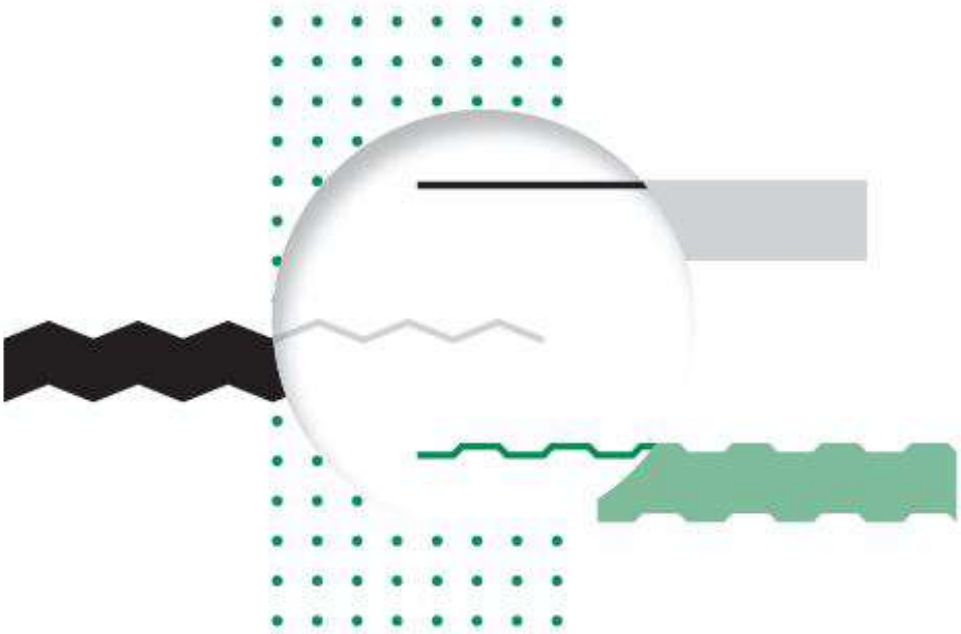
NAV Engineering

PANNELLI SANDWICH

NAV system



NEW GENERATION INSULATING PANELS

QUALITY, DESIGN, INNOVATION: EXCELLENCE IN THE THERMAL INSULATION FIELD.

NAV System specialises in the production of sandwich insulating panels in PIR and PUR polyurethane for thermal insulation.

The NAV System insulating panels, the first in Italy to have obtained B-s1, d0 fire reaction certification according to standard UNI EN 13501-1:2009, were manufactured using top quality raw materials and using sustainable and innovative production processes.

The NAV System REFRIGERATION WALL panels are the result of over 50 years of experience in the processing and preservation industry of the food chain, suitable for any cold store.

DAIRY| FISH| FOOD | FRUIT AND VEGETABLES| MUSHROOM GROWING | LOGISTICS

NAV system

NAV Silex

NAV Engineering

NAV sime

INSULATION SYSTEMS

PUR PANELS

Sandwich panels with PUR polyurethane core are the most wide-spread solution in the insulation sector for residential and industrial buildings. This type of panel gives **numerous benefits at competitive prices**, guaranteeing high insulation power,
poor thermal conductivity, resistance to water and humidity, as well as lightness and manageable.

PIR PANELS

Sandwich panels with a PIR (polyisocyanurate) insulating core guarantee the same insulation performance of PUR – and are therefore waterproof, light and last over time – however they have **better reaction to fire and resistance performance.**
In particular, PIR NAV Silex panels were the **first in Italy to obtain B-s1, d0 fire reaction performance.**

NAV Engineering

CONTENT

PUR AND PIR PANELS

REFRIGERATION WALL

WIND-FRIGO

USEFUL WIDTH
1000 mm
(1155/1185 on request)

MAXIMUM LENGTH
15000 mm

PANEL THICKNESSES AVAILABLE

80	100	120

CERTIFICATION

CE EN 14509
EPD UNI ISO 14025
PIR B-s2, d0 / PIR B-s1, d0
PIR Zulassung Nr.Z-10.49-589
PIR VKF 5.3
PIR CLASSE 0-2 AS/NZS 1530.3-1999
PIR GROUP NUMBER 2 ISO 9702
LEED

METAL COATINGS

NAV Silex insulating panels manufactured with **metal supports in galvanised steel, Aluzinc steel, stainless steel, aluminium, copper or other special metals.**
Each of these is manufactured in steelworks and they are selected and painted using the ***coil coating method***, to **guarantee** suitable **duration** using products painted with a simple and long-lasting polyester, polyurethane, polyamide, plastisol or PVDF base. In addition to the standard colours available, special ones are available on request. Custom colours can be created to order.

The **WIND-FRIGO** panel is the complete solution with high technical performance for the installation of insulated infill walls against atmospheric agents.

WIND-FRIGO is an **insulated metal panel for walls,** designed for internal and external, industrial, vertical infill walls and for internal false ceilings. Simple to lay and extremely functional, it meets multiple **residential and industrial industry** needs.

The panel can be manufactured with a smooth or ribbed finish (ribbed, box or diamond cut) and in various widths.
The joint of the panel, with a slightly tapered shape, was designed to facilitate perfect closure of the fitting during laying and guarantee continuity of the insulation. Furthermore, a specific seal is positioned on the joint to give an additional cold sealing guarantee.

EXTERNAL/INTERNAL COLOURS

7035-C73 | 9002 | 9010

WITH PUR INSULATION

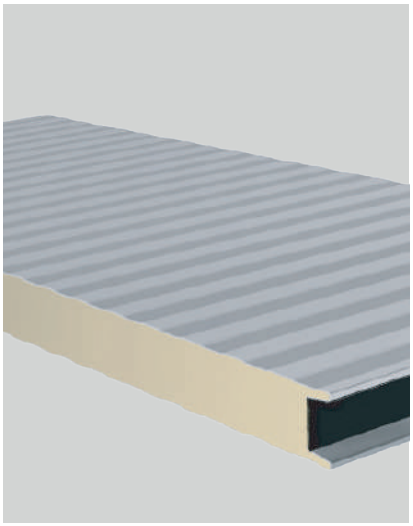
Manufactured in polyurethane resin (PUR), CFC and HCFC-free, it has an approximate density of 35-40 kg/m^3, according to the EC Declaration of Conformity and laboratory testing.
Thermal conductivity coefficient at 10°C (UNI EN 12667): 0.020-0.023 W/mk.

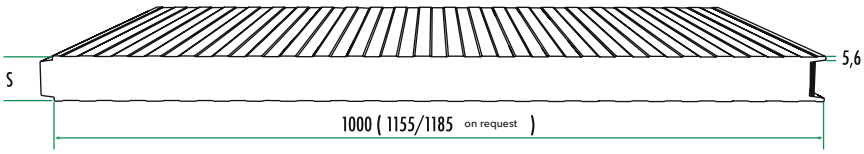
WITH PIR INSULATION

Manufactured in polyisocyanurate, CFC and HCFC-free with an approximate density of 35-40 kg/m^3, capable of obtaining B-s1, d0 fire reaction class, according to the EC Declaration of Conformity and laboratory testing.
Thermal conductivity coefficient at 10°C (UNI EN 12667): 0.020-0.023 W/mk.

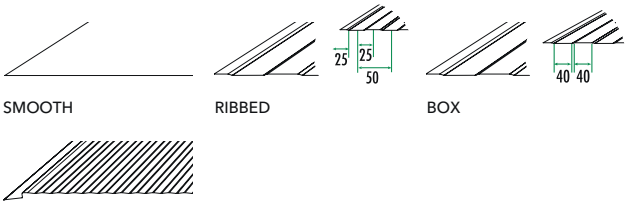
STANDARD
SPECIAL

PUR/PIR PANELS REFRIGERATION WALL WIND-FRIGO





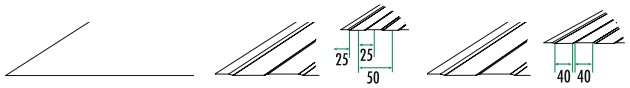
EXTERNAL FINISHES



SMOOTH RIBBED BOX

DIAMOND CUT PITCH 15

INTERNAL FINISHES



SMOOTH RIBBED BOX

DIMENSIONAL TOLERANCES mm	Wall	
Length	L ≤ 3m • +/- 5mm	L > 3m • +/- 10mm
Useful Width	+/- 2mm	
Thickness	D ≤ 100mm • +/- 2mm	D > 100 • +/- 2%
Perpendicular deviation	0,6 %	
Internal metal parameters misalignment	+/- 3mm	
Inferior sheets coupling	F = 0 + 5mm	

Where **L** is the LENGTH, **D** is the THICKNESS of the panels and **F** the coupling of the supports.

