [INT], Poliester Standard [RAL], HERCULIT [HC], MULTILAYER 40 [MLT]						
Special coatings	PVDF, PUR	, PVC (P), PVC (F)	- FoodSafe					
Accessories	fixing syst	em, seals, flashin	gs, rooflight					



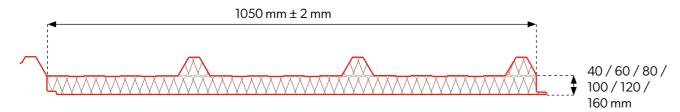
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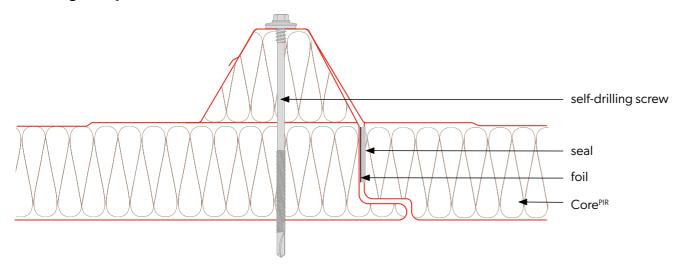
Roof sandwich panel



Panel cross-section



Joining the panels



Technical specifications

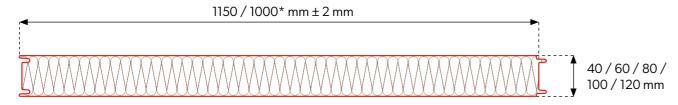
Core	PIR							
Density [kg/m³]	40 ± 3							
PIR panel thickness [mm]	40	60	80	100	120	160		
Weight [kg/m²]	9,6	10,4	11,2	12,0	12,8	14,8		
Effective width [mm]	1050							
Total width [mm]	1127							
Min. panel length [m]	2,0							
Max. panel length [m]	15,0							
Outer/inner sheet thickness [mm]	0,3-0,7 /	0,3-0,7 / 0,3-0,7						
U-value [W/m²K]	0,55	0,37	0,28	0,22	0,18	0,14		
Reaction to external fire on the roof	B _{ROOF} (t1)		·			·		
Fire spread degree	NRO							
Type of external / internal profiling	[T40]/[T	Γ1],[M],[F]						
External / internal corrosion resistance	C1, C2, C	3 (C4 ÷ C5) /	A1 (A2 ÷ A5)					
Standard coatings		Poliester Interior [INT], Poliester Standard [RAL], HERCULIT [HC], MULTILAYER 40 [MLT]						
Special coatings	PVDF, PU	IR, PVC (P), P	/C (F) - Food	Safe				
Accessories	fixing system, seals, flashings, rooflight SPR-SKY							

SPW-S COREPUR

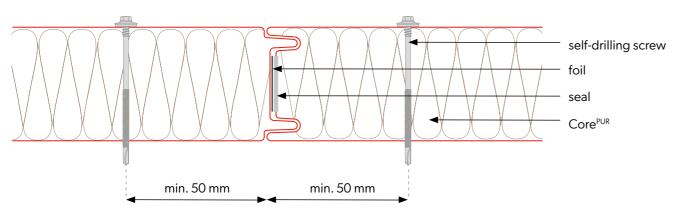
Wall panel with visible fastening



Panel cross-section



Joining the panels



Technical specifications

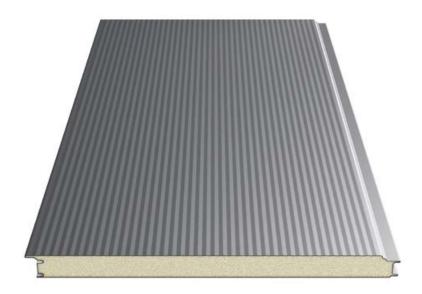
Core	PUR							
Density [kg/m³]	40 ± 3	40±3						
PUR panel thickness [mm]	40	40 60 80 100						
Weight [kg/m²]	8,7	9,5	10,3	11,1	11,9			
Effective width [mm]	1150, 100	1150,1000*						
Total width [mm]	1171, 1021*							
Min. panel length [m]	2,5 2,0							
Max. panel length [m]	15,0							
Outer/inner sheet thickness [mm]	0,3-0,7 /	0,3-0,7 / 0,3-0,7						
U-value [W/m²K]	0,55	0,37	0,28	0,22	0,18			
Fire spread degree	NRO							
Type of external / internal profiling	[M],[T1],	[R],[F]/[T1],[M],[F]					
External / internal corrosion resistance	C1, C2, C3	C1, C2, C3 (C4 ÷ C5) / A1 (A2 ÷ A5)						
Standard coatings		Poliester Interior [INT], Poliester Standard [RAL], HERCULIT [HC], MULTILAYER 40 [MLT]						
Special coatings	PVDF, PUI	PVDF, PUR, PVC (P), PVC (F) - FoodSafe						
Accessories	fixing sys	fixing system, seals, flashings, rooflight						

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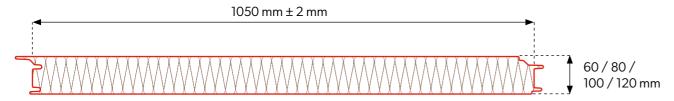
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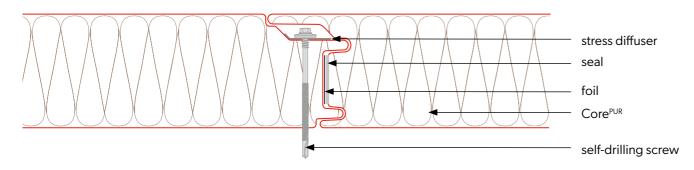
Sandwich wall panel with concealed fixing



