PANELTECH®

SANDWICH PANELS

PW PIR-S

APPLICATION

Wall sandwich panel with visible joint PW PIR-S is used to construct external walls and internal partitions in the single- or multiple-span shell structure. The panel is characterized by very good thermal insulation properties and strength, as well as very high fire resistance properties.

In particular PW PIR-S panels can be applied in:
- Industrial buildings,
- Store houses and logistic centres,
- Commercial buildings and offices,
- Food industry facilities,
- Agricultural objects
- Sport halls.

TABLE OF TECHNICAL PARAMETERS OF THE PW PIR-S PANELS

Parameter	Value				
thickness [mm]	40	60	80	100	120
modular width [mm]	1130 (optionally 1000 or 1050[1])				
length[2] [mm]	2000 ÷ 15800				
weight [kg/m^2]	9,9	10,7	11,5	12,3	13,1
heat transfer coefficient U_c [W/m^{2}K]	0,58	0,37	0,27	0,22	0,18
acoustic insulation Rw [dB]	26				
reaction to fire	B-s1,d0				
resistance to external fire	NRO				
wall fire rating[2]	NPD		EI 15 (o ↔ i)[2]	EI 30 (o ↔ i)[2]	
anti-corrosive protection	external C1, C2, C3 (C4 ÷ C5), internal A1 (A2 ÷ A5)				
organic coatings	SP 25, PU, AGRO, FOOD SAFE and other				
external facing	galvanized steel 0,5 ÷ 0,6 mm				
internal facing	galvanized steel 0,4 ÷ 0,5 mm				
available profilation types	external facing L, ML, MF, MR, G; internal facing L, R, G				
insulating core	rigid foam of 40 kg/m^3 in total density and with enclosed PIR (polyisocyanurate) cells				
application	non-continuous application on external walls and as wall cladding, on the structural parts of walls and ceilings				
wall application layout	vertical or horizontal				

[1] Minimum Production Quantity (MPQ) for modular width 1050 mm is 1000m^2 and depends on thickness of the panel. In order to verify production possibilities of specific order please contact our Customer Service or Sales Representative.

[2] for more details on the General Terms of Sale and Delivery, go to www.paneltech.pl

PW PIR-SU

APPLICATION

Wall sandwich panel with hidden joint PW PIR-SU is used to construct external walls and internal partitions in the single- or multiple-span shell structure. The panel is characterized by very good thermal insulation properties and strength, as well as very high fire resistance properties.

In particular PW PIR-SU panels can be applied in:
- Industrial buildings,
- Store houses and logistic centres,
- Commercial buildings and offices,
- Food industry facilities,
- Agricultural objects
- Sport halls.

TABLE OF TECHNICAL PARAMETERS OF THE PW PIR-SU PANELS

Parameter	Value			
thickness [mm]	60	80	100	120
modular width [mm]	1050 (optionally 1000)			
length[1] [mm]	2000 ÷ 15800			
weight [kg/m^2]	11,1	11,80	12,60	13,40
heat transfer coefficient U_c [W/m^{2}K]	0,42	0,29	0,23	0,19
acoustic insulation Rw [dB]	26			
reaction to fire	B-s1,d0			
resistance to external fire	NRO			
wall fire rating[1]	NPD		EI 15 (o ← i)[1]	
anti-corrosive protection	external C1, C2, C3 (C4 ÷ C5), internal A1 (A2 ÷ A5)			
organic coatings	SP 25, PU, AGRO, FOOD SAFE and other			
external facing	galvanized steel 0,5 ÷ 0,6 mm			
internal facing	galvanized steel 0,4 ÷ 0,5 mm			
available profilation types	external facing L, ML, MF, MR, G; internal facing L, R, G			
insulating core	rigid foam of 40 kg/m^3 in total density and with enclosed PIR (polyisocyanurate) cells			
application	non-continuous application on external walls and as wall cladding, on the structural parts of walls and ceilings			
wall application layout	vertical or horizontal			

[1] for more details on the General Terms of Sale and Delivery, go to www.paneltech.pl