VERTICAL ASSEMBLY

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
80	0,50 ACCIAIO	0,50 ACCIAIO	10,50	P=Kg/m2	825	550	410	325	230	170	130	100	80	65	55						
	0,60 ACCIAIO	0,50 ACCIAIO	11,30		830	555	415	330	245	180	140	110	85	70	60	50					
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.63 W/m²K | (K) EN ISO 6946 = 0.56 W/m²K																					

SPESSORE PANNELLO (mm)	SPESSORE NOMINALE SUPPORTO		PESO PANNELLO (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
100	0,50 ACCIAIO	0,50 ACCIAIO	11,40	P=Kg/m2	1000	685	515	410	290	210	160	125	100	85	70	60	50				
	0,60 ACCIAIO	0,50 ACCIAIO	12,30		1000	690	520	415	310	225	175	135	110	90	75	65	55				
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.56 W/m²K | (K) EN ISO 6946 = 0.49 W/m²K																					

SPESSORE PANNELLO (mm)	SPESSORE NOMINALE SUPPORTO		PESO PANNELLO (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
120	0,50 ACCIAIO	0,50 ACCIAIO	12,20	P=Kg/m2	1000	730	545	435	345	255	195	155	125	100	85	70	60	55			
	0,60 ACCIAIO	0,50 ACCIAIO	13,00		1000	735	550	440	365	275	210	165	135	110	90	80	65	65	50		
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.19 W/m²K | (K) EN ISO 6946 = 0.17 W/m²K																					

Effective width of the support 100 mm Calculated according to Annex E of Standard UNI EN 14509.
Wind action on the external face, thermal gradient ΔT =0, light colours and normal deflection limit 1/100.
The data in the tables should be considered approximate, except for errors or omissions of printing.
For updated data, refer to the website www.silexpanels.it.The planner is responsible for checking the values based on the individual applications. For all other specifications, refer to the AIPPEG standards (www.aippeg.it).

HORIZONTAL ASSEMBLY

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
80	0,50 ACCIAIO	0,50 ACCIAIO	10,50	P=Kg/m2	770	470	310	215	155	115	85	60									
	0,60 ACCIAIO	0,50 ACCIAIO	11,30		775	475	320	225	165	120	90	65	50								
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.63 W/m²K | (K) EN ISO 6946 = 0.56 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
100	0,50 ACCIAIO	0,50 ACCIAIO	11,40	P=Kg/m2	985	610	415	295	215	160	120	95	70	55							
	0,60 ACCIAIO	0,50 ACCIAIO	12,30		990	615	425	305	225	170	130	100	80	60							
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.56 W/m²K | (K) EN ISO 6946 = 0.49 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
120	0,50 ACCIAIO	0,50 ACCIAIO	12,20	P=Kg/m2	1000	720	515	375	280	210	160	125	100	80	60	50					
	0,60 ACCIAIO	0,50 ACCIAIO	13,00		1000	725	525	385	290	225	175	135	105	85	70	55					
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.19 W/m²K | (K) EN ISO 6946 = 0.17 W/m²K																					

Calculated according to Annex E of Standard UNI EN 14509. Evenly distributed working load on the external face, thermal gradient ΔT =0, light colours and normal deflection limit 1/200.
The data in the tables should be considered approximate, except for errors or omissions of printing.
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WET

USEFUL WIDTH
1150 mm
(965/1092 on request)

MAXIMUM LENGTH
15000 mm

PANEL THICKNESSES AVAILABLE

50 | 60 | 80 | 100 | 120

CERTIFICATION

CE EN 14509
EPD UNI ISO 14025
PIR B-s2, d0 / PIR B-s1, d0
PIR EI30 / PIR EI45
PIR Zulassung Nr.Z-10.49-589
PIR VKF 5.3
PIR B-S1, d0 Avis technique 2/15-1684
PIR CLASSE 0-2 AS/NZS 1530.3-1999
LEED

METAL COATINGS

NAV Silex insulating panels manufactured with **metal supports in galvanised steel, Aluzinc steel, stainless steel, aluminium, copper or other special metals.**
Each of these is manufactured in steelworks and they are selected and painted using the ***coil coating* method**, to guarantee suitable **duration** using products painted with a simple and long-lasting polyester, polyurethane, polyamide, plastisol or PVDF base. In addition to the standard colours available, special ones are available on request. Custom colours can be created to order

The **WET** panel resolves highly complex technical problems in technical insulation, the vapour barrier and climatic sealing of environments and reaction and resistance to fire.

WET is an insulated metal panel in polyurethane designed to guarantee **high technical performance:** maximum thermal insulation, humidity and condensate barrier, best class of fire reaction and resistance.

Designed in particular for the **refrigeration sector with air conditioned and atmospherically controlled environments and in the prefabrication** sector to build walls of houses and residential modules, the WET panel finds considerable use in the manufacture of climatic chambers and where there are considerable changes in temperature.

EXTERNAL/INTERNAL COLOURS

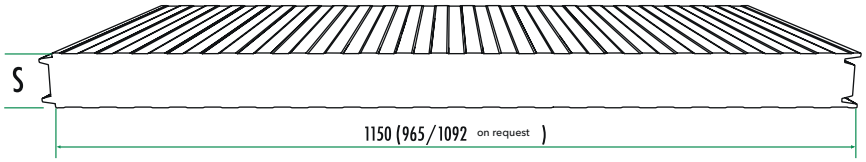
7035-C73 | 9002 | 9010

Manufactured in polyurethane resin (PUR), CFC and HCFC-free, it has an approximate density of 35-40 kg/m^3, according to the EC Declaration of Conformity and laboratory testing. Thermal conductivity coefficient at 10°C (UNI EN 12667): 0.020-0.023 W/mk.

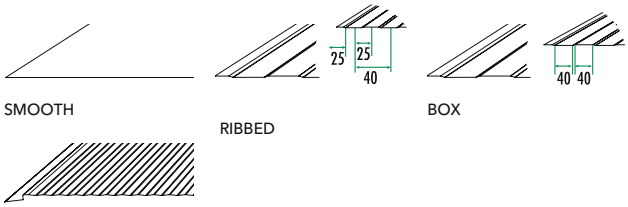
Manufactured in polyisocyanurate, CFC and HCFC-free with an approximate density of 35-40 kg/m^3, it can obtain fire reaction class B-s1, d0, according to the EC Declaration of Conformity and laboratory testing. Thermal conductivity coefficient at 10°C (UNI EN 12667): 0.020-0.023 W/mk.

STANDARD
SPECIAL

PUR/PIR PANELS REFRIGERATION WALL WET



EXTERNAL FINISHES



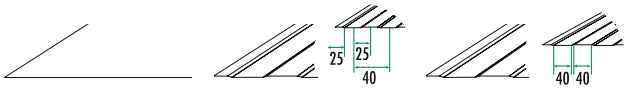
SMOOTH

RIBBED

BOX

DIAMOND CUT PITCH 15

INTERNAL FINISHES



SMOOTH

RIBBED

BOX

DIMENSIONAL TOLERANCES mm	Wall	
Length	L ≤ 3m • +/- 5mm	L > 3m • +/- 10mm
Useful Width	+/- 2mm	
Thickness	D ≤ 100mm • +/- 2mm	D > 100 • +/- 2%
Perpendicular deviation	0,6 %	
Internal metal parameters misalignment	+/- 3mm	
Inferior sheets coupling	F = 0 + 5mm	

Where **L** is the LENGTH, **D** is the THICKNESS of the panels and **F** the coupling of the supports.