Panel cross-section



Joining the panels

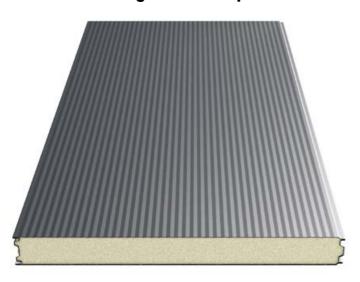


Technical specifications

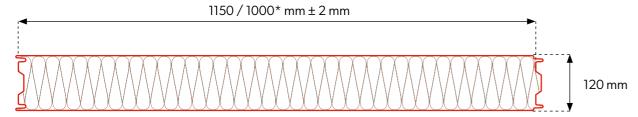
Core	PUR							
Density [kg/m³]	40 ± 3							
PUR panel thickness [mm]	60	120						
Weight [kg/m²]	9,5	10,3	11,1	11,9				
Effective width [mm]	1050							
Total width [mm]	1102							
Min. panel length [m]	2,0							
Max. panel length [m]	15,0							
Outer/inner sheet thickness [mm]	0,3-0,7 / 0,3-0,7							
U-value [W/m²K]	0,37	0,28	0,22	0,18				
Fire spread degree	NRO							
Type of external / internal profiling	[M],[T1],[R],[F]/[T1],[M],[F]						
External / internal corrosion resistance	C1, C2, C3 (C4 ÷ C5) / A1 (A2 ÷ A	A5)					
Standard coatings	Poliester Interior [INT], Poliester Standard [RAL], HERCULIT [HC], MULTILAYER 40 [MLT]							
Special coatings	PVDF, PUR,	PVDF, PUR, PVC (P), PVC (F) - FoodSafe						
Accessories	fixing syste	em, seals, flashings, i	fixing system, seals, flashings, rooflight					

SPW-C COREPUR

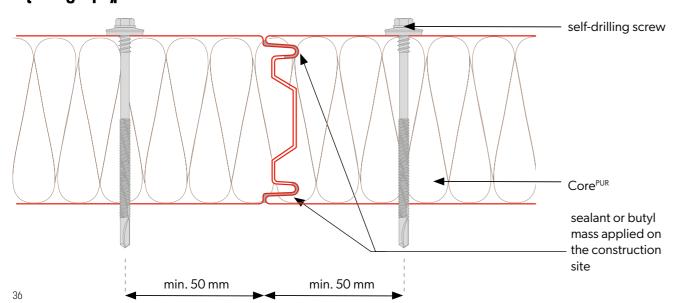
Cooling sandwich panel



Panel cross-section



Voizimi elpeytanels



Technical specifications

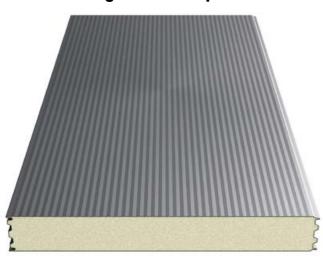
Core	PUR
Density [kg/m³]	40 ± 3
PUR panel thickness [mm]	120
Weight [kg/m²]	11,9
Effective width [mm]	1150, 1000*
Total width [mm]	1171,1021*
Min. panel length [m]	2,0
Max. panel length [m]	15,0
Outer/inner sheet thickness [mm]	0,3-0,7 / 0,3-0,7
U-value [W/m²K]	0,18
Fire spread degree	NRO
Type of external / internal profiling	[M],[T1],[R],[F]/[T1],[M],[F]
External / internal corrosion resistance	C1, C2, C3 (C4 ÷ C5) / A1 (A2 ÷ A5)
Standard coatings	Poliester Interior [INT], Poliester Standard [RAL], HERCULIT [HC], MULTILAYER 40 [MLT]
Special coatings	PVDF, PUR, PVC (P), PVC (F) - FoodSafe
Accessories	fixing system, seals, flashings, rooflight



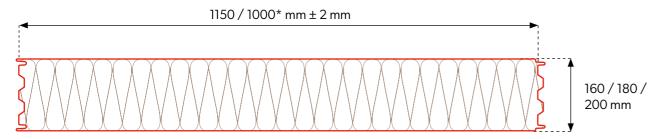
 $^{^{\}star}$ Module availability is agreed individually with the sales department.

SPW-C COREPUR

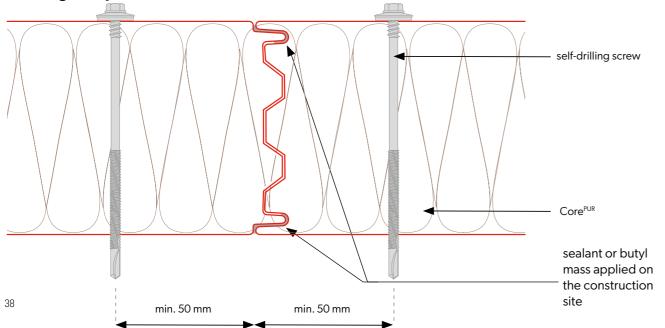
Cooling sandwich panel



Panel cross-section



Joining the panels



Technical specifications

Core	PUR								
Density [kg/m³]	40 ± 3								
PUR panel thickness [mm]	160	160 180 200						160 180	200
Weight [kg/m²]	13,5	14,3	15,1						
Effective width [mm]	1150, 1000	1150, 1000*							
Total width [mm]	1171, 1021*	1171, 1021*							
Min. panel length [m]	2,0	2,0							
Max. panel length [m]	15,0	15,0							
Outer/inner sheet thickness [mm]	0,3-0,7 / 0	0,3-0,7 / 0,3-0,7							
U-value [W/m²K]	0,14	0,12	0,11						
Fire spread degree	NRO								
Type of external / internal profiling	[M],[T1],[F	R],[F]/[T1],[M],[F]						
External / internal corrosion resistance	C1, C2, C3	(C4 ÷ C5) / A1 (A2	2 ÷ A5)						
Standard coatings		Poliester Interior [INT], Poliester Standard [RAL], HERCULIT [HC], MULTILAYER 40 [MLT]							
Special coatings	PVDF, PUR	PVDF, PUR, PVC (P), PVC (F) - FoodSafe							
Accessories	fixing syste	em, seals, flashin	gs, rooflight						



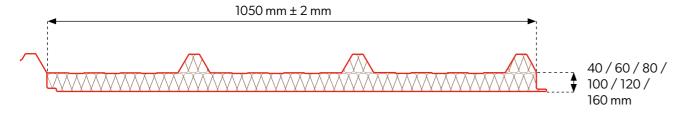
^{*} Module availability is agreed individually with the sales department.