PW PIR-CH

TABLE OF TECHNICAL PARAMETERS OF THE PW PIR-CH PANELS

Parameter	Value			
thickness [mm]	120	160	180	200
modular width [mm]	1130 (optionally 1000 or 1050[1])			
length[2] [mm]	2000 ÷ 15800			
weight [kg/m^2]	13,1	14,7	15,5	16,3
heat transfer coefficient U_c [W/m^{2}K]	0,18	0,14	0,12	0,11
acoustic insulation Rw [dB]	26			
reaction to fire	B-s1,d0			
resistance to external fire	NRO			
wall fire rating[2]	EI 30 (o ↔ i)[2]			
anti-corrosive protection	external C1, C2, C3 (C4 ÷ C5), internal A1 (A2 ÷ A5)			
organic coatings	SP 25, PU, AGRO, FOOD SAFE and other			
external facing	galvanized steel 0,5 ÷ 0,6 mm			
internal facing	galvanized steel 0,4 ÷ 0,5 mm			
available profilation types	external facing L, ML, MF, MR, G; internal facing L, R, G			
insulating core	rigid foam of 40 kg/m^3 in total density and with enclosed PIR (polyisocyanurate) cells			
application	non-continuous application on external walls and as wall cladding, on the structural parts of walls and ceilings			
wall application layout	vertical or horizontal			

[1] Minimum Production Quantity (MPQ) for modular width 1050 mm is 1000m^2 and depends on thickness of the panel. In order to verify production possibilities of specific order please contact our Customer Service or Sales Representative.
[2] for more details on the General Terms of Sale and Delivery, go to www.paneltech.pl

APPLICATION

Coldroom PW PIR-CH sandwich panel is intended for warehouse structures where internal temperatures reach minus 25°C. The panel is characterized by very good thermal insulation properties and strength, as well as very high fire resistance properties.

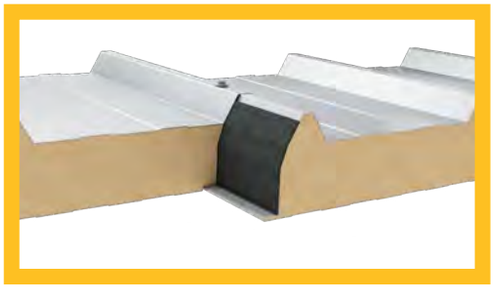
In particular PW PIR-CH panels can be applied in:
- Industrial buildings,
- Coldrooms and freezers,
- Store houses,
- Food industry facilities,
- Agricultural objects.

PW PUR-D / PIR-D

TABLE OF TECHNICAL PARAMETERS OF THE PW PUR-D / PIR-D PANELS

Parameter	Value						
thickness [mm]	40	60	80	100	120	145	160
modular width [mm]	1050						
length[1] [mm]	2000 ÷ 16000						
weight [kg/m^2]	10,2	11,0	11,8	12,6	13,4	14,5	15,0
heat transfer coefficient U_c for PW PUR-D [W/m^{2}K]	0,50	0,35	0,27	0,22	0,18	0,16	0,14
heat transfer coefficient U_c for PW PIR-D [W/m^{2}K]	0,49	0,34	0,26	0,21	0,18	0,15	0,14
acoustic insulation Rw [dB]	26						
reaction to fire PUR	NPD						
reaction to fire PIR	B-s1,d0						
resistance to external fire PUR	$B_{roof}(t_1)$						
resistance to external fire PIR	$B_{roof}(t_1)$ and $B_{roof}(t_2)$ and $B_{roof}(t_3)$						
roof fire rating PUR[1]	NPD			RE 30[1]			
roof fire rating PIR[1]	NPD			REI 30[1]			
anti-corrosive protection	external C1, C2, C3 (C4 ÷ C5), internal A1 (A2 ÷ A5)						
organic coatings	SP 25, PU, AGRO, FOOD SAFE and other						
external facing	galvanized steel 0,5 ÷ 0,6 mm						
internal facing	galvanized steel 0,4 ÷ 0,5 mm						
available profilation types	external facing T; internal facing L, R, G						
insulating core	rigid foam of 40 kg/m^3 in total density and with enclosed PUR (polyurethane) / PIR (polyisocyanurate) cells						
application	non-continuous application on roofs and roof covers						

[1] for more details on the General Terms of Sale and Delivery, go to www.paneltech.pl



APPLICATION

Roof sandwich panel PW PUR-D / PIR-D is applied as roofs and roof covers. The panel is characterized by very good thermal insulation properties and strength, as well as very high fire resistance properties (PW PIR-D).

In particular PW PUR-D / PIR-D panels can be applied in:
- Industrial buildings,
- Store houses and logistic centres,
- Commercial buildings and offices,
- Food industry facilities,
- Agricultural objects
- Sport halls.