TECHNICAL NOTE: During installation of WET panels, for cold stores, application is necessary of the specific sealant in the cavities of the sheet metal fittings to obtain a vapour barrier

VERTICAL ASSEMBLY

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
50	0,50 ACCIAIO	0,50 ACCIAIO	9,60	P=Kg/m2	510	340	250	200	140	105	80	60	50								
	0,60 ACCIAIO	0,50 ACCIAIO	10,40		515	345	255	205	150	110	85	65	55								
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.43 W/m²K | (K) EN ISO 6946 = 0.40 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
60	0,50 ACCIAIO	0,50 ACCIAIO	10,00	P=Kg/m2	615	410	305	245	170	125	95	75	60	50							
	0,60 ACCIAIO	0,50 ACCIAIO	10,80		620	415	310	250	185	135	100	80	65	55	50						
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.36W/m²K | (K) EN ISO 6946 = 0.33 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
80	0,50 ACCIAIO	0,50 ACCIAIO	10,70	P=Kg/m2	825	550	410	325	230	170	130	100	80	65	55						
	0,60 ACCIAIO	0,50 ACCIAIO	11,60		830	555	415	330	245	180	140	110	85	70	60	50					
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.28 W/m²K | (K) EN ISO 6946 = 0.25 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
100	0,50 ACCIAIO	0,50 ACCIAIO	11,50	P=Kg/m2	1000	685	515	410	290	210	160	125	100	85	70	60	50				
	0,60 ACCIAIO	0,50 ACCIAIO	12,30		1000	690	520	415	310	225	175	135	110	90	75	65	55				
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.22 W/m²K | (K) EN ISO 6946 = 0.20 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
120	0,50 ACCIAIO	0,50 ACCIAIO	12,20	P=Kg/m2	1000	730	545	435	345	255	195	155	125	100	85	70	60	55			
	0,60 ACCIAIO	0,50 ACCIAIO	12,30		1000	735	550	440	365	275	210	165	135	110	90	80	65	65	50		
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.18 W/m²K | (K) EN ISO 6946 = 0.17 W/m²K																					

Effective width of the support 100 mm Calculated according to Annex E of Standard UNI EN 14509.
Wind action on the external face, thermal gradient ΔT =0, light colours and normal deflection limit 1/100.
The data in the tables should be considered approximate, except for errors or omissions of printing.
For updated data, refer to the website www.silexpanels.it.The planner is responsible for checking the values based on the individual applications. For all other specifications, refer to the AIPPEG standards (www.aippeg.it).

TECHNICAL NOTE: During installation of WET panels, for cold stores, application is necessary of the specific sealant in the cavities of the sheet metal fittings to obtain a vapour barrier

HORIZONTAL ASSEMBLY

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
50	0,50 ACCIAIO	0,50 ACCIAIO	9,60	P=Kg/m2	455	260	165	105	70	50											
	0,60 ACCIAIO	0,50 ACCIAIO	10,40		460	270	170	115	75	55											
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.43 W/m²K | (K) EN ISO 6946 = 0.40 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
60	0,50 ACCIAIO	0,50 ACCIAIO	10,00	P=Kg/m2	560	330	210	140	100	70	50										
	0,60 ACCIAIO	0,50 ACCIAIO	10,80		565	335	220	150	105	75	55										
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.36W/m²K | (K) EN ISO 6946 = 0.33 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
80	0,50 ACCIAIO	0,50 ACCIAIO	10,70	P=Kg/m2	770	470	310	215	155	115	85	60									
	0,60 ACCIAIO	0,50 ACCIAIO	11,60		775	475	320	225	165	120	90	65	50								
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.28 W/m²K | (K) EN ISO 6946 = 0.25 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
100	0,50 ACCIAIO	0,50 ACCIAIO	11,50	P=Kg/m2	985	610	415	295	215	160	120	95	70	55							
	0,60 ACCIAIO	0,50 ACCIAIO	12,30		990	615	425	305	225	170	130	100	80	60							
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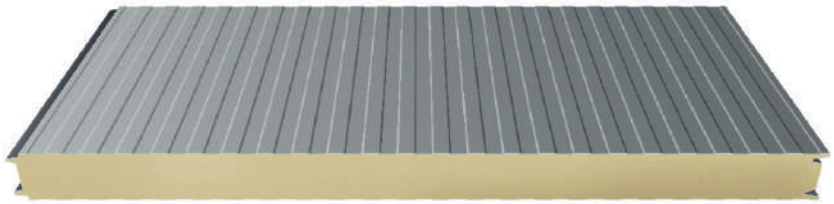
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
120	0,50 ACCIAIO	0,50 ACCIAIO	12,20	P=Kg/m2	1000	720	515	375	280	210	160	125	100	80	60	50					
	0,60 ACCIAIO	0,50 ACCIAIO	13,10		1000	725	525	385	290	225	175	135	105	85	70	55					
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.18 W/m²K | (K) EN ISO 6946 = 0.17 W/m²K																					

Calculated according to Annex E of Standard UNI EN 14509. Evenly distributed working load on the external face, thermal gradient Δ T =0, light colours and normal deflection limit 1/200.
The data in the tables should be considered approximate, except for errors or omissions of printing.
For updated data, refer to the website www.silexpanels.it.The planner is responsible for checking the values based on the individual applications. For all other specifications, refer to the AIPPEG standards (www.aippeg.it).

TECHNICAL NOTE: During installation of WET panels, for cold stores, application is necessary of the specific sealant in the cavities of the sheet metal fittings to obtain a vapour barrier

ULTRA WET



USEFUL WIDTH
1150 mm
(965/1092 on request)

MAXIMUM LENGTH
15000 mm

PANEL THICKNESSES AVAILABLE

50 | 60 | 80 | 100 | 120

CERTIFICATION

CE EN 14509
EPD UNI ISO 14025
PIR B-s2, d0 / PIR B-s1, d0
PIR EI30 / PIR EI45
PIR Zulassung Nr.Z-10.49-589
PIR VKF 5.3
PIR CLASSE 0-2 AS/NZS 1530.3-1999
LEED

METAL COATINGS

NAV Silex insulating panels manufactured with **metal supports in galvanised steel, Aluzinc steel, stainless steel, aluminium, copper or other special metals.**
Each of these is manufactured in steelworks and they are selected and painted using the ***coil coating* method,** to **guarantee** suitable **duration** using products painted with a simple and long-lasting polyester, polyurethane, polyamide, plastisol or PVDF base. In addition to the standard colours available, special ones are available on request. Custom colours can be created to order.

■ STANDARD
■ SPECIAL

ULTRA **WET** is the panel designed to obtain maximum performance in environments subject to considerable changes in temperaturefor the mushroom growing sector.

ULTRA WET is the **insulated metal panel** designed for all internal and external wall and infill wall installations requiring high technical performance, in particular for the **mushroom growing sector.**

Designed in particular for the **refrigeration sector with air conditioned and atmospherically controlled environments and in the prefabrication** sector to build walls of houses and residential modules, the WET panel finds considerable use in the manufacture of climatic chambers and where there are considerable changes in temperature.

EXTERNAL/INTERNAL COLOURS

■ 7035-C73 ■ 9002 ■ 9010

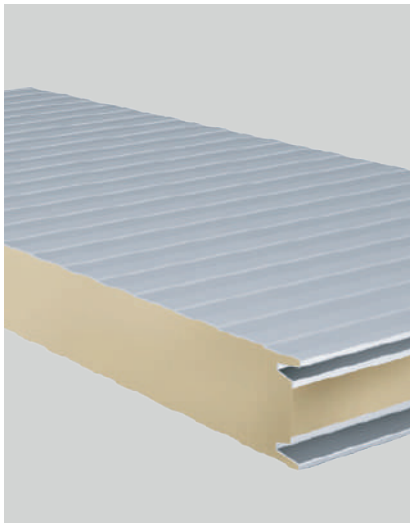
WITH PUR INSULATION

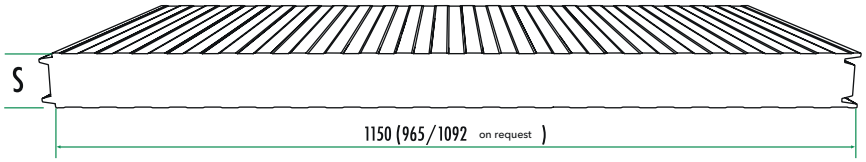
Manufactured in polyurethane resin (PUR), CFC and HCFC-free, it has an approximate density of 35-40 kg/m^3, according to the EC Declaration of Conformity and laboratory testing. Thermal conductivity coefficient at 10°C (UNI EN 12667): 0.020-0.023 W/mk.

WITH PIR INSULATION

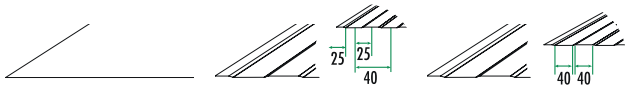
Manufactured in polyisocyanurate, CFC and HCFC-free with an approximate density of 35-40 kg/m^3, it can obtain fire reaction class B-s1, d0, according to the EC Declaration of Conformity and laboratory testing. Thermal conductivity coefficient at 10°C (UNI EN 12667): 0.020-0.023 W/mk.