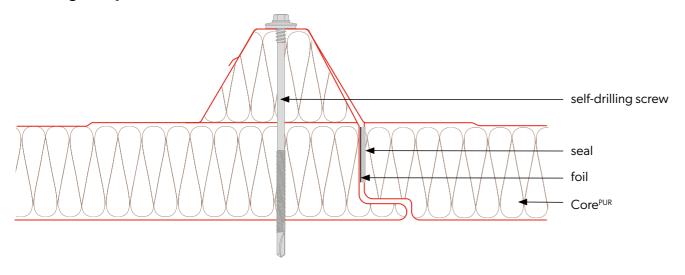
Roof sandwich panel



Panel cross-section



Joining the panels



Technical specifications

Core	PUR	PUR							
Density [kg/m³]	40 ± 3								
PUR panel thickness [mm]	40	60	80	100	120	160			
Weight [kg/m²]	9,6	10,4	11,2	12,0	12,8	14,8			
Effective width [mm]	1050								
Total width [mm]	1127								
Min. panel length [m]	2,0								
Max. panel length [m]	15,0								
Outer/inner sheet thickness [mm]	0,3-0,7 / 0,3-0,7								
U-value [W/m²K]	0,55	0,37	0,28	0,22	0,18	0,14			
Reaction to external fire on the roof	B _{ROOF} (t1)			·					
Fire spread degree	NRO								
Type of external / internal profiling	[T40]/[T	1], [M], [F]							
External / internal corrosion resistance	C1, C2, C3	3 (C4 ÷ C5) / A	A1 (A2 ÷ A5)						
Standard coatings		Poliester Interior [INT], Poliester Standard [RAL], HERCULIT [HC], MULTILAYER 40 [MLT]							
Special coatings	PVDF, PUF	R, PVC (P), PV	C (F) - Food	Safe					
Accessories	fixing system, seals, flashings, rooflight SPR-SKY								

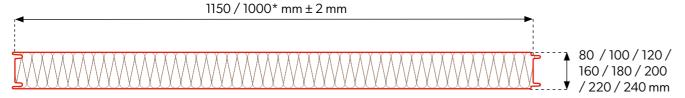


SPW-S CORE WOOL

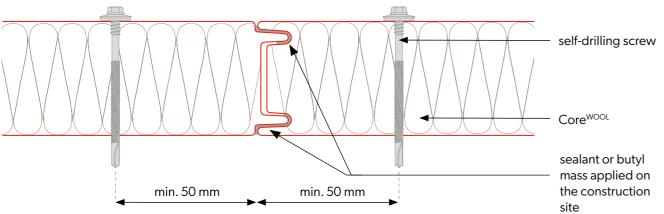
Wall panel with visible fastening



Panel cross-section



Joining the panels



Technical specifications

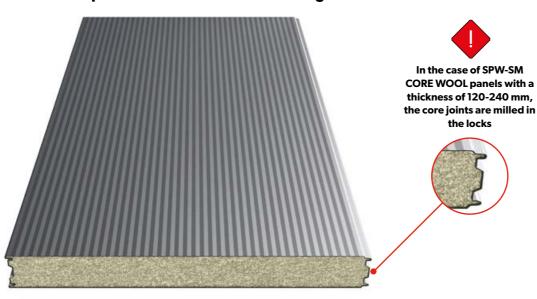
Core	wool										
Density [kg/m³]	100 ± 1	100 ± 10									
WOOL panel thickness [mm]	80	100	120	160	180	200	220	240			
Weight [kg/m²]	16,6	18,6	20,6	24,6	26,6	28,6	30,6	32,6			
Effective width [mm]	1150, 1	1150, 1000*									
Total width [mm]	1171, 10	1171, 1021*									
Min. panel length [m]	2,0	2,0									
Max. panel length [m]	15,0										
Outer/inner sheet thickness [mm]	0,5-0,7	0,5-0,7 / 0,5-0,7									
U-value [W/m²K]	0,54	0,43	0,36	0,27	0,24	0,22	0,20	0,18			
Fire resistance	45	45	60	90	90	90	90	90			
Fire spread degree	NRO										
Type of external / internal profiling	[M],[T	1], [R], [F] ,	/ [T1], [M],	[F]							
External / internal corrosion resistance	C1, C2,	C3 (C4 ÷	C5) / A1 (A	12 ÷ A5)							
Standard coatings	Poliest	er Interior	[INT], Pol	iester Sta	ndard [RAL], HERCULIT	[HC], MULTIL	AYER 40 [ML			
Special coatings	PVDF, I	PUR, PVC (P), PVC (F) - FoodSa	ife						
Accessories	fixing	svstem, se	als, flashi	nas, roofl	iaht						



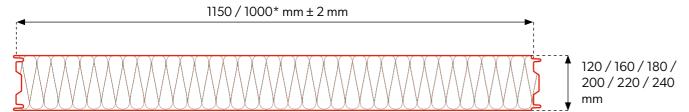
^{*} Module availability is agreed individually with the sales department.

