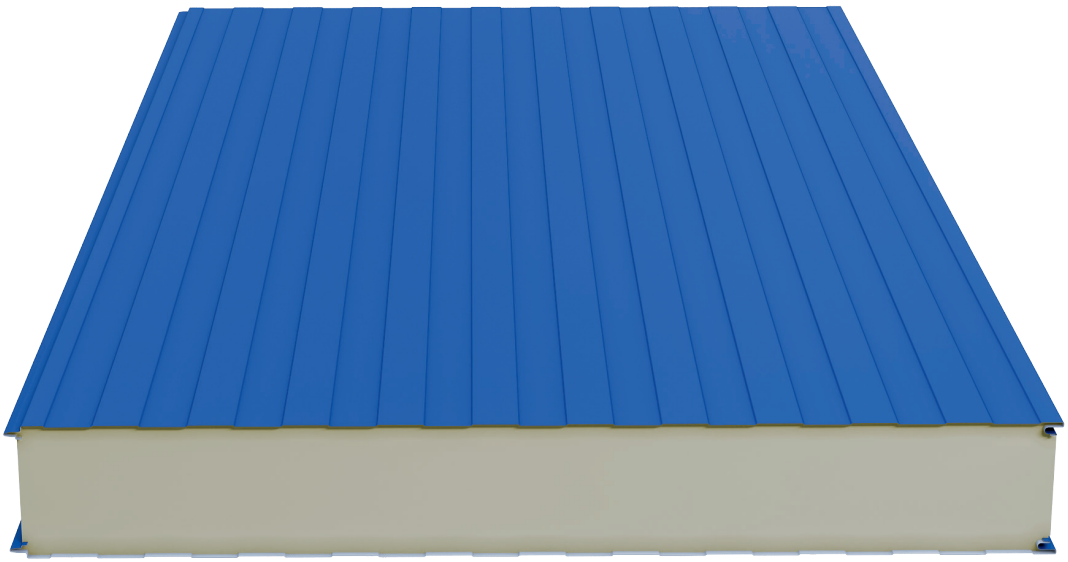
CS Cold Storage Panel – TZL



Product Description

The Assan Panel CS products 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 doubletongue-and-groove joints. In addition to cold storage wall coatings they are applicable as ceiling coatings.

Production Location

Istanbul

Product Application

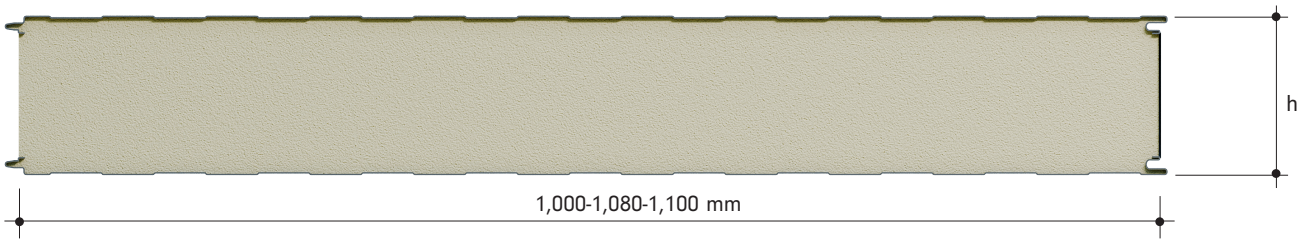
- Fruit and Vegetable Facilities
- Dairy and Ice Cream Facilities
- Poultry and Seafood Processing Plants
- Slaughterhouses and Meat Processing Plants
- Cold Storage Warehouses

EN.PRO.CST.03

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



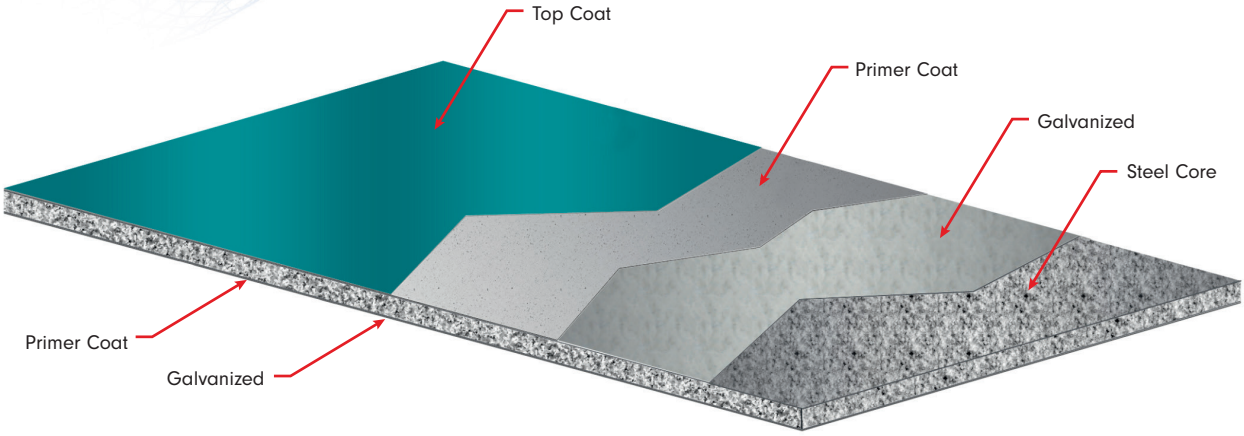
h: 50-80-100-120-150-200 mm

Modular Width	1,000-1,080-1,100 mm
Minimum Length	3 m
Maximum Length	Depends on transport conditions.