PUR/PIR PANELS REFRIGERATION WALL ULTRA WET





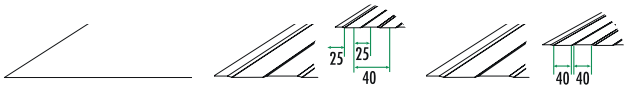
EXTERNAL FINISHES



SMOOTH RIBBED BOX

DIAMOND CUT PITCH 15

INTERNAL FINISHES



SMOOTH RIBBED BOX

DIMENSIONAL TOLERANCES mm	Wall	
Length	L ≤ 3m • +/- 5mm	L > 3m • +/- 10mm
Useful Width	+/- 2mm	
Thickness	D ≤ 100mm • +/- 2mm	D > 100 • +/- 2%
Perpendicular deviation	0,6 %	
Internal metal parameters misalignment	+/- 3mm	
Inferior sheets coupling	F = 0 + 5mm	

Where **L** is the LENGTH, **D** is the THICKNESS of the panels and **F** the coupling of the supports.

TECHNICAL NOTE: During installation of WET panels, for cold stores, application is necessary of the specific sealant in the cavities of the sheet metal fittings to obtain a vapour barrier

VERTICAL ASSEMBLY

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
50	0,50 ACCIAIO	0,50 ACCIAIO	9,60	P=Kg/m2	510	340	250	200	140	105	80	60	50								
	0,60 ACCIAIO	0,50 ACCIAIO	10,40		515	345	255	205	150	110	85	65	55								
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.43 W/m²K | (K) EN ISO 6946 = 0.40 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
60	0,50 ACCIAIO	0,50 ACCIAIO	10,00	P=Kg/m2	615	410	305	245	170	125	95	75	60	50							
	0,60 ACCIAIO	0,50 ACCIAIO	10,80		620	415	310	250	185	135	100	80	65	55	50						
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.36W/m²K | (K) EN ISO 6946 = 0.33 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
80	0,50 ACCIAIO	0,50 ACCIAIO	10,70	P=Kg/m2	825	550	410	325	230	170	130	100	80	65	55						
	0,60 ACCIAIO	0,50 ACCIAIO	11,60		830	555	415	330	245	180	140	110	85	70	60	50					
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.28 W/m²K | (K) EN ISO 6946 = 0.25 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
100	0,50 ACCIAIO	0,50 ACCIAIO	11,50	P=Kg/m2	1000	685	515	410	290	210	160	125	100	85	70	60	50				
	0,60 ACCIAIO	0,50 ACCIAIO	12,30		1000	690	520	415	310	225	175	135	110	90	75	65	55				
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.22 W/m²K | (K) EN ISO 6946 = 0.20 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
120	0,50 ACCIAIO	0,50 ACCIAIO	12,20	P=Kg/m2	1000	730	545	435	345	255	195	155	125	100	85	70	60	55			
	0,60 ACCIAIO	0,50 ACCIAIO	12,30		1000	735	550	440	365	275	210	165	135	110	90	80	65	65	50		
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.18 W/m²K | (K) EN ISO 6946 = 0.17 W/m²K																					

Effective width of the support 100 mm Calculated according to Annex E of Standard UNI EN 14509. Wind action on the external face, thermal gradient ΔT =0, light colours and normal deflection limit 1/100.
The data in the tables should be considered approximate, except for errors or omissions of printing.
For updated data, refer to the website www.silexpanels.it.The planner is responsible for checking the values based on the individual applications. For all other specifications, refer to the AIPPEG standards (www.aippeg.it).

TECHNICAL NOTE: During installation of WET panels, for cold stores, application is necessary of the specific sealant in the cavities of the sheet metal fittings to obtain a vapour barrier

HORIZONTAL ASSEMBLY

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²													
	EXTERNAL (mm)	INTERNAL (mm)		I=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm
50	0,50 ACCIAIO	0,50 ACCIAIO	9,60	P=Kg/m2	510	340	250	200	140	105	80	60	50					
	0,60 ACCIAIO	0,50 ACCIAIO	10,40		515	345	255	205	150	110	85	65	55					
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.43 W/m²K | (K) EN ISO 6946 = 0.40 W/m²K																		

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²													
	EXTERNAL (mm)	INTERNAL (mm)		I=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm
60	0,50 ACCIAIO	0,50 ACCIAIO	10,00	P=Kg/m2	560	330	210	140	100	70	50							
	0,60 ACCIAIO	0,50 ACCIAIO	10,80		565	335	220	150	105	75	55							
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.36W/m²K | (K) EN ISO 6946 = 0.33 W/m²K																		

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²													
	EXTERNAL (mm)	INTERNAL (mm)		I=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm
80	0,50 ACCIAIO	0,50 ACCIAIO	10,70	P=Kg/m2	770	470	310	215	155	115	85	60						
	0,60 ACCIAIO	0,50 ACCIAIO	11,60		775	475	320	225	165	120	90	65	50					
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.28 W/m²K | (K) EN ISO 6946 = 0.25 W/m²K																		

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²													
	EXTERNAL (mm)	INTERNAL (mm)		I=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm
100	0,50 ACCIAIO	0,50 ACCIAIO	11,50	P=Kg/m2	985	610	415	295	215	160	120	95	70	55				
	0,60 ACCIAIO	0,50 ACCIAIO	12,30		990	615	425	305	225	170	130	100	80	60				
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.22 W/m²K | (K) EN ISO 6946 = 0.20 W/m²K																		

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²													
	EXTERNAL (mm)	INTERNAL (mm)		I=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm
120	0,50 ACCIAIO	0,50 ACCIAIO	11,50	P=Kg/m2	1000	720	515	375	280	210	160	125	100	80	60	50		
	0,60 ACCIAIO	0,50 ACCIAIO	12,30		1000	725	525	385	290	225	175	135	105	85	70	55		
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.18 W/m²K | (K) EN ISO 6946 = 0.17 W/m²K																		

Calculated according to Annex E of Standard UNI EN 14509. Evenly distributed working load on the external face, thermal gradient ΔT =0, light colours and normal deflection limit 1/200.
The data in the tables should be considered approximate, except for errors or omissions of printing.
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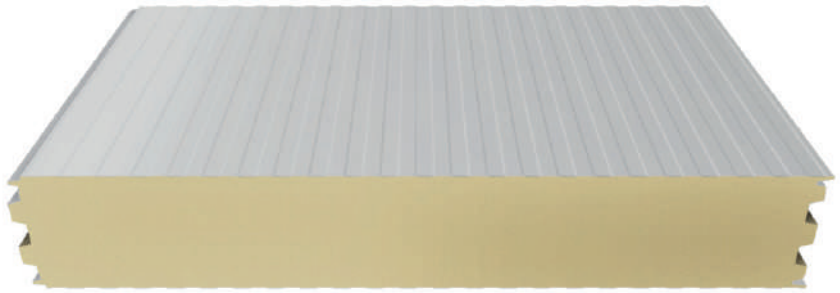
TECHNICAL NOTE: During installation of WET panels, for cold stores, application is necessary of the specific sealant in the cavities of the sheet metal fittings to obtain a vapour barrier

FROST



USEFUL WIDTH
1150 mm
(965/1092 on request)

MAXIMUM LENGTH
15000 mm

PANEL THICKNESSES AVAILABLE

150 | 180 | 200 | 220 | 240

CERTIFICATION

CE EN 14509
EPD UNI ISO 14025
PIR B-s2, d0 / PIR B-s1, d0
PIR EI30 / PIR EI45 / PIR EI60
PIR Zulassung Nr.Z-10.49-589
PIR VKF 5.3
PIR B-S1, d0 Avis technique 2/15-1684
PIR CLASSE 0-2 AS/NZS 1530.3-1999
LEED

METAL COATINGS

NAV Silex insulating panels manufactured with **metal supports in galvanised steel, Aluzinc steel, stainless steel, aluminium, copper or other special metals.**
Each of these is manufactured in steelworks and they are selected and painted using the ***coil coating method***, to **guarantee** suitable **duration** using products painted with a simple and long-lasting polyester, polyurethane, polyamide, plastisol or PVDF base. In addition to the standard colours available, special ones are available on request. Custom colours can be created to order.

The **FROST** panel is ideal for cold store building with high thermal insulation performance with limited laying times.

FROST is the **insulated metal panel** with a polyurethane base designed to build **industrial cold stores for low and medium temperatures.** The thermal insulation performance reached by the panel is the result of long and careful design gained from our experience in over 50 years of installations in the refrigeration sector.

The FROST panel is the **evolution of industrial refrigeration** since it allows the merging of very high thermal insulation values with the simplicity of dry panel assembly.

All the surfaces of the panel can be manufactured in steel, stainless steel and other metals and all the painting systems are available to protect the panel facings.