PWW-S / PWW-S LITE

APPLICATION

Wall sandwich panel with visible joint PWW-S / PWW-S lite is used to construct external walls and internal partitions in the single- or multiple-span shell structure. Thanks to their properties, i.e. high fire-resistance parameters, the panels can be used to construct buildings with high fire ratings.

In particular, PWW-S / PWW-S lite panels can be applied in:
- buildings requiring high fire resistance and noise insulation,
- Industrial buildings,
- Store houses and logistic centres,
- Commercial buildings and offices,
- Food industry facilities,
- Agricultural objects
- Sport halls.

TABLE OF TECHNICAL PARAMETERS OF THE PWW-S / PWW-S LITE PANELS

Parameter	Value								
thickness [mm]	60[1)]	80[1)]	100	120	140	150	160	180	200
modular width [mm]	1130 (optionally 1000 or 1050)								
length[2)] [mm]	2000 ÷ 10000								
weight for PWW-S [kg/m^2]	14,1	16,1	18,1	20,1	22,1	23,1	24,1	26,1	28,1
weight for PWW-S lite [kg/m^2]	-	-	16,6	18,3	20	20,9	21,7	23,4	25,1
heat transfer coefficient U_c for PWW-S [W/m^{2}K]	0,66	0,49	0,39	0,33	0,28	0,27	0,25	0,22	0,20
heat transfer coefficient U_c for PWW-S lite [W/m^{2}K]	-	-	0,38	0,32	0,27	0,25	0,24	0,21	0,19
acoustic insulation Rw [dB]	31		33	31					34
reaction to fire	A2-s1,d0								
resistance to external fire	NRO								
PWW-S wall fire rating[2)]	NPD	EI 30 (o ↔ i)[2)]	EI 60 (o ↔ i)[2)]	EI 120 (o ↔ i)[2)]				EI 240 (o ↔ i)[2)]	
PWW-S lite wall fire rating[2)]	-	EI 60 (o ↔ i)[2)]							
anti-corrosive protection	external C1, C2, C3 (C4 ÷ C5), internal A1 (A2 ÷ A5)								
organic coatings	SP 25, PU, AGRO, FOOD SAFE and other								
external facing	galvanized steel 0,5 ÷ 0,6 mm								
internal facing	galvanized steel 0,5 ÷ 0,6 mm								
available profilation types	external facing L, ML, MF, G; internal facing L, R, G								
insulating core	rock, inflammable mineral wool with a lamella fiber structure 85 kg/m^3 (PWW-S Lite) and 100 kg/m^3 (PWW-S)								
application	non-continuous application on external walls and as wall cladding, on the structural parts of walls and ceilings								
wall application layout	vertical or horizontal								

[1)] applies to sandwich panels PWW-S
[2)] for more details on the General Terms of Sale and Delivery, go to www.paneltech.pl

PWW-SU[1)]

APPLICATION

Wall sandwich panel with hidden joint PWW-SU is used to construct external walls and internal partitions in the single- or multiple-span shell structure. Thanks to their properties, i.e. high fire-resistance parameters, the panels can be used to construct buildings with high fire ratings.

In particular, PWW-SU panels can be applied in:
- buildings requiring high fire resistance and noise insulation,
- Industrial buildings,
- Store houses and logistic centres,
- Commercial buildings and offices,
- Food industry facilities,
- Agricultural objects
- Sport halls.

TABLE OF TECHNICAL PARAMETERS OF THE PWW-SU PANELS

Parameter	Value							
thickness [mm]	60	80	100	120	150	160	180	200
modular width [mm]	1050 (optionally 1000)							
length[2)] [mm]	2000 ÷ 10000							
weight for PWW-SU [kg/m^2]	14,4	16,4	18,4	20,4	23,4	24,4	26,4	28,4
heat transfer coefficient U_c for PWW-SU [W/m^{2}K]	0,74	0,51	0,41	0,34	0,27	0,25	0,23	0,20
acoustic insulation Rw [dB]	31							
reaction to fire	A2-s1,d0							
resistance to external fire	NRO							
PWW-SU wall fire rating[2)]	NPD		EI 30 (o ↔ i)[2)]	EI 60 (o ↔ i)[2)]				
anti-corrosive protection	external C1, C2, C3 (C4 ÷ C5), internal A1 (A2 ÷ A5)							
organic coatings	SP 25, PU, AGRO, FOOD SAFE and other							
external facing	galvanized steel 0,5 ÷ 0,6 mm							
internal facing	galvanized steel 0,5 ÷ 0,6 mm							
available profilation types	external facing L, ML, MF, G; internal facing L, R, G							
insulating core	rock, inflammable mineral wool with a lamella fiber structure 100 kg/m^3							
application	non-continuous application on external walls and as wall cladding, on the structural parts of walls and ceilings							
wall application layout	vertical or horizontal							