SPW-SM CORE WOOL

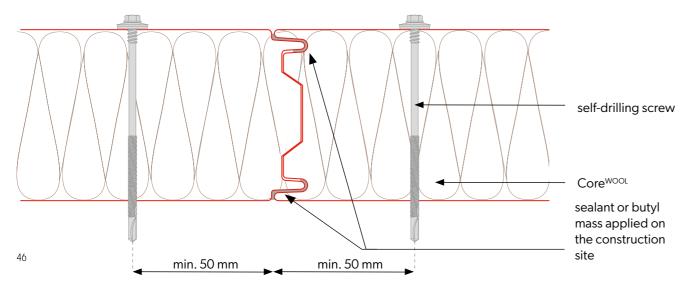
Wall panel with visible fastening



Panel cross-section



Joining the panels



Technical specifications

Core	wełna							
Density [kg/m³]	100 ± 10	0						
WOOL panel thickness [mm]	120	160	180	200	220	240		
Weight [kg/m²]	20,6	24,6	26,6	28,6	30,6	32,6		
Effective width [mm]	1150, 1000*							
Total width [mm]	1171, 1021*							
Min. panel length [m]	2,0							
Max. panel length [m]	15,0							
Outer/inner sheet thickness [mm]	0,5-0,7 / 0,5-0,7							
U-value [W/m²K]	0,36	0,27	0,24	0,22	0,20	0,18		
Fire resistance	60	90	90	90	90	90		
Fire spread degree	NRO							
Type of external / internal profiling	[M],[T1],[R],[F],	/ [T1], [M],	[F]				
External / internal corrosion resistance	C1, C2,	C3 (C4 ÷	C5) / A1 (A	2 ÷ A5)				
Standard coatings	Poliester Interior [INT], Poliester Standard [RAL], HERCULIT [HC], MULTILAYER 40 [MLT]							
Special coatings	PVDF, P	UR, PVC (P), PVC (F) - FoodSa	fe			
Accessories	fixing s	ystem, se	als, flashi	ngs, roofli	ght			



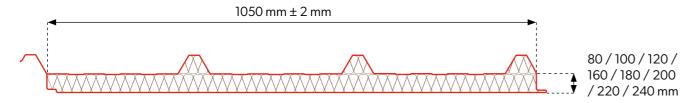
 $^{^{\}star}$ Module availability is agreed individually with the sales department.



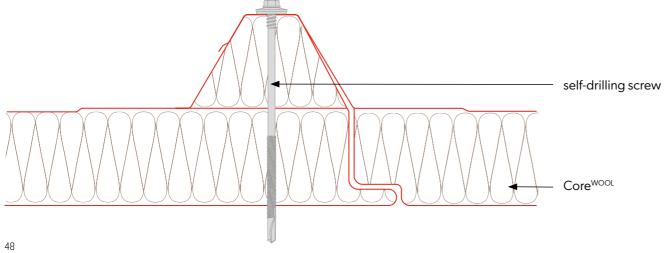
Roof sandwich panel



Panel cross-section



Joining the panels



Technical specifications

Core	wool							
Density [kg/m³]	100 ± 10							
WOOL panel thickness [mm]	80	100	120	160	180	200	220	240
Weight [kg/m²]	17,8	19,8	21,8	25,8	27,8	29,8	31,8	33,8
Effective width [mm]	1050			·				
Total width [mm]	1127	1127						
Min. panel length [m]	2,0							
Max. panel length [m]	15,0							
Outer/inner sheet thickness [mm]	0,5-0,7	7 / 0,5-0,7	•					
U-value [W/m²K]	0,54	0,43	0,36	0,27	0,24	0,22	0,20	0,18
Reaction to external fire on the roof	B _{ROOF} (t	2)						
Fire spread degree	NRO							
Type of external / internal profiling	[T40] /	′[T1],[M],	[F]					
External / internal corrosion resistance	C1, C2,	C3 (C4 ÷	C5) / A1 (A	\2 ÷ A5)				
Standard coatings		Poliester Interior [INT], Poliester Standard [RAL], HERCULIT [HC], MULTILAYER 40 [MLT]						
Special coatings	PVDF, PUR, PVC (P), PVC (F) - FoodSafe							
Accessories	fixing system, seals, flashings, rooflight SPR-SKY							

Sandwich panels are a modern product with

a very wide range of applications in today's

They are used to develop both roofs and facades of new buildings as well as modernised

ones. They are also used for interior walls and

ceilings, giving you the freedom to arrange

interior production, storage or office areas.

Attractive colours and varied profiling allow for the design and construction of public utility facilities. This technology makes it possible develop buildings in a very short time and, in addition, due to its attractive price, allows the use of sandwich panels to be so common on

construction industry.

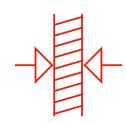
today's developments.

Sandwich panels advantages

In today's dynamic world of construction investments, the key aspect is the selection of materials that will not only meet the highest quality standards, but also ensure time and cost efficiency. Sandwich panels are becoming an increasingly popular choice for investment projects, offering numerous advantages that satisfy both developers and future users of buildings.

By selecting sandwich panels for your project, you invest in a durable, cost-effective and eco-friendly solution. It's a choice that will bring benefits, both today and in the future.

Gain an advantage by selecting sandwich panels as the material for your building projects. Not only will you save time and money, but also create sustainable, eco-friendly and comfortable spaces for future users.



Thermal insulation: Sandwich panels are characterised by excellent thermal insulation, which allows for a significant reduction in the heating and cooling costs of buildings. This saves you money on your energy bills, while also protecting the environment.



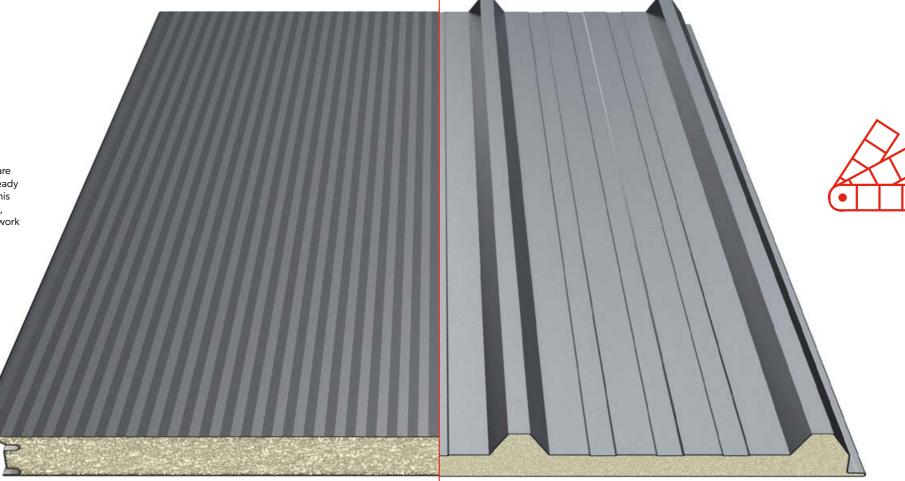
Multifunctionality: Sandwich panels are versatile and can be used for a variety of building types, from residential to industrial. As a result, they are an ideal solution for a variety of investment projects.