SmartCore – PIR Elite – PIR

Density (EN 1602)	PIR: 40 (± 2) kg/m^3 & SmartCore-PIR Elite: 41 (±2) kg/m^3
Thickness	50-80-100-120-150-200 mm
Thermal Conductivity (EN 13165)	PIR Elite-PIR: 0.022-0.024 & SmartCore: 0.019 W/mK
Dimensional Stability (EN 13165)	Level DS (TH) 11
Reaction to Fire (EN 13501)	PIR Elite: B-s1,d0 & PIR: 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

Metal Type	Prepainted Galvanized Steel
External Facing Thickness	0.35-0.80 mm
Internal Facing Thickness	0.35-0.80 mm
Thickness Tolerance (EN 10143)	Nominal
Steel Quality (EN 10327)	DX51 D+Z Prepainted Galvanized Steel (last coat polyester paint on primer)
Paint Type	Polyester, PVDF, Plastisol, PVC

Installation Lengths

External Sheet Thickness (mm)	Internal Sheet Thickness (mm)	PIR (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/ PIR	**U CS panel**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**50**	**55**	**60**	**65**	**70**	**80**	**90**
(mm)	**(W/m²K)**															
50	**0.44**	4.4	6.6	8.8	< 10 W/m²											
80	**0.275**	2.75	4.13	5.50	6.88	8.25	9.63	< 10 W/m²								
100	**0.220**	2.20	3.30	4.40	5.50	6.60	7.70	8.80	9.90	< 10 W/m²						
120	**0.183**	1.83	2.75	3.67	4.58	5.50	6.42	7.33	8.25	9.17	< 10 W/m²					
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/m²		
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/m²	

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

Mechanical Properties

Steel Faces Yield Strength	min. 220 N/mm^2
Shear Strength of Core Material	min. 0.11 MPa
Shear Modulus of Core Material	min. 2.0 MPa
Compressive Strength of Core Material	min. 0.095 MPa
Yield Coefficient	t: 1,000 hours min. 0.04 MPa t: 2,000 hours min. 0.03 MPa t: 100,000 hours min. 0.01 MPa
Shear Strength After Long-Continued Loading	t: 1,000 hours min. 0.04 MPa t: 2,000 hours min. 0.03 MPa t: 100,000 hours min. 0.01 MPa
Bending Moment Capacity in Span	min. 2,3 KNm/m (Upwards) min. 2,0 KNm/m (Downwards)
Torsion Stress in Span	min. 100 MPa (Downwards) min. 115 MPa (Upwards)

According to TS EN 14509

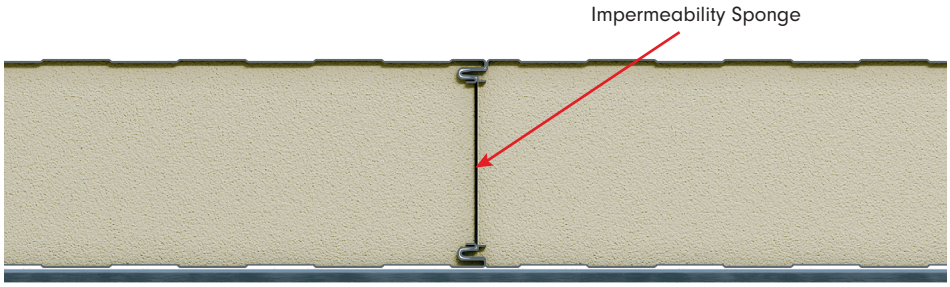
Tolerances

Panel Length	Panel Thickness	Panel Cover Width	Rectangularity
If L < = 3,000 mm ± 5 mm If L > 3,000 mm ± 10 mm	D ≤ 100 mm ± 2 mm	± 2 mm for all profiles	0.6% of s ≤ nominal cover thickness (Width x 0.006)

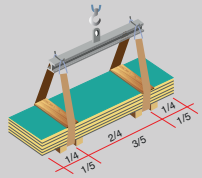
Standard Color Options

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

Joint Details

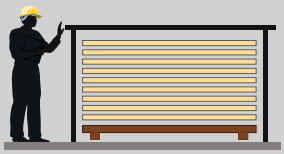


Transportation and Protection of Sandwich Panel

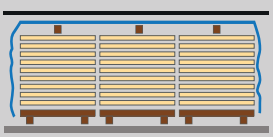


During hoisting, take precaution for the sling.

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



Panels to be strored 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 cover, leaving space for ventilation. Place stacks on a simple wedge.

Do not walk on panels.