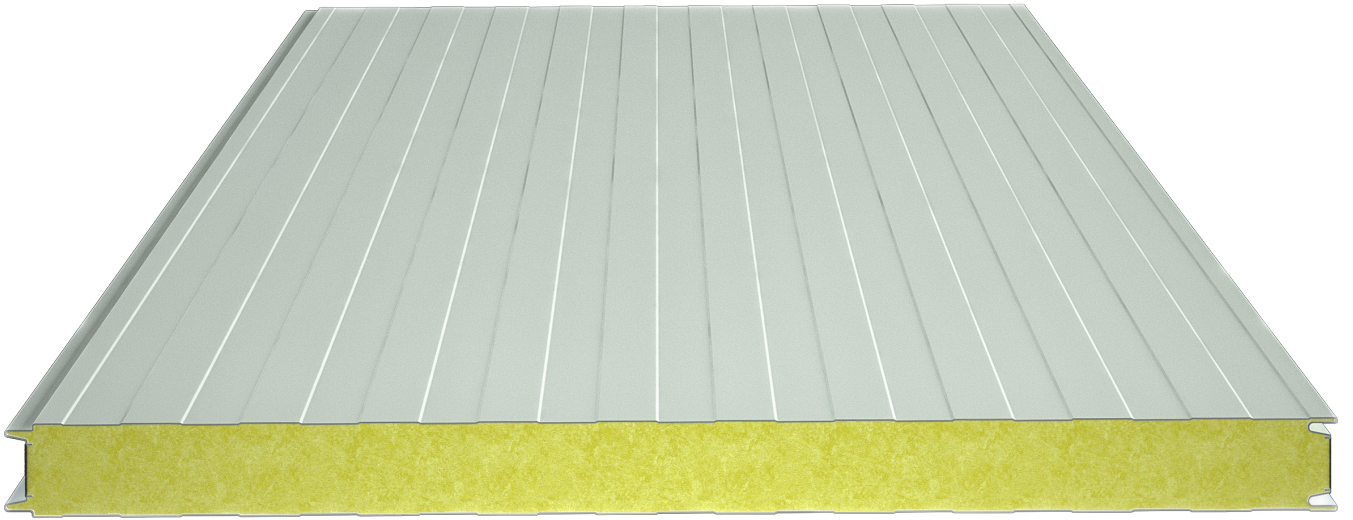


CS Cold Storage Panel



Product Description

The Assan Panel CS product can be used in cold storage rooms with the specially painted surface that provides full protection against bacteria. They provide an advantage in thermal insulation with strongly fitting double tongue-and-groove joints. In addition to cold storage wall coatings they are applicable as ceiling coatings.

Production Location

Istanbul, İskenderun

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 polyurethane structure does not retain water and allow bacteria and pests to develop.

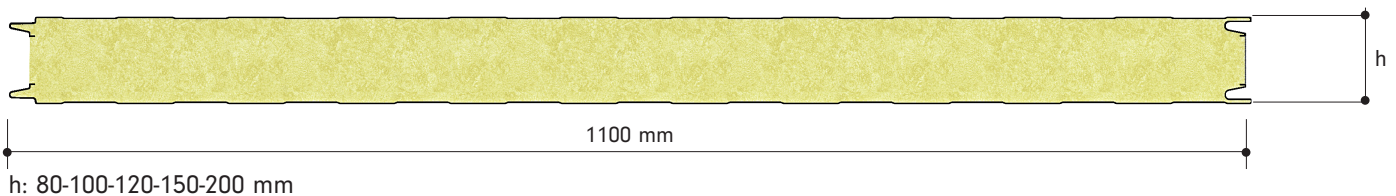
The use of n-Pentane gas in inflating polyurethane prevent environmental damage.

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



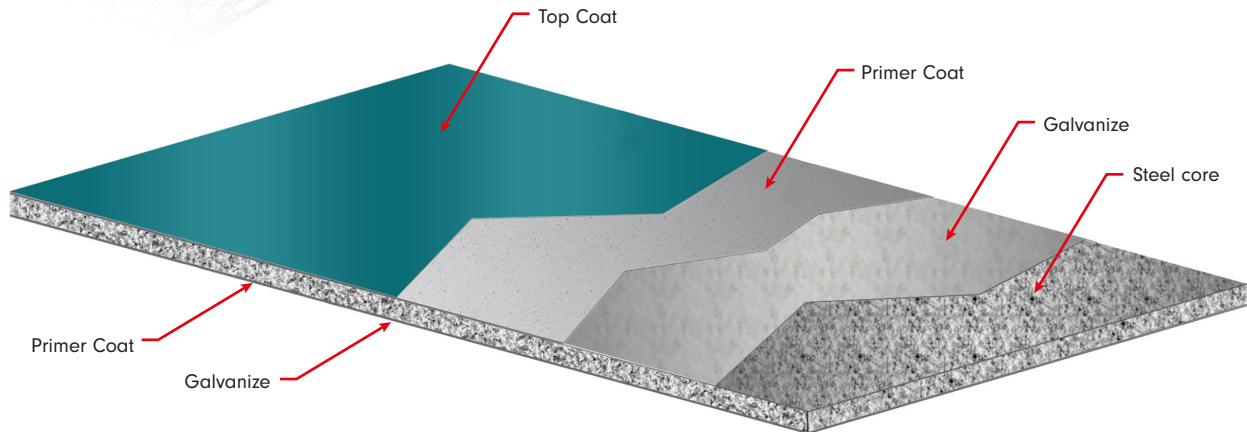
Modular Width	1100 mm
Minimum Length	3 m
Maximum Length	Depends on transport conditions.