Durability: sandwich panels are extremely durable and weatherproof. This means that your building will last for many years without the need for significant investment in



Quick installation: sandwich panels are prefabricated, which means they are ready for use right on the construction site. This significantly reduces construction time, which in turn reduces costs related to work and equipment rental.



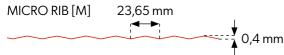
Aesthetics: Sandwich panels allow a variety of interior and exterior finishes and a wide range of cladding colours, so you can tailor the look of your building to your individual needs and preferences.

Sandwich panels www.vssk.sk

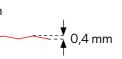
Sandwich wall panel

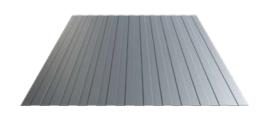
External profiling

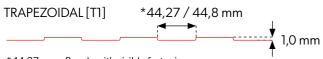






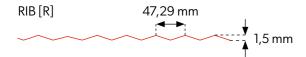






*44,27 mm - Panels with visible fastening 44,8 mm - Panels with concealed fixing





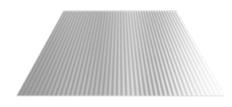


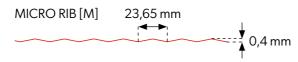
FLAT[F]

Internal profiling











FLAT[F]



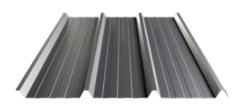
ATTENTION! Due to the structure of sandwich panels with FLAT [F] profiles, the so-called effect may occur. "waves" of the sheet metal. This is a natural phenomenon for this type of products. We recommend contacting the technical department to choose the optimal solution.



Internal and external profiling are available in any configuration.

Roof sandwich panel

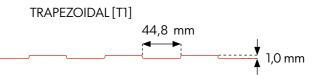
External profiling



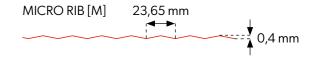


Internal profiling











FLAT[F]



ATTENTION! Due to the structure of sandwich panels with FLAT [F] profiles, the so-called effect may occur. "waves" of the sheet metal. This is a natural phenomenon for this type of products. We recommend contacting the technical department to choose the optimal solution.



Internal and external profiling are available in any configuration.



www.vssk.sk

Fixings

Self-drilling screw with aluminium washer for fixing sandwich panels to steel substrate. Drilling capacity up to 6 mm.



Self-drilling screw with aluminium washer for fixing sandwich panels to substrate steel. Drilling capacity up to 12 mm.



Self-drilling screw with aluminium washer for fixing sandwich panels to substrate steel. Drilling capacity up to 20 mm.



Self-tapping screw with washer aluminium for fastening sandwich panels to concrete and wood.



The length of the connector should be selected depending on the type and thickness of the sandwich panel used. All connectors should be fitted with \emptyset 19 sealing and vulcanising washers. If the object is exposed to particular humidity and chemical agents, we recommend the use of stainless steel fasteners.

To improve the aesthetics of the installation, especially when joining sandwich panels with visible fixing, fasteners with powder-coated heads and washers or fitted with plastic caps in a colour matching that of the panel façade sheet can be used.

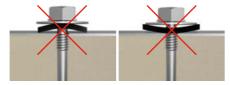
In order to properly attach the sandwich panel to the structure, the perpendicular position of the fastener in relation to the surface must be maintained during the installation process. For this reason, when installing, it is recommended to use specialised screwdrivers equipped with guide heads, which allow stable guidance of long fasteners and limit the embedding depth. These elements optimise the drilling capacity, allowing simultaneous drilling and fastening with just one power tool, significantly improving the quality of fastening and saving time. Thanks to this, we can maintain equally high and constant values of the breaking force, which reduce the risk of deformation on the cladding sheets (they use a system for adjusting the setting of the depth of the required embedding) and increase the resistance of the fastenings to external factors (e.g. waterproofness). All of this ensures safety of the structure and eliminates the so-called installation clearances, i.e. under-tightening and misalignment that can occur between the sandwich panel and the support to which the panel is mounted.

 $The \ clamping \ force \ of \ the \ fastener \ should \ be \ chosen \ ensuring \ that \ the \ washer \ is \ not \ deformed. This \ is \ illustrated \ in \ the \ figure \ below.$

Correct







	Self-drilling screw with washer for mounting sandwich panels to steel substrate. Drilling capacity up to 6 mm							
Name	Screw diameter [mm]	Screw length [mm]	Thickness range of the installed sandwich panel [mm]	Washer diameter [mm]	Use of a connector for a specific sandwich panel. Note - for roof panel when using ridge tiles, you must take into account ridge dimension			
WKR01A	5,5/6,3	65	30-47	19	SPW-S 40, SPW-H 60,			
WKR01B	5,5/6,3	80	30-62	19	SPW-S 60, SPW-H 80,			
WKR01C	5,5/6,3	90	40-72	19	SPW-H 80,			
WKR01D	5,5/6,3	110	60-92	19	SPW-S 80, SPW-H 100, SPR 40			
WKR01E	5,5/6,3	125	75-107	19	SPW-S 100, SPW-H 120, SPR 60			
WKR01F	5,5/6,3	150	100-132	19	SPW-S 120, SPR 80, SPW-C 120			
WKR01G	5,5/6,3	175	125-157	19	SPR 100,			
WKR01H	5,5/6,3	200	150-182	19	SPW-S 160,180, SPR 120, SPW-C 160, 180			
WKR01I	5,5/6,3	230	160-211	19	SPW-S 200, SPR 160,180, SPW-C 200			
WKR01J	5,5/6,3	275	205-257	19	SPW-S 220,240, SPR 200			

