

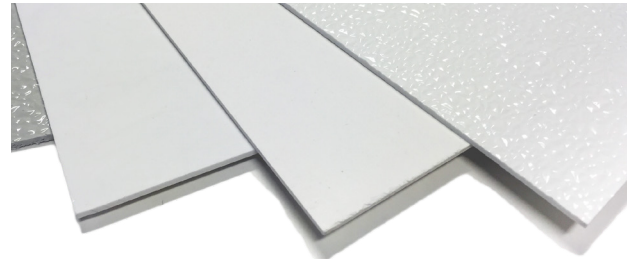
FRP POLYESTER SHEET

Product description

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

The Polysto FRP sheet is the base for the products Renopanel, RenoCemPanel, Insupanel, HygiCeil and HygiWall.

IDEAL FOR BOTH NEW-BUILD AND RENOVATION!



Applications

Hygienic protection for smooth or slightly damaged walls in:

food processing plants, bakeries, meat processing, industry and butcheries, restaurants and mass caterings, fish factories and stores, milk and cheese industry, slaughter houses for cattle and poultry, hatcheries and egg processing companies, clean rooms, cold rooms, hotels, hospitals, public buildings (schools, kitchens, toilets,...), transportation (bus stations, subway, train stations, airports, ...), health clubs and amusement parks, sports and training facilities (changing rooms and showers), commercial buildings (shopping centers...), fuel stations, car and truck wash, garages, chemical and petrochemical industry, hygienic locks, laboratories, beer and beverage industry, marine applications like fisher vessels, oil platforms, truck lorries, containers, traffic signs,



Characteristics



Food safe



Economical
Ecological



Chemical
resistant



Anti-fungal
Anti-bacterial



Water- and
dirt resistant



Non-
corrosive



Easy
to clean



Assumes
no odors



High impact-
and
scratch proof



Quick and
easy
to install



Cooled and
heated
spaces



Optional
fire
retardant,
standard
Euroclass E



Doesn't
discolour



Anti-graffiti



Easy
reparable



All RAL colours,
standard
RAL 9016
(Hygienic white)

Technical data

FRP surface	Embossed			Smooth (+ film)			Smooth Matt		
Standard dimensions Euro class E	Lenght (m)	Width (m)	Sqm (m ²)	Lenght (m)	Width (m)	Sqm (m ²)	Lenght (m)	Width (m)	Sqm (m ²)
	2.5	1.2	3	2.5	1.2	3	2.6	1.2	3.12
	2.75		3.3	3		3.6	3.6		
	3		3.6	3.5		4.2	4.2		
	3.5		4.2	4		4.8	4.8		
4	4.8								
Standard dimensions Euro Class B-s2, d0	Lenght (m)	Width (m)	Sqm (m ²)	Lenght (m)	Width (m)	Sqm (m ²)	Lenght (m)	Width (m)	Sqm (m ²)
	2.5	1.2	3	2.5	1.2	3	on demand	1.2	
3		3.6	3		3.6				
Other lengths	on demand, coils of 250m available								
Lenght/width tolerance	0.2 x 0.5 %								
Squareness	Panels are within 3.18mm of square								
Polyester thickness (bolt = standaard)	Euro class E	2.3 mm		Euro class E	2 mm		Euro class E	2 mm	
	Euro Class B-s2, d0	2.3 mm		Euro Class B-s2, d0	2.3 mm		Euro Class B-s2, d0	2.3 mm	
Thickness tolerance	approx. 10 %								
Weight/m ²	3 kg/m ²			3.2 kg/m ² for 2mm thickness, 3.52 Kg/m ² for 2.3mm thickness					
Colour	standard RAL 9016 (hygienic white), other colours on demand								
Fire class	Euro class E or Euro Class B-s2, d0								
Temperature range	-60 °C / +100 °C (suitable profiles are required above 60°C)								

Mechanical properties		Standard	Value	Unit of measurement
	Traction strength	ASTM D-638		314
Tensile strength	36273			
Flexural strength	ASTM D-790		694	
Bending unit			17360	
Compression strength	ASTM D-695		750	
Compression unit			7240	
Impact strength	ASTM D-256		180	J/m
Elongation	ASTM D-638		1.55	%
Linear expansion rate	ASTM D-696		0.025	mm/m°C
Physical properties	Hardness	ASTM D-2583	30 - 40	Barcol
	Thermal conductivity	ASTM C-177	0.23	W/m°K
	Water absorption	ASTM D-570	3/24 hrs. at 25 °C	%
	Opacity		96.5	minimal %
Fire properties	Fire classification	UNE-EN 13501-1:2019	Standard FRP = Euroclass E	Euroclass EN-13501-1
			Fire retardant FRP = B,s2-d0	
Electrical properties	Dielectric constant (60 Hz)	ASTM D-150	5.2	-
	Loss tangent (60 Hz)	ASTM D-150	0.03	-
	Electrical strength	ASTM D-149	35	KV / inch
	Arc resistance	ASTM D-495	120	seconds

Polysto FRP-sheets contains < 0.06% styrene after production.