[1)] Minimum Production Quantity (MPQ) is from 300m^2 up to 500m^2 and depends on thickness of the panel. In order to verify production possibilities of specific order please contact our Customer Service or Sales Representative.
[2)] for more details on the General Terms of Sale and Delivery, go to www.paneltech.pl

PWW-D[1)]

TABLE OF TECHNICAL PARAMETERS OF THE PWW-D PANELS

Parameter	Value						
thickness [mm]	80	100	120	150	160	180	200
modular width [mm]	1050						
length[2)] [mm]	2000 ÷ 10000						
weight [kg/m^2]	16,8	18,8	20,8	23,8	24,8	26,8	28,8
heat transfer coefficient U_c [W/m^{2}K]	0,46	0,38	0,32	0,26	0,24	0,22	0,20
acoustic insulation Rw [dB]	31						
reaction to fire	A2-s1,d0						
resistance to external fire	B_{roof}; $B_{roof}(t_1)$ and $B_{roof}(t_2)$ and $B_{roof}(t_3)$						
roof fire rating[2)]	NPD	REI 120[2)]					
anti-corrosive protection	external C1, C2, C3 (C4 ÷ C5), internal A1 (A2 ÷ A5)						
organic coatings	SP 25, PU, AGRO, FOOD SAFE and other						
external facing	galvanized steel 0,5 ÷ 0,6 mm						
internal facing	galvanized steel 0,5 ÷ 0,6 mm						
available profilation types	external facing T; internal facing L, R, G						
insulating core	rock, inflammable mineral wool with a lamella fiber structure 100 kg/m^3						
application	non-continuous application on roofs and roof covers						

[1)] Minimum Production Quantity (MPQ) is from 300m^2 up to 500m^2 and depends on thickness of the panel. In order to verify production possibilities of specific order please contact our Customer Service or Sales Representative.

[2)] for more details on the General Terms of Sale and Delivery, go to www.paneltech.pl

APPLICATION

Roof sandwich panel PWW-D is applied as roofs and roof covers. Thanks to their properties, i.e. high fire-resistance parameters, the panels can be used to construct buildings with high fire ratings.

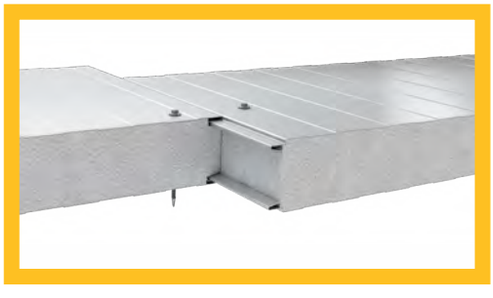
In particular, PWW-D panels can be applied in:
- buildings requiring high fire resistance and noise insulation,
- Industrial buildings,
- Store houses and logistic centres,
- Commercial buildings and offices,
- Food industry facilities,
- Agricultural objects
- Sport halls.

PWS-S

TABLE OF TECHNICAL PARAMETERS OF THE PWS-S PANELS

Parameter	Value					
thickness [mm]	50	80	100	120	150	200
modular width [mm]	1130					
length[1)] [mm]	2000 ÷ 10000					
weight [kg/m^2]	8,8	9,1	9,4	9,6	10,0	10,6
heat transfer coefficient U_c [W/m^{2}K]	0,77	0,48	0,39	0,32	0,26	0,20
resistance to external fire	NRO					
anti-corrosive protection	external C1, C2, C3 (C4 ÷ C5), internal A1 (A2 ÷ A5)					
organic coatings	SP 25, PU, AGRO, FOOD SAFE and other					
external facing	galvanized steel 0,5 ÷ 0,6 mm					
internal facing	galvanized steel 0,4 ÷ 0,5 mm					
available profilation types	external facing L, ML, MF, G; internal facing L, R, G					
insulating core	expanded polystyrene EPS of 12,5 kg/m^3					
application	non-continuous application on external walls and as wall cladding, on the structural parts of walls and ceilings					
wall application layout	vertical or horizontal					

[1)] for more details on the General Terms of Sale and Delivery, go to www.paneltech.pl