:	Self-drilling	screw wit	th washer for mounting	sandwich panels to	steel substrate. Drilling capacity up to 12 mm
Name	Screw diameter [mm]	Screw length [mm]	Thickness range of the installed sandwich panel [mm]	Washer diameter [mm]	Use of a connector for a specific sandwich panel. Note - for roof panel when using ridge tiles, you must take into account ridge dimension
VKR02A	5,5/6,3	70	34-45	19	SPW-S 40, SPW-H 60,
WKR02B	5,5/6,3	90	34-65	19	SPW-S 60, SPW-H 80,
WKR02C	5,5/6,3	110	54-85	19	SPW-S 80, SPW-H 100, SPR 40
WKR02D	5,5/6,3	130	74-105	19	SPW-S 100, SPW-H 120, SPR 60
WKR02E	5,5/6,3	150	94-125	19	SPW-S 120, SPR 80, SPW-C 120
WKR02F	5,5/6,3	175	119-150	19	SPR 100
WKR02G	5,5/6,3	185	119-160	19	SPW-S 160, SPR 120, SPW-C 160
WKR02H	5,5/6,3	200	134-175	19	SPW-S 160, SPR 120, SPW-C 160
WKR02I	5,5/6,3	230	164-205	19	SPW-S 180,200, SPR 160, SPW-C 200
WKR02J	5,5/6,3	285	209-260	19	SPW-S 220,240, SPR 220

:	Self-drilling screw with washer for mounting sandwich panels to steel substrate. Drilling capacity up to 20 mm							
Name	Screw diameter [mm]	Screw length [mm]	Thickness range of the installed sandwich panel [mm]	Washer diameter [mm]	Use of a connector for a specific sandwich panel. Note - for roof panel when using ridge tiles, you must take into account ridge dimension			
WKR03A	5,5/6,3	82	30-50	19	SPW-S 40, SPW-H 60,			
WKR03B	5,5/6,3	92	40-60	19	SPW-S 60, SPW-H 80,			
WKR03C	5,5/6,3	112	40-80	19	SPW-S 80, SPW-H 100, SPR 40			
WKR03D	5,5/6,3	165	93-133	19	SPW-S 100,120, SPW-H 120, SPR 60, 80, SPW-C 120			
WKR03E	5,5/6,3	205	123-173	19	SPW-S 160, SPR 100, 120, SPW-C 160			
WKR03F	5,5/6,3	255	163-223	19	SPW-S 180, 200, 220, SPR 110, 160, 180			

Self-drilling screw with washer for mounting sandwich panels to concrete and wood substrate.						
Name	Screw diameter [mm]	Screw length [mm]	Thickness range of the sandwich panel to be installed for wood substrate hef=40 mm [mm]	Washer diameter [mm]	Use of a connector for a specific sandwich panel. Note - for roof panel when using ridge tiles, you must take into account ridge dimension. For concrete, the selection is individual.	
WKR04A	6,3/7,0	113	50-70	19	SPW-S 60,	
WKR04B	6,3/7,0	138	75-95	19	SPW-S 80, SPW-H 100, SPR 40	
WKR04C	6,3/7,0	153	90-110	19	SPW-S 100, SPW-H 120, SPR 60	
WKR04D	6,3/7,0	173	110-130	19	SPW-S 120, SPR 80, SPW-C 120	
WKR04E	6,3/7,0	203	140-160	19	SPW-S 160, SPR 100, 120, SPW-C 160	
WKR04F	6,3/7,0	228	165-185	19	SPW-S 180, SPW-C 180	
WKR04G	6,3/7,0	253	190-210	19	SPW-S 200, SPR 160, SPW-C 200	

Self-drilling screw with steel washer for longitudinal overlapping sheet metal fixing. Drilling capacity up to 2.5 mm



Washer for fixing roof sandwich panels



Sealed ALU/steel rivet



Cap for masking screw heads



Screw for fixing skylights to roof panels



SDS+ concrete drill bits





Self-drilling screw	Self-drilling screw with steel washer for longitudinal overlapping sheet metal fixing. Drilling capacity up to 2.5 mm						
Name	Screw diameter [mm]	Screw length [mm]	Washer diameter [mm]	Quantity per box [pcs]			
WKR05A	4,8	19	14	250			
WKR05B	4,8	35	14	250			

Washer for fixing roof sandwich panels							
Name	Top wave width [mm]	Bottom wave width [mm]	tilt angle [°]	Quantity per box [pcs]			
WKR06A	22	68	30	100			

Sealed ALU/steel rivet							
Name	Rivet diameter [mm]	Rivet length [mm]	Mounting hole [mm]	Quantity per box [pcs]			
NIT01A	4	11	4,1	500			
NIT01B	4,8	11-12,5	4,9	500			

Cap for masking screw heads						
Name	Screw head diameter [mm]	Quantity per box [pcs]				
KAP01A	8	100				

Screw for fixing skylights to roof panels							
Name	Screw diameter [mm]	Screw length [mm]	Drill diameter [mm]	Thickness of materials to be joined [mm]	Quantity per box [pcs]		
WKR05A	10	25	10	14	100		
WKR05B	10	38	10	27	200		

		SDS+ concrete drill bits		
Name	Drill diameter [mm]	Total length of the drill [mm]	Drill working length [mm]	Quantity [pcs]
WIE01A	5	110	50	1
WIE01B	5	160	100	1
WIE01C	5	210	150	1
WIE01D	5	260	200	1
WIE01E	5	310	250	1
WIE01F	5	410	350	1
WIE02A	5,5	110	50	1
WIE02B	5,5	160	100	1
WIE02C	5,5	210	150	1
WIE02D	5,5	260	200	1
WIE02E	5,5	310	250	1
WIE02F	5,5	350	300	1
WIE02G	5,5	410	350	1

Stress diffuser do montażu płyt warstwowych







Polyethylene sealing tapes for roof covers and curtain walls



For the installation of roof sandwich panels with trapezoidal profiling, we recommend ridge tiles, i.e. clamp-shaped socket elements, equipped with a seal on the inside and sized to fit the front and side surfaces of the trapezoidal sandwich panel.