EXTERNAL/INTERNAL COLOURS

7035-C73 | 9002 | 9010

WITH PUR INSULATION

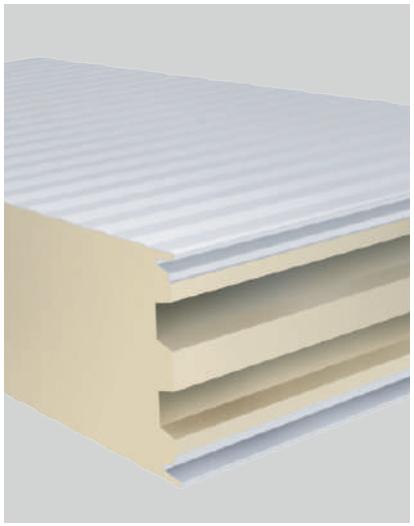
Manufactured in polyurethane resin (PUR), CFC and HCFC-free, it has an approximate density of 35-40 kg/m^3, according to the EC Declaration of Conformity and laboratory testing. Thermal conductivity coefficient at 10°C (UNI EN 12667): 0.020-0.023 W/mk.

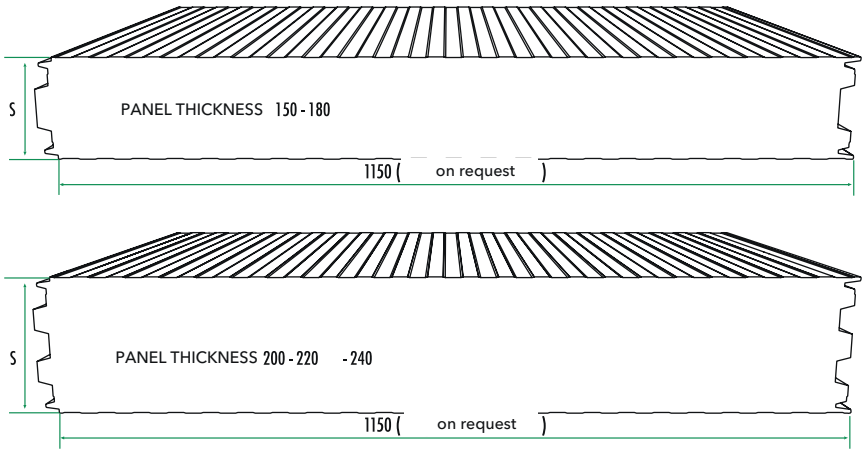
WITH PIR INSULATION

Manufactured in polyisocyanurate, CFC and HCFC-free with an approximate density of 35-40 kg/m^3, it can obtain fire reaction class B-s1, d0, according to the EC Declaration of Conformity and laboratory testing. Thermal conductivity coefficient at 10°C (UNI EN 12667): 0.020-0.023 W/mk.

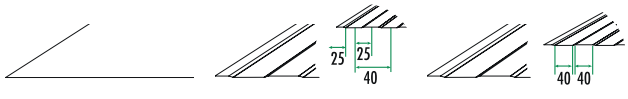
STANDARD
SPECIAL

PUR/PIR PANELS REFRIGERATION WALL FROST





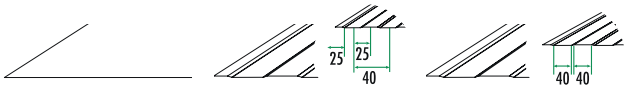
EXTERNAL FINISHES



SMOOTH RIBBED BOX

DIAMOND CUT PITCH 15

INTERNAL FINISHES



SMOOTH RIBBED BOX

DIMENSIONAL TOLERANCES mm	Wall	
Length	L ≤ 3m • +/- 5mm	L > 3m • +/- 10mm
Useful Width	+/- 2mm	
Thickness	D ≤ 100mm • +/- 2mm	D > 100 • +/- 2%
Perpendicular deviation	0,6 %	
Internal metal parameters misalignment	+/- 3mm	
Inferior sheets coupling	F = 0 + 5mm	

Where **L** is the LENGTH, **D** is the THICKNESS of the panels and **F** the coupling of the supports.

TECHNICAL NOTE: During installation of WET panels, for cold stores, application is necessary of the specific sealant in the cavities of the sheet metal fittings to obtain a vapour barrier

VERTICAL ASSEMBLY

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
150	0,50 ACCIAIO	0,50 ACCIAIO	13,40	P=Kg/m2	580	460	385	320	245	190	155	130	105	90	80	60	50				
	0,60 ACCIAIO	0,50 ACCIAIO	14,20		585	465	390	330	260	205	165	140	115	100	85	75	65	55	50		
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.15 W/m²K | (K) EN ISO 6946 = 0.14 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
180	0,50 ACCIAIO	0,50 ACCIAIO	14,50	P=Kg/m2	610	485	405	345	295	230	185	155	130	110	95	80	70	65	55	50	
	0,60 ACCIAIO	0,50 ACCIAIO	15,40		615	490	410	350	305	250	200	165	140	120	100	90	75	70	60	55	50
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.12 W/m²K | (K) EN ISO 6946 = 0.11 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
200	0,50 ACCIAIO	0,50 ACCIAIO	15,30	P=Kg/m2	630	505	420	360	315	260	210	170	145	120	105	90	80	70	65	55	55
	0,60 ACCIAIO	0,50 ACCIAIO	16,10		635	510	430	365	320	275	225	185	155	130	115	100	85	75	65	60	60
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.11 W/m²K | (K) EN ISO 6946 = 0.10 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
220	0,50 ACCIAIO	0,50 ACCIAIO	16,00	P=Kg/m2	650	520	435	370	325	285	230	190	160	135	115	100	90	80	70	60	55
	0,60 ACCIAIO	0,50 ACCIAIO	16,90		650	520	435	370	325	290	245	205	170	145	125	110	95	85	75	65	60
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.10 W/m²K | (K) EN ISO 6946 = 0.09 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
240	0,50 ACCIAIO	0,50 ACCIAIO	16,80	P=Kg/m2	675	540	450	385	335	300	250	205	175	145	125	110	95	85	75	70	60
	0,60 ACCIAIO	0,50 ACCIAIO	17,70		680	545	455	390	340	310	270	220	185	160	135	120	105	90	80	75	65
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.09 W/m²K | (K) EN ISO 6946 = 0.08 W/m²K																					

Effective width of the support 100 mm Calculated according to Annex E of Standard UNI EN 14509. Wind action on the external face, thermal gradient ΔT =0, light colours and normal deflection limit 1/100.
The data in the tables should be considered approximate, except for errors or omissions of printing.
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TECHNICAL NOTE: During installation of WET panels, for cold stores, application is necessary of the specific sealant in the cavities of the sheet metal fittings to obtain a vapour barrier

HORIZONTAL ASSEMBLY

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
150	0,50 ACCIAIO	0,50 ACCIAIO	13,40	P=Kg/m2	565	450	375	290	230	180	145	115	95	75	60	50		50			
	0,60 ACCIAIO	0,50 ACCIAIO	14,20		570	455	380	305	240	195	155	125	105	85	70	55		55	50		
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.15 W/m²K | (K) EN ISO 6946 = 0.14 W/²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
180	0,50 ACCIAIO	0,50 ACCIAIO	14,52	P=Kg/m2	595	475	395	335	290	240	195	155	130	105	90	75	60	50			
	0,60 ACCIAIO	0,50 ACCIAIO	15,37		600	480	405	340	300	250	205	170	140	115	95	80	65	55			
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.12 W/m²K | (K) EN ISO 6946 = 0.11 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
200	0,50 ACCIAIO	0,50 ACCIAIO	15,28	P=Kg/m2	620	490	405	345	300	265	225	185	155	130	105	90	75	60	50		
	0,60 ACCIAIO	0,50 ACCIAIO	16,13		625	500	410	350	310	275	235	200	165	140	115	100	85	70	60	50	
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.11 W/m²K | (K) EN ISO 6946 = 0.10 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
220	0,50 ACCIAIO	0,50 ACCIAIO	16,04	P=Kg/m2	640	505	420	355	310	275	245	210	175	145	125	105	90	75	65	55	
	0,60 ACCIAIO	0,50 ACCIAIO	16,89		645	510	425	360	315	280	250	220	195	165	135	115	100	85	70	60	50
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.10 W/m²K | (K) EN ISO 6946 = 0.09 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
240	0,50 ACCIAIO	0,50 ACCIAIO	16,80	P=Kg/m2	660	525	435	370	320	285	255	230	190	160	135	115	100	85	75	65	55
	0,60 ACCIAIO	0,50 ACCIAIO	17,65		665	530	440	375	325	290	260	235	205	185	160	135	115	100	85	70	60
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.10 W/m²K | (K) EN ISO 6946 = 0.09 W/m²K																					

Calculated according to Annex E of Standard UNI EN 14509. Evenly distributed working load on the external face, thermal gradient Δ T =0, light colours and normal deflection limit 1/200. The data in the tables should be considered approximate, except for errors or omissions of printing. For updated data, refer to the website www.silexpanels.it.
The planner is responsible for checking the values based on the individual applications. For all other specifications, refer to the AIPPEG standards (www.aippeg.it).

