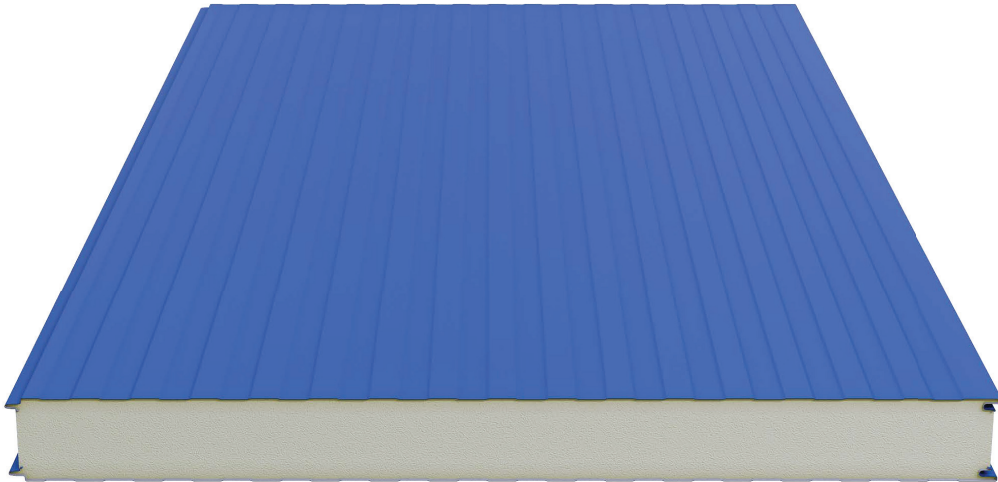


1100 CS - UK Cold Store Panel



Product Description

Assan Panel UK CS product can be used in cold rooms thanks to its special paint used on its surface, which provides complete protection against bacteria. It provides a strong joint with its double-sided tongue and groove cross-section, offering an advantage in thermal insulation. It can be applied to both facade and ceiling cladding of cold storage facilities.

Production Location

UK

Product Application

- Fruit and Vegetable Facilities
- Dairy and Ice Cream Facilities
- Poultry and Seafood Processing Plants
- Slaughterhouses and Meat Processing Plants
- Cold Storage Warehouses

Performance Advantages

Provides ideal thermal insulation with thinner panels compared to alternative insulation materials.

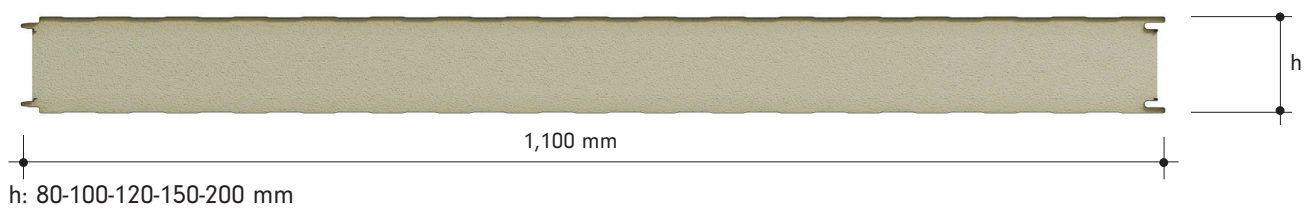
Fast and problem-free assembly saves time and labor.

The colorful surface eliminates the need for additional coatings like plaster and paint.

Color options available in the RAL catalogue.

Surface paint options available according to application (Polyester, PVDF, Plastisol, PVC).

Measurements



Modular Width	1,100 mm
Minimum Length	3 m
Maximum Length	Depends on transport conditions.

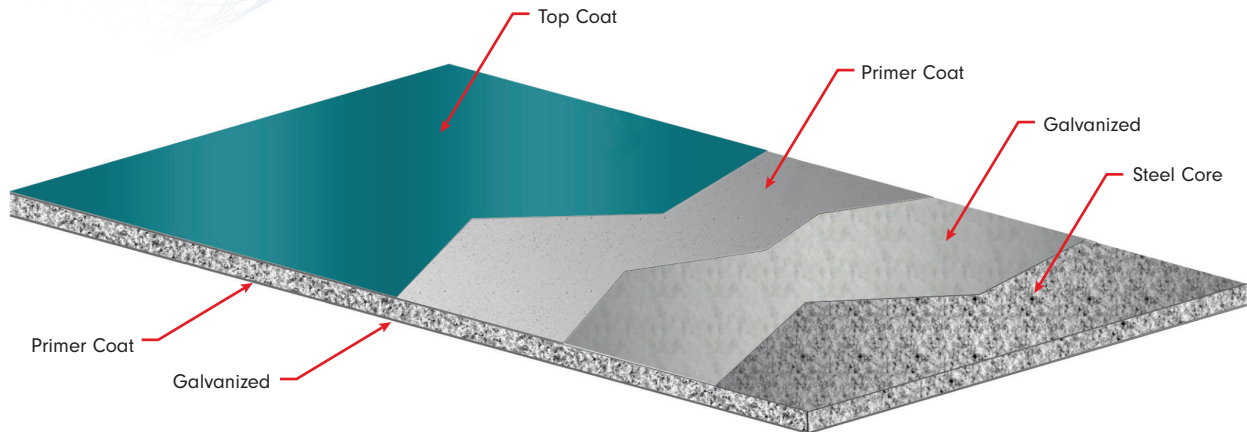
SmartCore – PIR Properties

Density (EN 1602)	PIR: 40 (± 2) kg/m ³ & SmartCore-PIR Elite: 41 (± 2) kg/m ³
Thickness	40-50-60-80-100-120-140-160-180-200 mm
Thermal Conductivity (EN 13165)	PIR Elite-PIR: 0.022-0.024 & SmartCore: 0.018-0.019 W/mK
Reaction to Fire (13501)	PIR Elite: B-s1,d0 & PIR: B-s2,d0