The purpose of the ridge tiles is to distribute the clamping force of the fasteners evenly over larger areas and to ensure the water tightness of joints. In most cases, they are a more effective and efficient solution than conventional EPDM-type sealing compound washers.

The quality of the assembly is the responsibility of the contractor and its control supervision. The cause of cover leaks is most often defective performing assembly work. In order to achieve the optimal effect, we recommend the use of an instruction from a BP2 technical advisor. It is also advisable to carry out the installation by specialised teams who have experience in the installation of lightweight housing.

Stress absorber for the installation of sandwich panels							
Name	LxWxT [mm]	colour	number of holes [pcs].	Quantity per box [pcs]			
WKR07A	80x22x1,2	zinc	2	100			
WKR07B	100x22x1,2	zinc	3	100			
WKR07C	150x22x1,2	zinc	4	100			

Ridge gasket			
Name	width [mm]	height	thickness [mm]
USZ01	1050	45	20

Polyethylene sealing tapes for roof covers and curtain walls				
Name	Tape dimensions [mm]	Roll length [m]	quantity per box [pcs]	
TAS01A	3x9	30	100	
TAS01B	3x10	30	90	
TAS01C	3x20	30	48	
TAS01D	3x30	30	32	
TAS01E	3x50	30	18	
TAS01F	4x20	20	48	
TAS01G	4x40	20	24	
TAS01H	5×20	20	48	





Rooflight

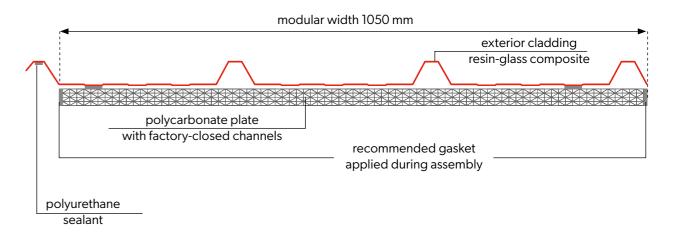


Technical information

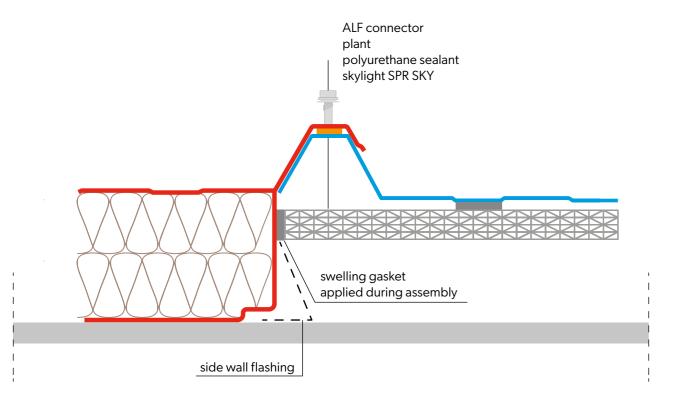


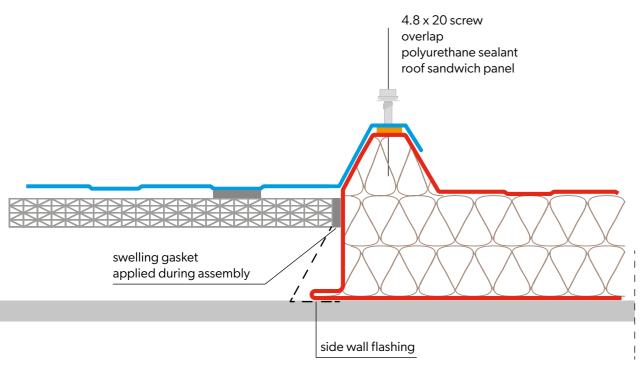






Connection diagram for sandwich panels





Technical specifications

Parameters	Value
Material	Resin-glass composite combined with 25 mm or 32 mm polycarbonate
Modular width	1050 mm
Length of opening	7.0 m (maximum cladding length 7.2 m) It is allowed to combine skylights at length directly on site
Recommended minimum roof pitch	10% (at 20 cm overlap)
Maximum support spacing	1,5 m
Thickness	Polycarbonate 25 mm - 30 mm + hump height Polycarbonate 32 mm - 35 mm + hump height
Weight	5,9 kg ± 5%
Acceptable dimensional deviations in length, width, and thickness of skylight elements	±5%
Heat penetration coefficient	U = 1.5 W/m ² K with 25 mm polycarbonate U = 1.1 W/m ² K with 32 mm polycarbonate
Light penetration	50% ± 5%

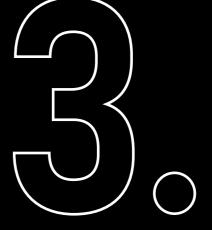
Using the SPR-SKY skylight

Using the SPR-SKY skylight constitutes an effective solution for providing daylight into a building. It can replace electrical lighting already at a roof coverage of between 7 and 15%. The chambered design of the skylight limits excessive temperature rises caused by solar radiation and minimises the loss of heat stored in the building. Skylights can be used in industrial buildings with so-called sloping roofs, i.e. roofs with an angle of inclination greater than 10% in the form of performing a warm sandwich panel covering.

The SPR-SKY skylight can be installed as a spotlight or opaque strip of light from ridge to eaves, at the centre of the slope, at the ridge, from the centre of the slope to the eaves.

SPR-SKY skylights connect to sandwich panels via side joints (at the humps) and end joints (overlapping), but the thickness of the SPR-SKY skylight cladding is 3-4 times greater than the thickness of the external panel cladding. This means that at the overlap joints between the skylight cladding and the panel, they do not adhere perfectly and therefore, particular attention must be paid to sealing these joints during design and installation. It is also important to bear in mind that skylights are not as strong as the adjacent cladding made of sandwich panels, so installation must be carried out in accordance with building regulations and practices in order to ensure durability and airtightness.