TECHNICAL NOTE: During installation of WET panels, for cold stores, application is necessary of the specific sealant in the cavities of the sheet metal fittings to obtain a vapour barrier

STORM

USEFUL WIDTH
1000 mm

MAXIMUM LENGTH
15000 mm

PANEL THICKNESSES AVAILABLE

180	200	220	240

CERTIFICATION

CE EN 14509
PIR B-s1, d0
PIR EI45 / PIR E60 / PIR REI60 / PIR RE90
LEED

METAL COATINGS

NAV Silex insulating panels manufactured with **metal supports in galvanised steel, Aluzinc steel, stainless steel, aluminium, copper or other special metals.**
Each of these is manufactured in steelworks and they are selected and painted using the ***coil coating method***, to **guarantee** suitable **duration** using products painted with a simple and long-lasting polyester, polyurethane, polyamide, plastisol or PVDF base. In addition to the standard colours available, special ones are available on request. Custom colours can be created to order.

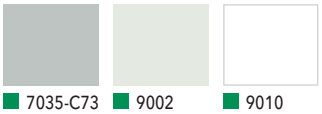
STANDARD
SPECIAL

STORM is the panel that combines the architectural elements and the technical performance of high thermal insulation to build self-supporting warehouses.

STORM is the insulated metal panel for the manufacture of **refrigerated structures and self-supporting warehouses at low and medium temperatures**, where an **elevated aesthetic design result** is required.

In fact, the very high thermal insulation values merge with simple
dry assembly and with concealed fastening. The **special milling of the insulation layer joinery** allows maximum precision to be obtained in the fitting geometry, which also develops the double labyrinth of the sheet metal.

This special fitting is the result of long and careful design
matured over 50 years of installations in the sector.
The planner can choose from various finishes, as illustrated, of the internal and external surface of the panel and from the vast range of painting and finishing systems, thereby enhancing the **architectural prestige of the surface.**



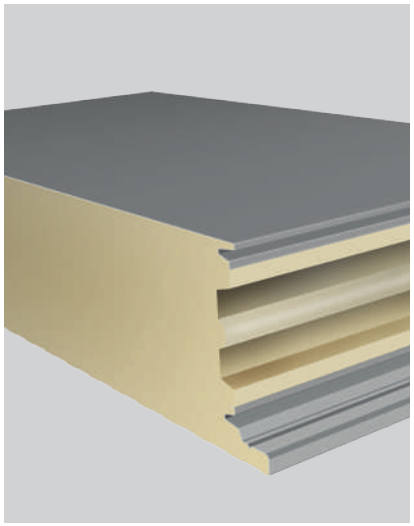
WITH PUR INSULATION

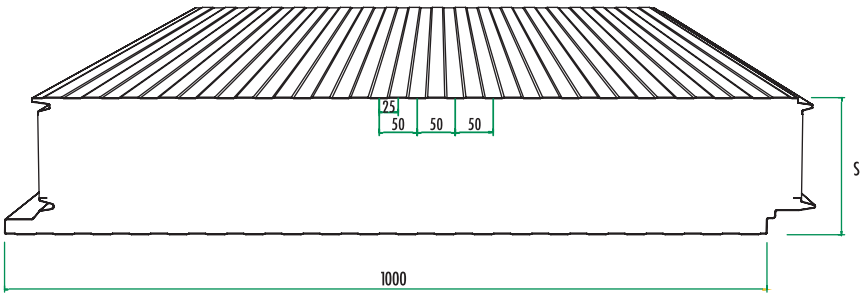
Manufactured in polyurethane resin (PUR), CFC and HCFC-free, it has an approximate density of 35-40 kg/m^3, according to the EC Declaration of Conformity and laboratory testing.
Thermal conductivity coefficient at 10°C (UNI EN 12667): 0.020-0.023 W/mk.

WITH PIR INSULATION

Manufactured in polyisocyanurate, CFC and HCFC-free with an approximate density of 35-40 kg/m^3, it can obtain fire reaction class B-s1, d0, according to the EC Declaration of Conformity and laboratory testing. Thermal conductivity coefficient at 10°C (UNI EN 12667): 0.020-0.023 W/mk.

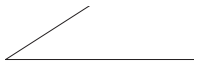
PUR/PIR PANELS REFRIGERATION WALL STORM



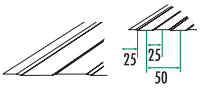


EXCLAMATION-SQUARE Nav-System recommends, during the assembly phase, use of a steel plate to distribute the fixing force in play.
The most appropriate number and position of the plates must be defined during the design phase and must be such to guarantee the best distribution of the load due to stress acting of the wall panel, stress caused by compression and negative pressure exerted on the structures.

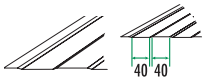
EXTERNAL FINISHES



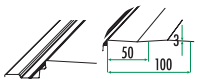
SMOOTH



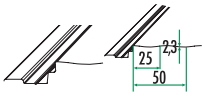
RIBBED



BOX



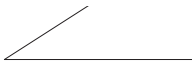
DIAMOND CUT PITCH 100



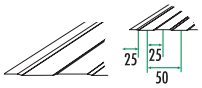
MICRO-RIBBED

DIAMOND CUT PITCH 15

INTERNAL FINISHES



SMOOTH



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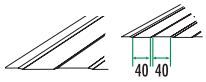


BOX

DIMENSIONAL TOLERANCES mm	Wall	
Length	L ≤ 3m • +/- 5mm	L > 3m • +/- 10mm
Useful Width	+/- 2mm	
Thickness	D ≤ 100mm • +/- 2mm	D > 100 • +/- 2%
Perpendicular deviation	0,6 %	
Internal metal parameters misalignment	+/- 3mm	
Inferior sheets coupling	F = 0 + 5mm	

Where **L** is the LENGTH, **D** is the THICKNESS of the panels and **F** the coupling of the supports.

TECHNICAL NOTE: During installation of WET panels, for cold stores, application is necessary of the specific sealant in the cavities of the sheet metal fittings to obtain a vapour barrier

VERTICAL ASSEMBLY

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																			
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm	1050cm	1100cm
180	0,50 ACCIAIO	0,60 ACCIAIO	16,2	P=Kg/m2	610	485	405	345	305	270	220	185	155	130	110	95	85	75	65	60	55	50	
	0,60 ACCIAIO	0,60 ACCIAIO	17,1		620	500	420	360	320	280	240	200	165	140	120	105	90	80	70	65	60	50	50
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.13 W/m²K | (K) EN ISO 6946 = 0.11 W/m²K																								

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																			
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm	1050cm	1100cm
200	0,50 ACCIAIO	0,60 ACCIAIO	17,0	P=Kg/m2	630	505	420	360	315	280	245	205	170	145	125	110	95	85	75	65	60	55	50
	0,60 ACCIAIO	0,60 ACCIAIO	17,8		640	520	430	370	330	290	255	220	185	155	135	115	105	90	80	70	65	60	55
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.12 W/m²K | (K) EN ISO 6946 = 0.10 W/m²K																								

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																			
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm	1050cm	1100cm
220	0,50 ACCIAIO	0,60 ACCIAIO	17,7	P=Kg/m2	650	520	435	370	325	290	260	225	190	160	140	120	105	90	80	75	65	60	55
	0,60 ACCIAIO	0,60 ACCIAIO	18,6		660	530	445	380	340	300	270	235	205	175	150	130	115	100	90	80	70	65	60
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.11 W/m²K | (K) EN ISO 6946 = 0.09 W/m²K																								

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																			
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm	1050cm	1100cm
240	0,50 ACCIAIO	0,60 ACCIAIO	18,5	P=Kg/m2	670	535	445	385	335	295	265	245	205	175	150	130	115	100	90	80	70	65	60
	0,60 ACCIAIO	0,60 ACCIAIO	19,4		680	645	455	395	345	305	275	255	220	190	165	140	125	110	95	85	80	70	65
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.10 W/m²K | (K) EN ISO 6946 = 0.08 W/m²K																								

Effective width of the support 100 mm Calculated according to Annex E of Standard UNI EN 14509. Wind action on the external face, thermal gradient ΔT =0, light colours and normal deflection limit 1/100.
The data in the tables should be considered approximate, except for errors or omissions of printing.
For updated data, refer to the website www.silexpanels.it.The planner is responsible for checking the values based on the individual applications. For all other specifications, refer to the AIPPEG standards (www.aippeg.it).