Chemical properties

Chemical agent	Concentration %	Temperature °C	Resistance
Linseed oil	100 %	70 - 90 °C	Resistant
Lubricant oil	100 %	60 - 80 °C	Resistant
Mineral oil	100 %	60 - 80 °C	Resistant
Acetic acid	10 %	40 - 60 °C	Resistant
Acetic acid	25 %	30 - 50 °C	Resistant
Acetic acid	50 %		Not resistant
Acetic acid	100 %		Not resistant
Butyric acid	45%	20 - 30 °C	Resistant
Stearic acid	100 %	60 - 70 °C	Resistant
Hydrofluoric acid	30 %		Not resistant
Formic acid	10 %	20 - 30 °C	Resistant
Phosphoric acid	10 %	40 - 50 °C	Resistant
Phosphoric acid	80 %	30 - 40 °C	Resistant
Lactic acid	10 %	40 - 60 °C	Resistant
Lactic acid	50 %	30 - 40 °C	Resistant
Nitric acid	0 - 5 %		Resistant
Sulfuric acid	10 %	30 - 40 °C	Resistant
Sulfuric acid	20 %	30 - 40 °C	Resistant
Sulfuric acid	50 %	20 - 30 °C	Resistant
Sulfuric acid	80 %	15 - 25 °C	Resistant
Sulfuric acid	100 %		Not resistant
Hydrogen peroxide	35 %	30 - 40 °C	Resistant
Ethyl alcohol	96 %	20 - 30 °C	Resistant
Methyl alcohol	100 %	20 - 30 °C	Resistant
Ammonia	1 : 10	20 - 30 °C	Resistant
Sodium bicarbonate	20 %	20 - 30 °C	Resistant
Ammonia carbonate	varias	20 - 30 °C	Resistant
Potassium carbonate	10 %	20 - 30 °C	Resistant
Sodium carbonate	10 %	20 - 30 °C	Resistant
Chloroform	100 %		Not resistant
Ammonia chloride	varias	60 - 80 °C	Resistant
Mercury chloride	varias	60 - 80 °C	Resistant
Sodium chloride	varias	60 - 80 °C	Resistant
Diethyl ether	100 %		Not resistant
Ethylenglycol	100 %	40 - 60 °C	Resistant
Phenol	varias		Not resistant
Diesel	100 %	50 - 70 °C	Resistant
Gasohol	100 %	50 - 70 °C	Resistant
Gasoline	100 %	50 - 70 °C	Resistant
Foods fat	100 %	70 - 90 °C	Resistant
Mineral fat	100 %	70 - 90 °C	Resistant
Sodium hypochloride	12,5 %	max. 60 °C	Resistant
Nafta	100 %	70 - 90 °C	Resistant
Caustic soda	0 - 5%		Resistant
Ammonia sulphate	varias	60 - 80 °C	Resistant
Sodium sulphate	varias	60 - 80 °C	Resistant
Sodium sulfite	varias	60 °C	Resistant
Sodium sulfide	varias	50 - 60 °C	Resistant

Approvals / classifications



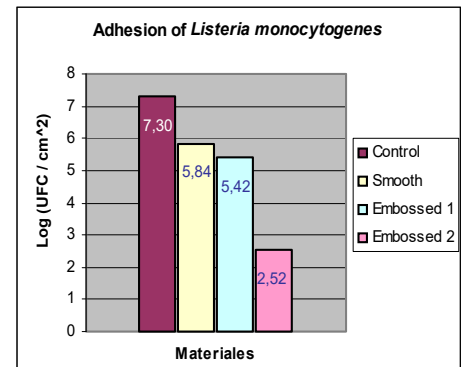
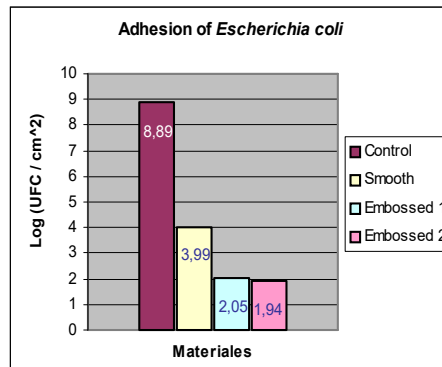
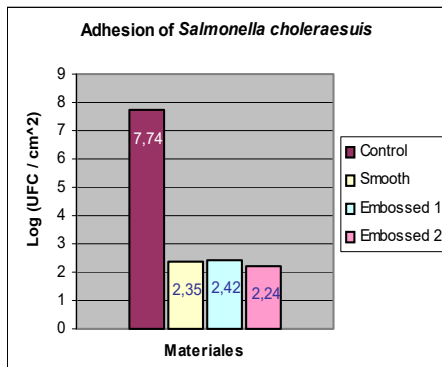
Afsset (A+) – Greenguard certificate (lowest possible emissions in the interior)



'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



Installation accessories

- Food Safe sealant White
- Hard Fix Glue
- HygiSeal (seamless connection)
- Profiles:
 - start/end
 - internal/external corner
 - wall/ceiling coving

Consumption

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



Preferred method with HygiSeal



Alternative method with profile



During installation