Technical information

- 70. Coated sheets
- 71. Colour range
- 72. Coatings characteristics
- 73. Coatings properties



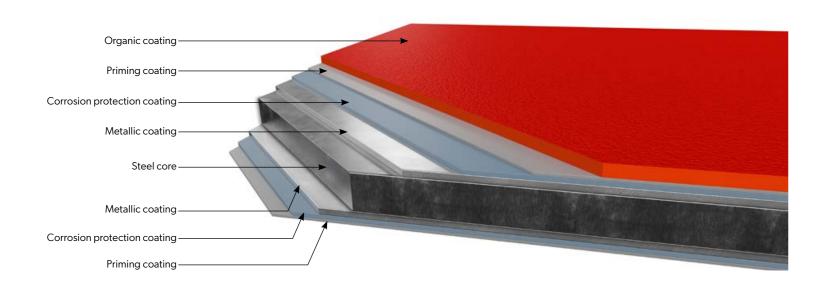
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Coated sheets

COATED SHEETS [HC, INT, RAL]

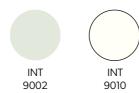
Coated sheets are produced on the basis of hot-dip galvanized batch or covered with a dedicated alloy (zinc, magnesium zinc, aluminium zinc). This material, is cleaned during the pre-treatment process, and is subjected to a passivation process and then multi-layer coated with one of the many available coatings. This provides excellent protection for the metallic layers and the steel core against atmospheric factors. Coatings can have different thickness, colour and surface texture. Their guarantee period is up to 40 years.

Coated sheet cross-section



Colour range

POLYESTER Interior [INT] - colours available for interior cladding



POLYESTER Standard [RAL] - colours available for external cladding



HERCULIT [HC]



MULTILAYER 40 [MLT] - colours available for external cladding





The printing technology does not allow the accurate rendering of colours, therefore the colours shown are indicative and may differ from the actual colours.

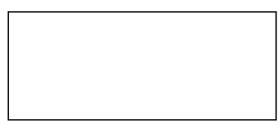


In addition, upon request, custom colours and coatings are available, outside the presented pallet (PVDF, PUR, PVC (P), PVC (F) - FoodSafe)

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Coatings characteristics

POLYESTER Interior [INT]



A 15 μ m polyester coated sheet with a smooth and glossy surface. Due to its low thickness, the organic coating is mainly intended for interior applications and building components not directly exposed to atmospheric agents.

POLYESTER Standard [RAL]



Basic organic coating $25\,\mu m$ thick. The surface is uniform, smooth-glossy or metallic. A material with very wide applications. It is available in a rich palette of colours described in using the universal RAL chart.

HERCULIT [HC]



This is a coating developed in close collaboration with a leading manufacturer of paints for the top steel mills in Europe. Many years of studying the coatings used to date and monitoring the needs of customers, with particular emphasis on the needs of roofers, allowed us to condense so many different advantages into one product. HERCULIT is a polyurethane-cured polyester, with high resistance to mechanical damage, $35\,\mu m$ thick .

SP35 Multilayer [SP35/MULTI]



 $40~\mu m$ thick polyester paint with Z275 zinc coating or ZM120 zinc-magnesium. It is characterised by wood structure and adequate protection against corrosion and UV radiation. Such a combination allows external use, especially where high resistance to weather conditions and high aesthetics are required.

Coatings properties

The following overview is indicative.

Code	Coating thickness	Corrosion resistance	UV resistance
POLYESTER Interior [INT]	15 μm	RA2	not applicable
POLYESTER Standard [RAL]	25 μm	RC3	RUV2
HERCULIT [HC]	35 μm	RC4	RUV4
MULTILAYER 40 [MLT]	40 μm	RC3	RUV3

Guidelines for installing sandwich panels with dark-coloured claddings

For the correct operation of installed sandwich panels, it is recommended to follow the guidelines set out by the manufacturer when designing and installing them on buildings, especially for sandwich panels with dark colours. This is regulated by the PN-EN 14509:2010 standard, which divides it into 3 basic colour groups: very light, light and dark. For each colour that is in these groups temperature values are assigned for the outer cladding of sandwich panels and are respectively:

- 1. +55 °C for very light colours
- 2. +65 °C for light colours
- 3. +80 °C for dark colours.

When designing facades and roofs cladded with sandwich panels in a specific colour, it is necessary to perform static calculations take into account temperature differences assuming a base temperature for the external environment of +20 °C. It is also recommended to avoid when designing, the multi-span systems, which are very unfavourable for dark colours. For wall panels in colour group III the maximum length should not exceed 9.5 m and for roof panels 15.0 m. When installing sandwich panels in dark colours, it is recommended that the outside temperature should not be below 10°C. Failure to meet all these conditions may result in the deterioration of the aesthetics of the cladding made of composite panels.

Colour group	Colours according to RAL palette	
Group 1 - very light	1015, 7035, 9002, 9010	
Group 2 - light	1002, 6011, 9006	
Group 3 - dark	3000, 3005, 3009, 3011, 5010, 6005, 6020, 6029, 7016, 7024, 8004, 8017, 8019, 9005, 9007	







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76. Helpful links

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- Sales representatives
- Technical consultancy



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Modular roofing tiles
MODULAR SERIES



Compact roofing tiles
COMPACT SERIES



Steel roofing tiles
CLASSIC SERIES



Retro roof tiles
RETRO SERIES



Roof panels
PANEL SERIES



INTEGRATED
PV PANELS



Steel roof gutter system INGURI



TRAPEZOIDAL SHEETS



STRUCTURAL PROFILES



FLAT METAL



FLASHINGS



ACCESORIES



Roof Sandwich



Wall Sandwich



Facade cladding **SKRIN, LINEA**



Uncoiling and slitting **SERVICES**



Flat sheets and cutting **SERVICES**



PERFORATION of sheets