TECHNICAL NOTE: During installation of WET panels, for cold stores, application is necessary of the specific sealant in the cavities of the sheet metal fittings to obtain a vapour barrier

HORIZONTAL ASSEMBLY

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																		
	ESTERNO (mm)	INTERNO (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm	1050cm	1100cm
180	0,50 ACCIAIO	0,60 ACCIAIO	16,2	P=Kg/m2	595	475	390	335	290	245	200	165	135	110	95	75	65	55					
	0,60 ACCIAIO	0,60 ACCIAIO	17,1		610	485	400	345	300	255	215	175	145	120	100	85	70	60	50				
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.13 W/m²K | (K) EN ISO 6946 = 0.11 W/m²K																							

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																		
	ESTERNO (mm)	INTERNO (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm	1050cm	1100cm
200	0,50 ACCIAIO	0,60 ACCIAIO	17,0	P=Kg/m2	615	490	405	345	300	265	235	190	155	130	110	95	80	65	55				
	0,60 ACCIAIO	0,60 ACCIAIO	17,8		625	500	415	355	310	275	245	205	175	145	125	105	90	75	65	55			
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.12 W/m²K | (K) EN ISO 6946 = 0.10 W/m²K																							

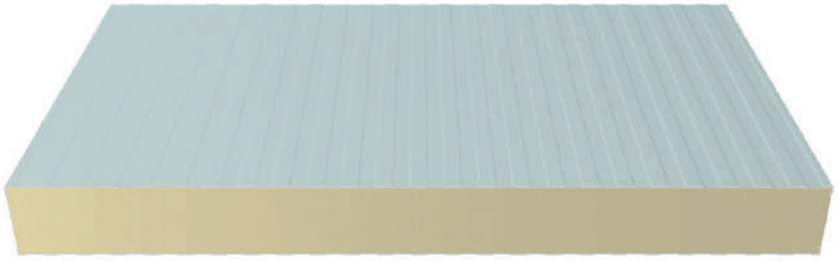
PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																		
	ESTERNO (mm)	INTERNO (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm	1050cm	1100cm
220	0,50 ACCIAIO	0,60 ACCIAIO	17,7	P=Kg/m2	635	505	420	355	310	275	245	210	175	145	125	105	90	80	70	60	50		
	0,60 ACCIAIO	0,60 ACCIAIO	18,6		645	515	430	365	320	285	255	220	200	170	145	120	105	90	75	65	55		
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.11 W/m²K | (K) EN ISO 6946 = 0.09 W/m²K																							

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																		
	ESTERNO (mm)	INTERNO (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm	1050cm	1100cm
240	0,50 ACCIAIO	0,60 ACCIAIO	18,5	P=Kg/m2	655	520	430	370	320	280	250	230	190	160	135	115	100	85	75	65	55	50	
	0,60 ACCIAIO	0,60 ACCIAIO	19,4		665	530	440	380	330	290	260	240	205	190	165	140	120	105	90	75	65	55	50
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.10 W/m²K | (K) EN ISO 6946 = 0.08 W/m²K																							

Effective width of the support 100 mm Calculated according to Annex E of Standard UNI EN 14509. Wind action on the external face, thermal gradient ΔT =0, light colours and normal deflection limit 1/100.
The data in the tables should be considered approximate, except for errors or omissions of printing.
For updated data, refer to the website www.silexpanels.it.The planner is responsible for checking the values based on the individual applications. For all other specifications, refer to the AIPPEG standards (www.aippeg.it).

TECHNICAL NOTE: During installation of WET panels, for cold stores, application is necessary of the specific sealant in the cavities of the sheet metal fittings to obtain a vapour barrier

ICE



PITCH
1260 mm

USEFUL WIDTH
1220 mm

MAXIMUM LENGTH
15000 mm
giunto max 13500 mm

PANEL THICKNESSES AVAILABLE

100	120	150	180
200	220	240	260

CERTIFICATION

CE EN 14509
EPD UNI ISO 14025
PIR B-s2, d0
PIR EI30 / PIR EI60
PIR VKF 5.3
LEED

METAL COATINGS

NAV Silex insulating panels manufactured with **metal supports in galvanised steel, Aluzinc steel, stainless steel, aluminium, copper or other special metals.**
Each of these is manufactured in steelworks and they are selected and painted using the ***coil coating method***, to **guarantee** suitable **duration** using products painted with a simple and long-lasting polyester, polyurethane, polyamide, plastisol or PVDF base. In addition to the standard colours available, special ones are available on request. Custom colours can be created to order.

ICE is the latest generation panel that inherits and develops the traditions of industrial insulation in therefrigeration and controlled atmosphere sector.

ICE is the insulated metal panel designed for **cold stores at low temperature and controlled atmosphere stores.** The special system designed by NAV Silex of the **"joint injected on site"** guarantees quality and strength of joint sealing and fastening, giving a product with **higher insulation performance.**
In fact, the "joint injected on site" system of the ICE panel carried out on the **concealed fixtures with thermal break**, is fundamental for installation of self-supporting warehouses at low temperature and for applications where intermediate fastening to the wall is necessary for bracing. The ICE panel is synonymous with optimal quality, the result of over 50 years of experience in the design and construction of cold stores.

EXTERNAL/INTERNAL COLOURS

7035-C73 9002 9010

WITH PUR INSULATION

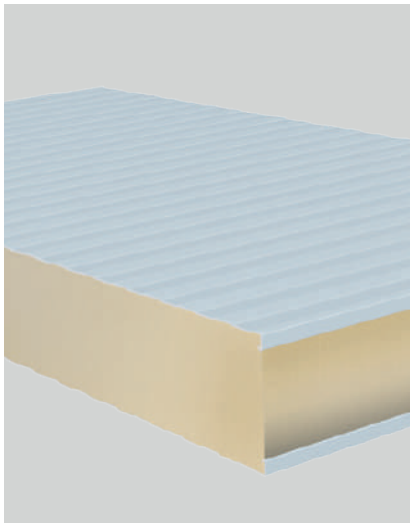
Manufactured in polyurethane resin (PUR), CFC and HCFC-free, it has an approximate density of 35-40 kg/m^3, according to the EC Declaration of Conformity and laboratory testing.
Thermal conductivity coefficient at 10°C (UNI EN 12667): 0.020-0.023 W/mk.

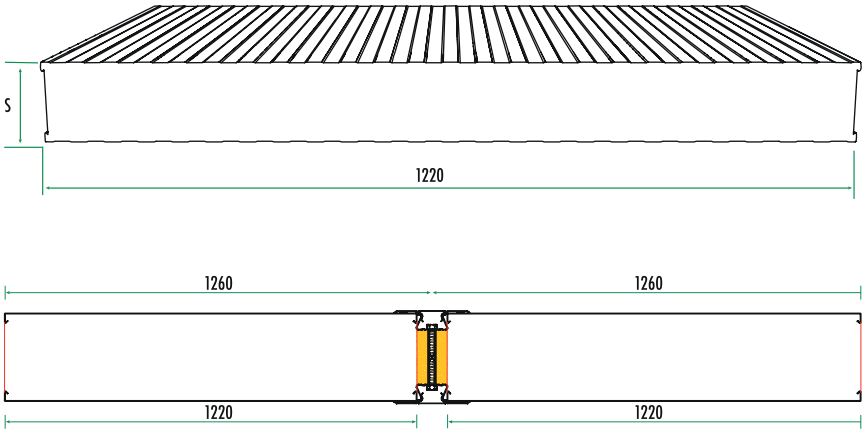
WITH PIR INSULATION

Manufactured in polyisocyanurate, CFC and HCFC-free with an approximate density of 35-40 kg/m^3, it can obtain fire reaction class B-s2, d0, according to the EC Declaration of Conformity and laboratory testing. Thermal conductivity coefficient at 10°C (UNI EN 12667): 0.020-0.023 W/mk.

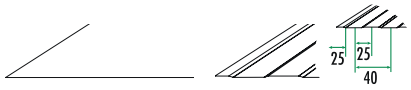
STANDARD
SPECIAL

PUR/PIR PANELS REFRIGERATION WALL ICE





EXTERNAL FINISHES



SMOOTH RIBBED

INTERNAL FINISHES

SMOOTH RIBBED

DIMENSIONAL TOLERANCES mm	Wall	
Length	L ≤ 3m • +/- 5mm	L > 3m • +/- 10mm
Useful Width	+/- 2mm	
Thickness	D ≤ 100mm • +/- 2mm	D > 100 • +/- 2%
Perpendicular deviation	0,6 %	
Internal metal parameters misalignment	+/- 3mm	
Inferior sheets coupling	F = 0 + 5mm	

Where **L** is the LENGTH, **D** is the THICKNESS of the panels and **F** the coupling of the supports.