Coefficient of Thermal Conductivity for PIR

PUR/ PIR	U CS panel	Temperature Difference Between Inside and Outside (°C)														
		10	15	20	25	30	35	40	45	50	55	60	65	70	80	90
(mm)	(W/m ² K)															
80	0.275	2.75	4.13	5.50	6.88	8.25	9.63	< 10 W/m ²								
100	0.220	2.20	3.30	4.40	5.50	6.60	7.70	8.80	9.90	< 10 W/m ²						
120	0.183	1.83	2.75	3.67	4.58	5.50	6.42	7.33	8.25	9.17	< 10 W/m ²					
150	0.147	1.47	2.20	2.93	3.67	4.40	5.13	5.87	6.60	7.33	8.07	8.80	9.53	< 10 W/m ²		
200	0.110	1.10	1.65	2.20	2.75	3.30	3.85	4.40	4.95	5.50	6.05	6.60	7.15	7.70	8.25 < 10 W/m ²	

Metallic Surface



Prepainted Galvanized Steel Surface

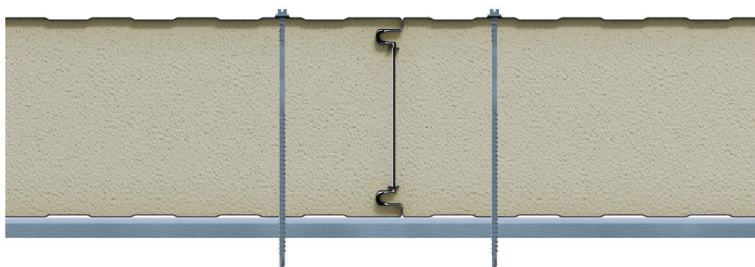
Metal Type	Prepainted Galvanized Steel
External Facing Thickness	0.50-0.80 mm
Internal Facing Thickness	0.40-0.80 mm
Thickness Tolerance (EN 10143)	Nominal
Steel Quality (EN 10327)	S Grade (S220GD+Z, S250GD+Z, S280GD+Z, S320GD+Z, S350GD+Z)
Paint Type	Polyester, PVDF, Plastisol

*Steel surface form can be as flat form if requested by the customer.

Tolerance Values

Panel Length	Panel Thickness	Panel Cover Width	Rectangularity
If $L \leq 3,000$ mm ± 5 mm If $L > 3,000$ mm ± 10 mm	$D \leq 100$ mm ± 2 mm	± 2 mm for all profiles	$s \leq 0.6\%$ of the nominal cover thickness (w). / (Width x 0.006)

Joint Details



Optimal thickness is determined under values of 10 W/m² thermal conductivity.

Self Supporting Internal Wall Spans

	Core Thickness (mm)				
	80	100	120	150	200
CS Wall Panel	6.30 m	7.00 m	7.70 m	8.60 m	10.00 m

Notes:

0.50 mm internal and 0.50 mm external facing metal thickness considered.

External +25°C and internal 0°C, Δt : 25°C temperature difference is considered.

The maximum allowable spans have been calculated with 0.3 kN/m² as an internal air pressure. Maximum deflection: short term: L/100 / long term: L/100.

Self Supporting Internal Ceiling Spans

	Core Thickness (mm)				
	80	100	120	150	200
CS Ceiling Panel	5.70 m	6.40 m	7.00 m	7.70 m	8.70 m

Notes:

0.50 mm internal and 0.50 mm external facing metal thickness considered.

External +25°C and internal 0°C, Δt : 25°C temperature difference is considered.

The maximum allowable spans have been calculated with 0.25 kN/m² as a maintenance load. Maximum deflection: short term L/200 / long term: L/100.

General Notes:

- 1 Values have been calculated using the method described in EN 14509: 2013 – self-supporting double skin metal faced insulated panels.
- 2 In order to conduct the calculations some data from table E6 and rates originating from table E8 stipulated in a standard EN 14509 were applied.
- 3 All panel thicknesses have been calculated with a minimum support width of 50 mm, larger support widths are available.
- 4 The ability of the panel to resist the imposed load, is dependent on the end support connection i.e. support bearing width, number of fasteners used and the support thickness, as well as the type of fastener.
- 5 Wall and ceiling panel fixing systems and the supporting framework shall be designed and installed to avoid serious progressive collapse in the event of accidental damage.
- 6 Excessive loading on the insulating panels in areas such as those occupied by control equipment shall be avoided; suitable walkways, supported by the structural frame, should be provided above the insulation panels.
- 7 The ability of the panel to resist the imposed load is dependent on the end support connection, i.e. support bearing width, number of fasteners used and the support thickness as well as the type of fastener.
- 8 These tables apply to short term imposed loads on simply supported panels (supported at each end of the panel) generally used for ceilings.
- 9 Please note that the load–span tables are for informative purposes only. For project-specific and exact calculations, kindly contact the Marketing Department.

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