

InsuPanel

1-sided or 2-sided with FRP Euroclass E / B,s2-d0

Description

InsuPanel is a combined panel.

InsuPanel is compliant with HACCP regulation and the connection is made with a seamless joint (HygiSeal, for more information see technical data sheet of HygiSeal 3.1) or with an omega profile.

It is composed of 2 parts :

- **Part I** = PIR insulation board covered on both sides with a multi-layer, gas-tight laminate
- **Part II** = FRP sheet Euroclass E / Euroclass B,s2-d0

Application

For renovation and new-build.

Because of the weight ideal for the renovation of ceilings.

Advantages

- Resistant to many chemicals
- Resistant to many living organisms (fungi, bacteria, insects, vermin,)
- Sound-insulating

Performance

Temperature range: -60°C / +100°C (suitable profiles are required above 60°C)

Technical data

Part I = PIR insulation board

Width:	1.200 mm
Thickness:	30 - 40 mm with straight edges 60 - 80 - 100 mm with hidden joint (tongue-groove)
Maximum length:	3 m
Tolerance:	thickness: ± 2 mm (<50 mm) ± 3 mm (50-75 mm) +5 / -3 mm (>75 mm)
	width: ± 1 mm
	length: ± 3 mm
Panel material:	PIR
Density:	density of PIR is of 40 kg/m ³ or 38 kg/m ³
Thermal conductivity of the PIR foam (NBN EN 12667):	$\lambda = 0,023 \pm 0,003$ W/mk
Thermal resistance:	Rd = 1.30 m ² .K/W for 30mm Rd = 4.30 m ² .K/W for 100mm
Dimensional stability (NBN EN 1604):	48h, 70°C, 90%RV DS(70,90)3: $\Delta e_{l,b} \leq 2$ / $\Delta e_d \leq 6$ 48h, -20°C DS(-20,-)1: $\Delta e_{l,b} \leq 1$ / $\Delta e_d \leq 2$
Compressive strength (strength at 10% deformation, NBN EN 826):	CS (10\Y)150 ≥ 150 kPa (1,5 kg/cm ²)
Tensile / flexural strength:	TR80 ≥ 80 kPa
Classification of Fire Reaction:	C-s3,d0 or B-s2,d0

Part II = FRP sheet , glued on 1 side

The FRP sheet is a glass fiber reinforced composite polyester sheet, opaque, available with a smooth or embossed surface.

- Hardness: 30 - 40 (according to Barcol unit)
- Impact Resistance : 180 J/m
- Fire Classification : available in Euroclass E and Euroclass B,s2-d0
- Color : White - RAL 9016
- Surface structure : embossed or smooth
- Sides: straight
- Thickness :

Euroclass E:	embossed:	2.3 mm
	smooth:	2 mm
	smooth mat:	2 mm
Euroclass B,s2-d0:	embossed:	2.3 mm
	smooth:	2.3 mm
	smooth mat:	2.3 mm

For additional technical information see the technical data sheet of FRP-sheets.

Characteristics

 <i>Food safe</i>	 <i>Economical Ecological</i>	 <i>Chemical resistant</i>	 <i>Anti-fungal Anti-bacterial</i>	 <i>Water- and dirt resistant</i>	 <i>Non-corrosive</i>	 <i>Easy to clean</i>	 <i>Assumes no odors</i>
 <i>High impact- and scratch proof</i>	 <i>Quick and easy to install</i>	 <i>Cooled and heated spaces</i>	 <i>Optional fire retardant, standard Euroclass E</i>	 <i>Doesn't discolour</i>	 <i>Anti-graffiti</i>	 <i>Easy reparable</i>	 <i>All RAL colours, standard RAL 9016 (Hygienic white)</i>

- FOOD-SAFE & accepted by HACCP, IFS ,EU, BRC, FDA, USDA, ...



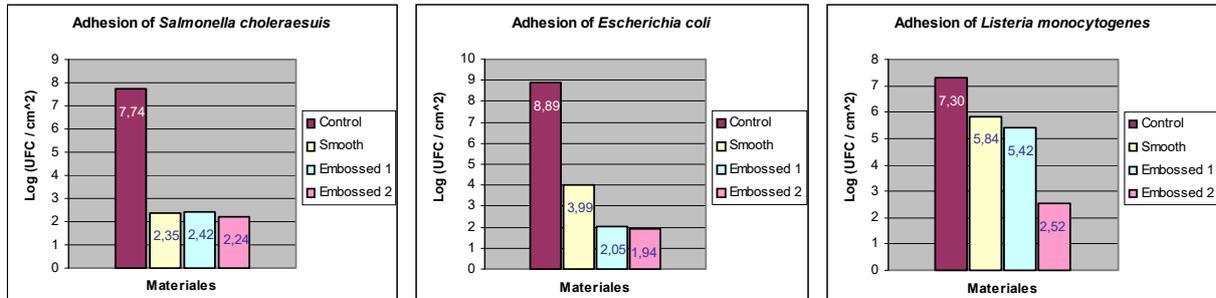
- Afsset (A+) – Greenguard certificate (lowest possible emissions in the interior)



'Bacterial adherence to covering materials in food industry' study

Performed by the university of Vigo (full report on demand)

- control material = RVS (AISI 304)
- smooth = FRP smooth surface
- embossed 1 = FRP embossed surface, discontinued
- embossed 2 = FRP embossed surface, the currently available FRP sheet



Consumption

- Hard Fix Glue / m²: 600 cc with line bonding
- Food Safe sealant White / m²: 150 cc
- HygiSeal / m: 40 - 50 cc

Mounting

- Glued to the surface with Hard Fix Glue
- Joints made by HygiSeal (seamless joint) or with an omega profile
- For ceilings an additional nylon plug is used

