

**“ Protecting business and property
with **FireSafe** insurer
FM approved systems ”**



Insurance Certification...

Factory Mutual Global (FM) Approval Requirements

FM Global (FM), formally known as Factory Mutual, has a severe test standard for assessing reaction to fire. This test standard is FMRC 4880 (1994) Approval requirements for Class 1 fire classification.

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Fire Test

For internal and external applications, Ral 9002 Polyester paint suitable to be used in food processing facilities is used as a standard in both surface iron sheets of the panels.

The Optional facings are:

- PVDF** : For inside and outside use where there is a high risk of corrosion.
- Plastisol** : High elasticity and very good corrosion-prevention properties; suitable especially for internal use.
- Niro 1.4301** : Rust - resistance according to EN 10088-2, for heavy duty use, (stainless steel)

Kingspan Izopoli cold store panels, facings are long lasting, easy to care and provide hygienic and low cost solutions.



Front



Back



Foam Technical Data	IPN	Unit
Suggested Application Temperature	-200~ +100	°C
Thermal Conductivity (λ)	0,020 - 0,021	W / mk
Compressive Strength (10% to expand)	$\leq 0,14$	N / mm ²
Shear Strength	40 - 50 mm $\leq 0,14$ 60 - 80 mm $\leq 0,12$ ≥ 100 mm $\leq 0,06$	N / mm ²
Water Absorption (%Volume)	≤ 2	% Volume
Vapour diffusion Strength (μ)	70 - 80	-
Fire Class	EN 13501-1 FM 4880 Class 1	-
Closed Cell Content	% 95	-

“ FM Global 50 feet (15.84 m) Wall Test On Kingspan Panels ”

FMRC 4880 approval requirements for class 1 fire classification with on height restriction.



ISO 9001:2008 QMS Certification: AQ/ TR/2338

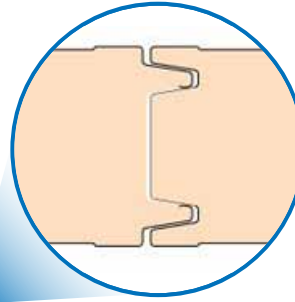
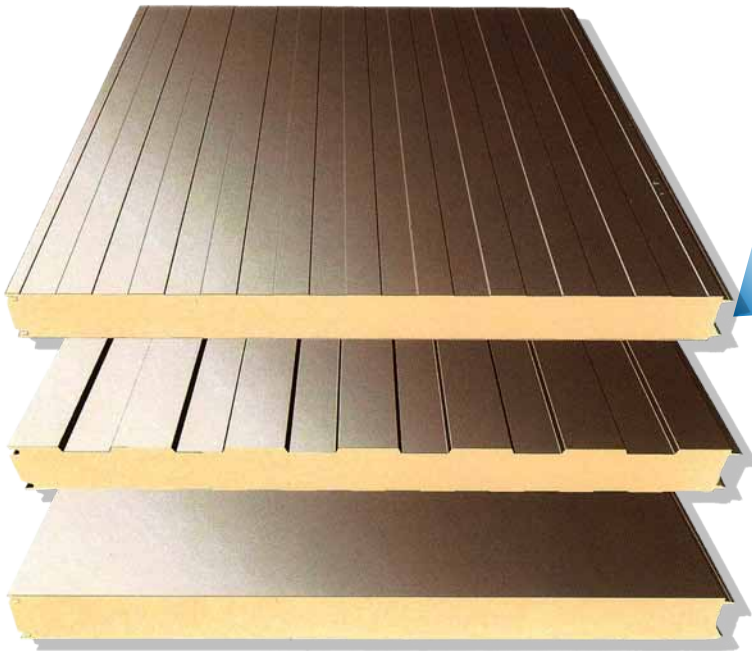
GOST

APPROVED
4880 Class1

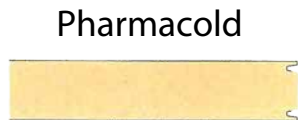
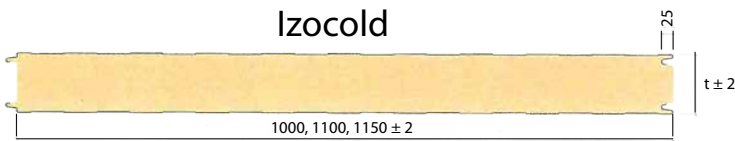
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Cold Store Panels

Insulation Panel *By itc*



The double tongue and groove edge alignment ensures a precise Interlocking of the panels and dimensional accuracy. This positively eliminates the risk of thermal bridging and provides an air-tight between panels after erection.



Dimensional Stability and long Term Thermal Performance

Insulation materials	Rigid IPN foam does not contain CFC and HCFC
Density	40±2 Kg/m ³
Fire reaction (IPN)	In EN 13501-1 standard, B s1 d0 - FM 4880 Class1
Product Length	Depending on the panel thickness, it can be produced up to 19 m.
Product Conformity Standard	TS EN 14509
Acoustic Insulation	About 25dB in all panel thicknesses.

IPN wall panels are effectively perform the following functions over the lifecycle of the building.

- Food and hygiene safe
- FireSafe property protection
- Provides a thermal barrier
- Provides a vapour airtight and gas barrier
- Resists moisture ingress
- Suitable for "wash and clean" down
- Walk-on ceilings
- Lightweight construction
- Low energy operating costs

	Thickness mm	Drawing	U - Value W/m ²	Weight Kg/m ²	Ceiling element span, cantilever as single - span girder			Thickness mm	Drawing	U - Value W/m ²	Weight Kg/m ²	Outside walls bolt distances, sigle - span system Wall Height to 8 m to 8 - 20 m		
					0.5 + 0.5	Appx. m	Appx. m					Appx. m	0.5 + 0.5	Appx. m
IZOCOLD	40		0.53	9.92	3.00	2.50	2.00	120		0.18	13.12	8.00	6.00	5.50
	45		0.47	10.12	3.50	2.88	2.25	140		0.15	13.92	8.50	6.50	5.75
	60		0.35	10.72	5.00	4.00	3.00	150		0.14	14.32	9.00	7.00	6.00
	80		0.26	11.52	6.00	5.00	4.00	170		0.12	15.12	9.00	7.00	6.00
	100		0.21	12.32	7.00	5.50	5.00	200		0.11	16.32	10.00	7.50	6.50

The figures ar for 05.50 / 0.50 mm metal thickness.