URETHANE FOAM IN PLACE SNAP PANEL are continuous production line prefabricated panels, and are composed of two faces of prepainted galvanized steel, bonded to a core of rigid polyurethane (PUR) or polyisocyanurate (PIR) foam, for-ming a sandwich type element with tongue and groove joints.

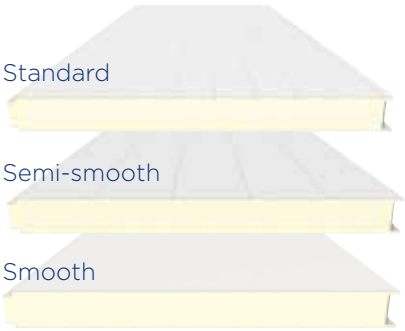
URETHANE FOAM IN PLACE SNAP PANEL panels are specially designed for use in all types of projects related to the agrofood industry, from transport, handling and storage through to the freezing and deep-freezing of foods.

URETHANE FOAM IN PLACE SNAP PANEL

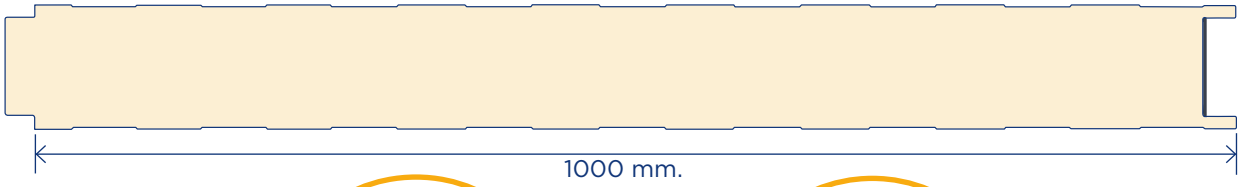
URETHANE FOAM IN PLACE SNAP PANEL offers various different configura-tions according to the project they will be used in. They come in six different thicknesses, three outer ribbing designs and two inner ribbing designs, as well as a wide range of available colours. Additiona-lly, **URETHANE FOAM IN PLACE SNAP PANEL** also offers the option of panels manufactured with PIR (polyisocyanurate) self-extin-guishing foam with a B-s1, d0 certification under Eu-roclasses (UNE-EN 13501).

URETHANE FOAM IN PLACE SNAP PANEL

TECHNICAL SPECIFICATIONS



	STANDARD	VALUES
Panel thickness		50, 60, 80, 100, 120, 150 mm.
Usable width		1.000 mm.
Length		Up to 16,000 mm. (máx. recommended 9,000 mm.)
Field of application		Cold stores
Outer face thickness	EN10346	0,4 / 0,5 / 0,6 / 0,7 mm
Inner face thickness	EN10346	0,4 / 0,5 / 0,6 / 0,7 mm
Coatings (see section on Finishes)		Polyester 25um
		PVDF 25um / 35um
		Granite HDX / SDP 50
		PVC imitation wood (interior use)
		PET (foods sector)
Outer ribbing		Standard / Semi-smooth / Smooth
Inner ribbing		Standard / Smooth
Core type		Polyurethane (PUR)
		Polyisocyanurate (PIR)
Core Density	EN1602	40 Kg/m³
Thermal Transmission	EN13165	0,022 W/m K
Tensile strength	EN1607	> 0,080 Mpa
Compressive strength	EN826	> 0,100 Mpa
Flexural strength		> 0,100 Mpa
Reaction to fire		Cs3d0/Bs2d0/Bs1d0
Water permeability		Class A



Details of overlap:

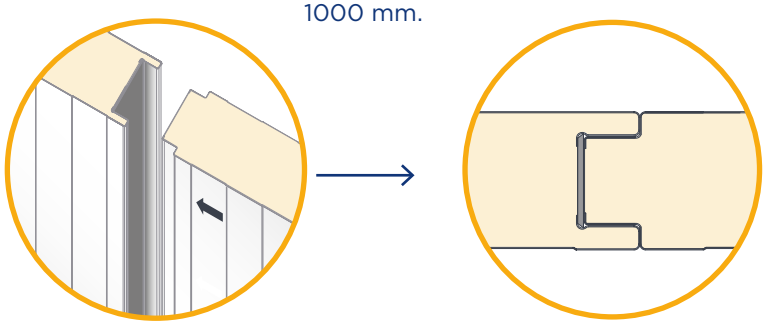


Table of thermal conductivity and thermal resistance of the panels (allowing for air film)

Panel Thickness mm	Weight Kg/m²	Metric System			Imperial system	
		Thermal Transmission (U)		Thermal resistance (R)	Thermal Transmission (U)	Thermal resistance (R)
		Kcal /m² h ºC	w/m² k	(m² k/w)	BTU/Hr ft² ºF	Hr ft² ºF/BTU
50	10,64	0,39	0,45	1,22	0,062	16,13
60	11,04	0,33	0,38	2,63	0,050	20,00
80	11,84	0,25	0,29	3,45	0,042	23,81
100	12,64	0,21	0,24	4,17	0,032	31,25
120	13,44	0,17	0,20	5,00	0,026	38,46
150	14,64	0,14	0,16	6,25	0,022	45,45

Functions and benefits of **URETHANE FOAM IN PLACE SNAP PANEL**

Excellent aesthetics.