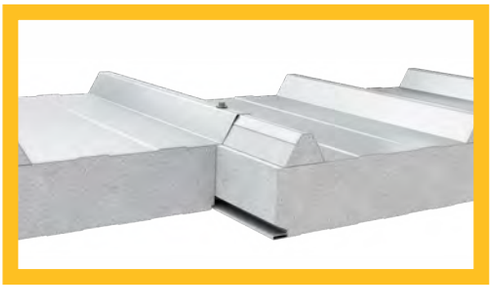


APPLICATION

Wall sandwich panel with visible joint PWS-S is used to construct external walls and internal partitions in the single- or multiple-span shell structure. The panel is characterized by superb thermal insulation and low weight.

In particular PWS-S panels can be applied in:
- Industrial buildings,
- Store houses and logistic centres,
- Coldrooms and freezers,
- Commercial buildings and offices,
- Food industry facilities,
- Agricultural objects
- Sport halls

PWS-D[1)]



APPLICATION

Roof sandwich panel PWS-D is applied as roofs and roof covers. The panel is characterized by superb thermal insulation and low weight.

In particular PWS-D panels can be applied in:
- Industrial buildings,
- Store houses and logistic centres,
- Coldrooms and freezers,
- Commercial buildings and offices,
- Food industry facilities,
- Agricultural objects
- Sport halls.

TABLE OF TECHNICAL PARAMETERS OF THE PWS-D PANELS

Parameter	Value				
thickness [mm]	80	100	120	150	200
modular width [mm]	1050				
length[2)] [mm]	2000 ÷ 10000				
weight [kg/m^2]	9,6	9,9	10,2	10,6	11,5
heat transfer coefficient U_c [W/m^{2}K]	0,45	0,37	0,31	0,25	0,19
resistance to external fire	$B_{roof}(t_1)$				
anti-corrosive protection	external C1, C2, C3 (C4 ÷ C5), internal A1 (A2 ÷ A5)				
organic coatings	SP 25, PU, AGRO, FOOD SAFE and other				
external facing	galvanized steel 0,5 ÷ 0,6 mm				
internal facing	galvanized steel 0,4 ÷ 0,5 mm				
available profilation types	external facing T; internal facing L, R, G				
insulating core	expanded polystyrene EPS of 12,5 kg/m^3				
application	non-continuous application on roofs and roof covers				

[1)] Minimum Production Quantity (MPQ) is from 500m^2 up to 1000m^2 and depends on thickness of the panel. In order to verify production possibilities of specific order please contact our Customer Service or Sales Representative.

[2)] for more details on the General Terms of Sale and Delivery, go to www.paneltech.pl

AVAILABLE PROFILATION TYPES

AVAILABLE EXTERNAL PROFILATION:

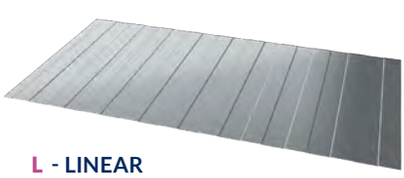
L	linear
MF	microwave
ML	microlinear
MR	microgroove[2)]
G	smooth[1)]
T	trapezoidal (only for roof panels)

AVAILABLE INTERNAL PROFILATION:

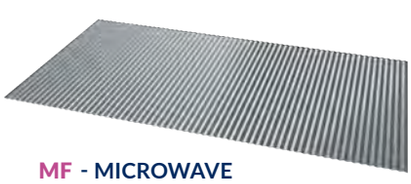
L	linear
R	groove[1)]
G	smooth[1)]

[1)] facings with the G - smooth or R - groove profiles can include microwaves, which affect the appearance of the product classified as compliant with the requirements of EN 14509, annex D

[2)] applies to Paneltech sandwich panels with PIR cores. For more information concerning MR - microgroove profilation, see the technical product cards



L - LINEAR



MF - MICROWAVE

ML - MICROLINEAR

R - GROOVE

MR - MICROGROOVE

G - SMOOTH

T - TRAPEZOIDAL

PROTECTIVE COATING OF STEEL FACING

SP 25
Polyester is a universal coating used both indoors and outdoors. The coating is used in regions with hardly aggressive environments. It is intended for outdoor atmospheres with a corrosion category up to C3 and for indoor applications, when exposed to A1 environments.