PUR/PIR PANELS REFRIGERATION WALL ICE

VERTICAL ASSEMBLY

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
100	0,50 ACCIAIO	0,50 ACCIAIO	11,10	P=Kg/m2	515	410	290	210	160	125	100	85	70	60	50	60	50				
	0,60 ACCIAIO	0,50 ACCIAIO	11,90		520	415	310	225	175	135	110	90	75	65	55	65	55				

THERMAL TRANSMITTANCE: (U) EN 14509 = 0.22 W/m²K | (K) EN ISO 6946 = 0.20 W/m²K

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
120	0,50 ACCIAIO	0,50 ACCIAIO	11,90	P=Kg/m2	545	435	345	255	195	155	125	100	85	70	60	55					
	0,60 ACCIAIO	0,50 ACCIAIO	12,70		550	440	365	275	210	165	135	110	90	80	65	60	50				

THERMAL TRANSMITTANCE: (U) EN 14509 = 0.18 W/m²K | (K) EN ISO 6946 = 0.17 W/m²K

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
150	0,50 ACCIAIO	0,50 ACCIAIO	13,10	P=Kg/m2	580	460	385	320	245	190	155	130	105	90	80	70	60	50			
	0,60 ACCIAIO	0,50 ACCIAIO	13,80		585	465	390	330	260	205	165	140	115	100	85	75	65	55	50		

THERMAL TRANSMITTANCE: (U) EN 14509 = 0.15 W/m²K | (K) EN ISO 6946 = 0.14 W/m²K

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
180	0,50 ACCIAIO	0,50 ACCIAIO	14,20	P=Kg/m2	610	485	405	345	295	230	185	155	130	110	95	80	70	65	55	50	
	0,60 ACCIAIO	0,50 ACCIAIO	15,00		615	490	410	350	305	250	200	165	140	120	100	90	75	70	60	55	50

THERMAL TRANSMITTANCE: (U) EN 14509 = 0.12 W/m²K | (K) EN ISO 6946 = 0.11 W/m²K

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
200	0,50 ACCIAIO	0,50 ACCIAIO	15,00	P=Kg/m2	630	505	420	360	315	260	210	170	145	120	105	90	80	70	65	55	50
	0,60 ACCIAIO	0,50 ACCIAIO	15,80		635	510	430	365	320	275	225	185	155	130	115	100	85	75	65	60	55

THERMAL TRANSMITTANCE: (U) EN 14509 = 0.11 W/m²K | (K) EN ISO 6946 = 0.10 W/m²K

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
200	0,50 ACCIAIO	0,50 ACCIAIO	15,70	P=Kg/m2	650	520	435	370	325	285	230	190	160	135	115	100	90	80	70	60	55
	0,60 ACCIAIO	0,50 ACCIAIO	16,50		650	520	435	370	325	290	245	205	170	145	125	110	95	85	75	65	60

THERMAL TRANSMITTANCE: (U) EN 14509 = 0.10 W/m²K | (K) EN ISO 6946 = 0.09 W/m²K

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
240	0,50 ACCIAIO	0,50 ACCIAIO	16,50	P=Kg/m2	675	540	450	385	335	300	250	205	175	145	125	110	95	85	75	70	60
	0,60 ACCIAIO	0,50 ACCIAIO	17,30		680	545	455	390	340	310	270	220	185	160	135	120	105	90	80	75	65

THERMAL TRANSMITTANCE: (U) EN 14509 = 0.09 W/m²K | (K) EN ISO 6946 = 0.08 W/m²K

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
260	0,50 ACCIAIO	0,50 ACCIAIO	17,30	P=Kg/m2	695	555	460	395	345	305	270	225	190	160	140	120	105	90	80	75	65
	0,60 ACCIAIO	0,50 ACCIAIO	18,10		700	560	465	400	350	310	275	240	200	170	150	130	115	100	90	80	70

THERMAL TRANSMITTANCE: (U) EN 14509 = 0.08 W/m²K | (K) EN ISO 6946 = 0.08 W/m²K

Effective width of the support 100 mm Calculated according to Annex E of Standard UNI EN 14509. Wind action on the external face, thermal gradient ΔT =0, light colours and normal deflection limit 1/100. The data in the tables should be considered approximate, except for errors or omissions of printing. For updated data, refer to the website www.silexpanels.it.The planner is responsible for checking the values based on the individual applications. For all other specifications, refer to the AIPPEG standards (www.aippeg.it).

HORIZONTAL ASSEMBLY

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
100	0,50 ACCIAIO	0,50 ACCIAIO	11,10	P=Kg/m2	415	295	215	160	120	95	70	55									
	0,60 ACCIAIO	0,50 ACCIAIO	11,90		425	305	225	170	130	100	80	60									
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.22 W/m²K | (K) EN ISO 6946 = 0.20 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
120	0,50 ACCIAIO	0,50 ACCIAIO	11,90	P=Kg/m2	515	375	280	210	160	125	100	80	60	50							
	0,60 ACCIAIO	0,50 ACCIAIO	12,70		525	385	290	225	175	135	105	85	70	55							
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.18 W/m2K | (K) EN ISO 6946 = 0.17 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
150	0,50 ACCIAIO	0,50 ACCIAIO	13,10	P=Kg/m2	565	450	375	290	230	180	145	115	95	75	60	50					
	0,60 ACCIAIO	0,50 ACCIAIO	13,80		570	455	380	305	240	195	155	125	105	85	70	55					
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.15 W/m²K | (K) EN ISO 6946 = 0.14 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
180	0,50 ACCIAIO	0,50 ACCIAIO	14,20	P=Kg/m2	595	475	395	335	290	240	195	155	130	105	90	75	60	50			
	0,60 ACCIAIO	0,50 ACCIAIO	15,00		600	480	405	340	300	250	205	170	140	115	95	80	65	55			
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.12 W/m²K | (K) EN ISO 6946 = 0.11 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
200	0,50 ACCIAIO	0,50 ACCIAIO	15,00	P=Kg/m2	620	490	405	345	300	265	225	185	155	130	105	90	75	60	50		
	0,60 ACCIAIO	0,50 ACCIAIO	15,80		625	500	410	350	310	275	235	200	165	140	115	100	85	70	60	50	
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.11 W/m²K | (K) EN ISO 6946 = 0.10 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
220	0,50 ACCIAIO	0,50 ACCIAIO	15,70	P=Kg/m2	640	505	420	355	310	275	245	210	175	145	125	105	90	75	65	55	
	0,60 ACCIAIO	0,50 ACCIAIO	16,50		645	510	425	360	315	280	250	220	195	165	135	115	100	85	70	60	50
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.10 W/m²K | (K) EN ISO 6946 = 0.09 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
240	0,50 ACCIAIO	0,50 ACCIAIO	16,50	P=Kg/m2	660	525	435	370	320	285	255	230	190	160	135	115	100	85	75	65	55
	0,60 ACCIAIO	0,50 ACCIAIO	17,30		665	530	440	375	325	290	260	235	205	185	160	135	115	100	85	70	60
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.09 W/m²K | (K) EN ISO 6946 = 0.08 W/m²K																					

PANEL THICKNESS (mm)	SUPPORT NOMINAL THICKNESS		PANEL WEIGHT (Kg/m²)	EFFECTIVE WIDTH OF SUPPORT 100 mm	P= EVENLY DISTRIBUTED LOAD Kg/m²																
	EXTERNAL (mm)	INTERNAL (mm)		l=cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm	950cm	1000cm
260	0,50 ACCIAIO	0,50 ACCIAIO	17,30	P=Kg/m2	680	540	445	380	330	290	260	235	210	175	150	125	110	95	85	70	65
	0,60 ACCIAIO	0,50 ACCIAIO	18,10		685	545	450	385	335	295	265	240	215	195	180	155	135	115	100	85	75
THERMAL TRANSMITTANCE: (U) EN 14509 = 0.08 W/m²K | (K) EN ISO 6946 = 0.08 W/m²K																					

Calculated according to Annex E of Standard UNI EN 14509. Evenly distributed working load on the external face, thermal gradient ΔT =0, light colours and normal deflection limit 1/200. The data in the tables should be considered approximate, except for errors or omissions of printing. For updated data, refer to the website www.silexpanels.it.
The planner is responsible for checking the values based on the individual applications. For all other specifications, refer to the AIPPEG standards (www.aippeg.it).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