### **PUR/PIR PANELS COLD STORE**



USEFUL WIDTH 1150 mm (965/1092 on request)

MAXIMUM LENGTH 15000 mm

AVAILABLE PANEL THICKNESS



#### CERTIFICATION

CE EN 14509 EDP 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 Avis technique 2/15-1684 PIR CLASS 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 panel resolves highly complex technical problems regarding thermal insulation, vapour barrier climatic sealing of environments and reaction and resistance to fire.

Polyurethane insulated metal panel designed to guarantee high technical performance: maximum thermal insulation, humidity and condensation barrier, best class of fire reaction and resistance.

Designed d in particular for the refirgeration sector with air conditioned and controlled atmosphere envirorments and in the prefabrication sector to build walls of houses and residential modules, the panel finds considerable use in the manufacture of climatic chambers and where there are considerable changes in temperature.

### WITH PUR INSULATION

Manufactured in polyurethane resin (PUR), CFC and HCFC-free, it has an approximate density of 35-40 kg/m<sup>3</sup> 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<sup>3</sup>, 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.

### EXTERNAL / INTERNAL COLOURS





## PUR/PIR PANELS COLD STORE WET





### **EXTERNAL FINISHES**

SMOOTH

## **INTERNAL FINISHES**

SMOOTH

#### DIMENSIONAL TOLERANCES mm Wall

Lenght	L ≤ 3m . =/- 5mm	L ≤ 3m . =/- 10mm									
Useful Width	=/- 2mm										
Thickness	D ≤ 100mm . =/- 2mm	D ≤ 100mm . =/- 2%									
Perpendicular deviation	0.6%										
Internal metal parameters misalignment	=/- 3mm										
Inferior sheets coupling	F = 0 + 5mm										
Where L is the LENGHT, D is the THICKNESS of the panels and F the coupling of the supports.											

# VERTICAL ASSEMBLY

PANEL THICK. (mm)	SHEET NOMINAL THICKNESS		PANEL WEIGHT	EFFECTIVE WIDTH OF SUPPORT 100 mm																	
	EXTERNAL (mm)	INTERNAL (mm)	(Kg/m²)	I=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
00	0.50 STEEL	0.50 STEEL	10.70	P=Kg/m2	825	550	410	325	230	170	130	100	80	65	55						
80	0.60 STEEL	0.50 STEEL	11.60		830	555	415	330	245	180	140	110	85	70	60	50					
	TRANSMITTANC	E: (II) EN 14509 :	= 0.28 W/m²k			6946 -	0 25 1	M/m <sup>2</sup> K													

PANEL THICK. (mm)	SHEET NOMINAL THICKNESS		PANEL WEIGHT	EFF	EFFECTIVE WIDTH OF SUPPORT 100 mm																
	EXTERNAL (mm)	INTERNAL (mm)	(ngiin)	I=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
100	0.50 STEEL	0.50 STEEL	11.50	g/m2	1000	685	515	410	290	210	160	125	100	85	70	60	50				
	0.60 STEEL	0.50 STEEL	12.30	P=Kg	1000	690	520	415	310	225	175	135	110	90	75	65	55				
THERMAL	TRANSMITTANC	E: (U) EN 14509 =	= 0.22 W/m²k	(K) E	EN ISO	6946 =	= 0.20 \	N/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  $\Delta T = 0$ , 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.nav-system.it. The designer/engineer is responsible for checking the values based on the individual applications. For all other specifications, refer to the AIPPEG standards (www.aippeg.it).

# PUR/PIR PANELS COLD STORE WET

# HORIZONTAL ASSEMBLY

PANEL THICK. (mm)	SHEET NOMINAL THICKNESS		PANEL WEIGHT		ECTIV					00 mr		P	UNIF	ORML	Y DIS	TRIBU	TED L	OAD H	Kg/m²		
				CFFG																	
	EXTERNAL (mm)	INTERNAL (mm)	(vô.u.)	I=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
80	0.50 STEEL	0.50 STEEL	10.70	P=Kg/m2	770	470	310	215	155	115	85	60									
	0.60 STEEL	0.50 STEEL	11.60		775	475	320	225	165	120	90	65	50								
THERMAL	TRANSMITTANC	E: (U) EN 14509 =	= 0,28 W/m²ł	< I (K) E	EN ISO	6946 =	= 0,25 \	W/m²K													

PANEL THICK. (mm)	SHEET NOMINAL THICKNESS		PANEL WEIGHT	P= UNIFORMLY DISTRIBUTED LOAD Kg/m <sup>2</sup>																	
	EXTERNAL (mm)	INTERNAL (mm)	(vôur)	I=cm	100cm	150cm	200cm	250cm	300cm	350cm	400cm	450cm	500cm	550cm	600cm	650cm	700cm	750cm	800cm	850cm	900cm
100	0.50 STEEL	0.50 STEEL	11.50	P=Kg/m2	985	610	415	295	215	160	120	95	70	55							
	0.60 STEEL	0.50 STEEL	12.30		990	615	425	305	225	170	130	100	80	60							
THERMAL	TRANSMITTANC	E: (U) EN 14509 =	= 0,22 W/m²ł	< ] (K) I	EN ISO	6946 =	= 0,20 \	W/m²K													

Calculated according to Annex E of Standard UNI EN 14509. Uniformly 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.nav-system.it. The designer/engineer is responsible for checking the values based on the individual applications. For all other specifications, refer to the AIPPEG standards (www.aippeg.it).