PU
Polyurethane coatings are suitable for use in standard, aggressive and demanding environments. PU coatings can be used in atmospheres with very high corrosive properties and very high UV radiation. Buildings, for which color stability and appearance have above-average meaning. The coat is intended for outdoor atmospheres with a corrosion category up to C5[1)] and for indoor applications, when exposed to A4[1)] environments.

FARM
The coating is used inside agricultural and livestock buildings, particularly in buildings intended for breeding livestock or poultry and to store cereals. The coat is intended for aggressive environment.

FOOD SAFE
The coating is intended for indoor use, on surfaces entering in contact with food. Easily washable and resistant to the majority of detergents. The coat is intended for indoor atmospheres with an environment category up to A5[1)].

SPECIAL
Protective coatings for use in aggressive and demanding environments. Used in atmospheres with very high corrosive properties. Coatings are intended for use in outdoor atmospheres with a corrosion resistance class up to C5[1)] and for indoor applications, when exposed to environments up to A5[1)].

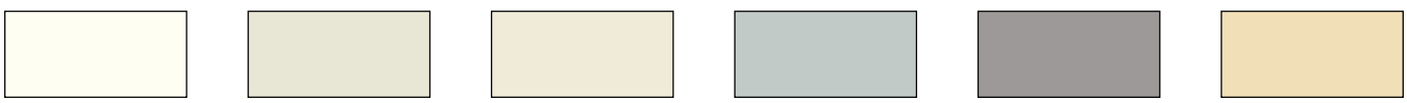
TABLE OF COATING PROPERTIES

NAME	TYPE	THK. [µm]	CORROSION RESISTANCE	APPLICATION	SURFACE FINISHING[2)]
SP25	polyester	25	C1-C3, A1	common	smooth
PU	polyurethane	35-60	conditionally C5[1)], A4[1)]	environment with increased corrosion class	smooth with shine
FARM	polyester	35	conditionally C3, A1	from inside of buildings (no UV-resistance), agricultural buildings, high resistance to ammonia	smooth
FOOD SAFE	PVC laminate	120	conditionally C5[1)], A5[1)]	from inside of buildings (no UV-resistance), premises with controlled environmental parameters: cold stores, clean rooms, e.g. meat processing plants	matt / grainy
special	polyvinyl chloride	200	conditionally C5[1)], A5[1)]	environment with high corrosion resistance class	scintilla finishing
	PVDF / polyurethane	40-65	conditionally C5[1)], A5[1)]	environment with high corrosion resistance class, high colour fastness	smooth

[1)] organic coating is selected on the basis of its durability and application conditions. Coating selection is carried out through environmental assessment based on an environmental questionnaire completed by the Client, approved by the steel manufacturer and Paneltech
[2)] feature not defined by standard.

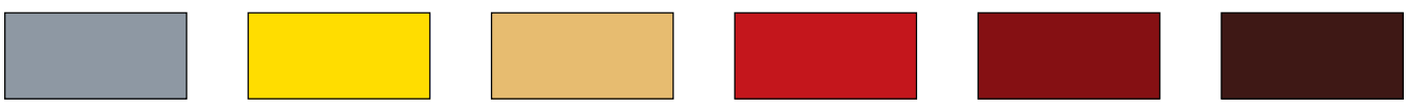
AVAILABLE COLORS FOR EXTERNAL FACINGS

STANDARD COLORS

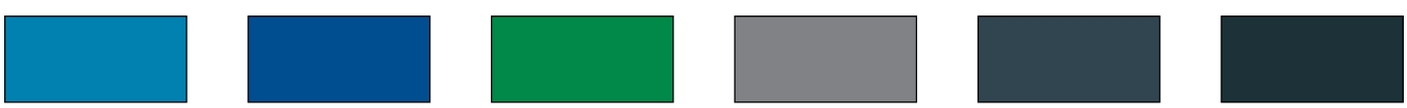


9010[1)] 9002[1)] 9001 7035 9006 1015

TYPICAL COLORS[2)]



7040 1021 1002 3000 3011 8017



5012 5010 6029 9007 7024 7016

[1)] Internal sandwich panel facings are available in two basic colors: RAL 9002 and 9010. Other colors available on request.

[2)] Availability of these colors depends on current stock and has to be confirmed by sales before order. Untypical colors – for individual request.
The colors presented in this brochure are for reference only. Steel sheet tones may differ, depending on the material batch and the manufacturer. Paneltech Sp. z o.o. therefore admits the possibility of occurrence of color differences between the samples presented and the colors of materials supplied.

1/2024

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