(PUR) – Polyisocyanurate (PIR)



Polyurethane Density (EN 1602)	40 (±2) kg/m ³
Polyurethane Thickness	80-100-120-150-200 mm
Thermal Conductivity (EN 13165)	0,022-0,024 W/mK
Dimensional Stability (EN 13165)	Level DS(TH) 11
Reaction to Fire (13501)	B. S2 . d0
Water Absorption (EN ISO 354)	By Volume 2% (168 hours)
Closed Cell Percentage (EN 14509)	95%
Vapour Diffusion Resistance (EN 12086)	30-100
Heat Resistance	-200 / +110 °C

Metallic Surface



Prepainted Galvanized Steel Surface

Type	Prepainted Galvanized Steel
External Facing Thickness	0,50-0,70 mm
Internal Facing Thickness	0,40-0,70 mm
Thickness Tolerance (EN 10143)	Nominal
Steel Quality (EN 10327)	Dx51 D+Z Prepainted Galvanized Steel (last coat polyester paint on primer)
Hot Dipped Coated Steel Grade (EN 10327)	100-275 gr/m ²
Paint Type	Polyester, PvdF, Plastisol, PVC

Installation Lengths

External Sheet Thickness (mm)	Internal Sheet Thickness (mm)	PUR (mm)	Max. Wall Length (m)	Ceiling Span (m)
0,50	0,50	80	6,5	4
0,50	0,50	100	8	5
0,50	0,50	120	10	6
0,50	0,50	150	12	7
0,50	0,50	200	13	8

Coefficient of Thermal Conductivity

		Temperature Difference Between Inside and Outside (°C)														
PUR	U CS panel	10	15	20	25	30	35	40	45	50	55	60	65	70	80	90
(mm)	(W/m²K)															
80	0,2470	2,5	3,7	4,9	6,2	7,4	8,6	9,9	< 10 W/m²							
100	0,1993	2,0	3,0	4,0	5,0	6,0	7,0	8,0	9,0	< 10 W/m²						
120	0,1670	1,7	2,5	3,3	4,2	5,0	5,8	6,7	7,5	8,3	9,2	< 10 W/m²				
150	0,1343	1,3	2,0	2,7	3,4	4,0	4,7	5,4	6,0	6,7	7,4	8,1	8,7	9,4	< 10 W/m²	
200	0,1013	1,0	1,5	2,0	2,5	3,0	3,5	4,1	4,6	5,1	5,6	6,1	6,6	7,1	8,1 < 10 W/m²	

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

Mechanical Properties

Steel Faces Yield Strength	min. 220 N/mm ²
Tensile Strength of Panel	min. 0,018 Mpa
Panel Tensile Modulus at Elevated Temperature	min. 0,04 Mpa
Shear Strength of Core Material	min. 0,11 Mpa
Shear Modulus of Core Material	min. 1,5 Mpa
Compressive Strength of Core Material	min. 0,095 Mpa
Compressive Strength of Core Material	min. 0,095 Mpa

According to TSE EN 14509 .

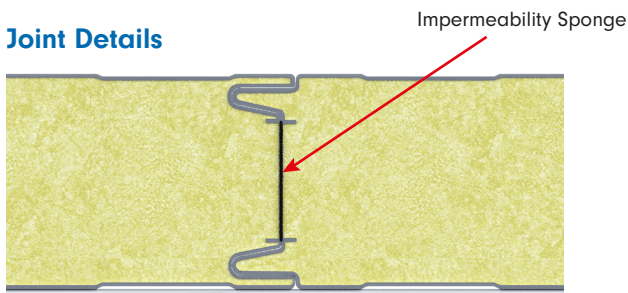
Tolerances

Panel Length	Panel Thickness	Panel Cover Width	Rectangularity
If L≤3000 mm., ±5mm If L>3000 mm, ± 10mm	D ≤ 100mm ±2mm	± 2mm for all profiles	0.6% of s ≤ nominal cover thickness (Width x 0.006)

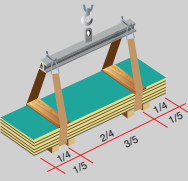
Standard Color Options

RAL 3009	RAL 5010	RAL 5018	RAL 6021	RAL 7016	RAL 9002	RAL 9006
						

Joint Details



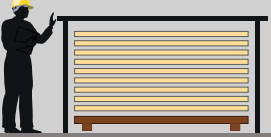
Transportation and Protection of Sandwich panel



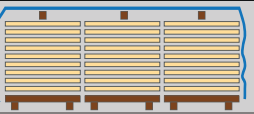
During hoisting take precaution for the sling.



Do not drag panel's in a pile, or on the roof purlins. Lift panel's from both ends when moving or laying in place.



Panel's to be stored on site for long periods should be stacked in covered areas. Wherever possible, always place stacks preferably on wooden wedges, against ground water.



For shorter periods stacks should be arranged on sloppy areas with a simple scaffolding and polyethilen coverleaving space for ventilation. Place stacks on a simple wedge.



Do not walk on panels.