High thermal insulation capacity.

High mechanical strength.

High dimensional stability.

Water vapour tight.

Resistant to aggressive environments.

A versatile material that allows any configuration.

Quick to install and easy to maintain (easy to clean).

Easily removable and can be reused.

Made to measure, avoids waste.

Made with recyclable materials.

AFITI LICOF

Reaction to fire:

B-s1, d0

Intertek **ATSM E84 Class A**

CE

Permissible Loads (Kg/m²)

Panel thickness mm	(L) Span Distance in cm. Calculations based on panel 0,50 mm/0,50 mm.														
	150	175	200	225	250	275	300	325	350	375	400	450	500	550	600
50	346	283	237	201	172	149	130	114	100	89	79				
60		351	294	241	216	188	165	145	128	114	102	82			
80			412	353	307	268	237	210	188	168	152	124	103	86	72
100						351	312	278	249	225	203	168	141	119	101
120							388	347	313	283	257	214	180	153	131
150								453	410	372	339	285	242	207	179

* Load uniformly distributed over 3 or more supports (F < L/200).

Assembly and erection of cold stores

Basic assembly instructions:

- The ground on which the sandwich panels are to be set up should be completely flat, clean and smooth.
- Once the panels are installed, the verticality (walls) and horizontality (ceilings and roofs) should be checked, and any deviations corrected.
- The system of vertical jointing between panels is effected by pressure on the tongue and groove joint, with the panels being brought flush to each other.
- The wall-ceiling junction should be carried out strictly following the instructions provided (see technical details on page 83), with special attention being paid to cuts that are made, when these may be necessary, to create the junction
- When the joint between panels does not by itself have sufficient capacity to prevent the formation of condensation or ice, a sealant is applied in that area; this could be silicone (for air- and water- tightness), butyl (for water vapour tightness) or foam injected in situ (to reduce the thermal bridge between the panels).
- The fixing of roof panels attached to building structures should be performed using connector rods or guy wires. The building structure must be designed to withstand both its usual loads and those due to the weight of the panels themselves.
- The maximum length of the vertical or horizontal spans, as well as the maximum permissible loads on the panels, should comply with those specified (see table on admissible loads page 41) for the type of panel to be used.
- Refrigerating equipment and accessories must not be directly hung from the panels, but require a separate support system.
- Avoid the use of cutting discs, as these may produce metal shavings which can stick to the panel surfaces and cause oxidation problems. If cutting discs must be used, ensure the complete removal of all metal shavings.
- Check that appropriate screws for the required structure are used.
- Remove the protective plastic coating from the panels.
- Ensure that any possible scratches the outer face may suffer are correctly repaired.
- Check that individual points are properly sealed.

Table of minimum recommended thicknesses for insulation

Type of coldroom	Temperature range ºC	Interior coldroom			Exterior coldroom		
		Floor	Wall	Ceiling	Floor	Wall	Ceiling
Coldstore	+15 a +10	NO	50 mm	50 mm	NO	50 mm	50 mm
	+15 a +4	NO	50 mm	50 mm	NO	50 mm	60 mm
	+4 a -4	50 mm	60 mm	60 mm	50 mm	80 mm	80 mm
Freezer	-4 a -10	60 mm	80 mm	80 mm	60 mm	80 mm	100 mm
	-10 a -18	80 mm	100 mm	100 mm	80 mm	100 mm	100 mm
	-18 a -26	100 mm	100 mm	100 mm	100 mm	100 mm	120 mm
	-26 a -40	100 mm	120 mm	120 mm	120 mm	120 mm	120 mm
Blast freezer	-40 a -46	120 mm	120 mm	120 mm	120 mm	150 mm	150 mm

Maintenance of a cold store

- At least every six months, check the state and tension of the ceiling fastening tensors, as well as cleaning them.
- The panel surfaces can be washed with a mixture of tap water and a neutral agent, then rinsed with running water and dried.
- Check the water collection channels once a year, ensuring that they are clean and in good condition.
- Check the condition of the sealing elements once a year.