



S.C. SWISSPOR S.A. - Sos. Centură Ploiesti-Est – Ploiesti – 107060 – Prahova County – Romania

EPS 100 LambdaRoof

TECHNICAL SHEET

Description

- LambdaRoof is a graphite foam with thermal conductivity by improved 20% (0,031 instead of 0,038 W/mk) compared to EPS 100.
- Polystyrene plates, rectangular, with smooth surface, without bumps and dimensional deviations, in addition to those prescribed.
- Destressed plates that will not "operate" in time, avoiding the formation of cracks.

Areas of use

- High performance thermal insulation composite systems (ETICS) according to SR EN 13499:2004.
- Insulation of pitched roofs, under the cover.
- Thermal insulation of uncircular terraces.
- Insulation of floors below floor or reinforced slabs.
- Insulation of refrigerating rooms.

Technical characteristics

Parameter	Class	Value	Method of determination
Limit deviation for length (mm)	L2	±2	SR EN 822/97
Limit deviation for thickness (mm)	T1	±1	SR EN 823/97
Limit deviation for width (mm)	W2	±2	SR EN 822/97
Limit deviation of perpendicularity (mm/m)	S2	±2	SR EN 824/97
Limit deviation of flatness (mm)	P5	5	SR EN 825/97
Dimensional stability under specified temperature and humidity conditions (%)	DS(70,-)1	≤1	SR EN 1604/98
Flexural strength (kPa)	BS 150	≥150	SR EN 12089/99
Compression effort at a deformation of 10% σ_{10} (kPa)	CS(10)100	≥100	SR EN 826/98
Dimensional stability under constant laboratory conditions (%)	DS(N)2	±0.2	SR EN 1603/98
Deformation under specified conditions for the compressive and temperature load (%)	DLT(1)5	≤5	SR EN 1605/98
Tensile strength perpendicular to faces (kPa)	TR10	≥150	SR EN 1607/99
Water absorption of long duration by total immersion (%)	WL(T)3	≤3	SR EN 12087/99
Water absorption of long duration by partial immersion (kg/m ²)	Wlp	≤0.5	SR EN 12087/99
Compressibility (mm)	CP2	≤2	SR EN 12431/02
Declared thermal conductivity λ_D 10° C (W/mK)	-	0.031	SR EN 12667/02
Resistance to water vapour diffusion	μ - resistance factor	30 - 70	SR EN 12086/99
	δ - water vapor permeability (mg/Pa*h*m)	0.010-0.024	
Reaction to fire class	Class E		SR EN 13501-1+A1/2010

Advantages

- Provides an insulation superior to traditional polystyrene products, even in conditions of a low thickness.
- No cracks are formed even in case of large thick insulations.
- High Elasticity
- 100% recyclable.
- Reduces considerably the heat losses from the housing, diminishing the transfer effect of the heat energy through infrared radiation.

Certifications

- The product is certified in accordance with the requirements of the standard SR EN 13163/2012, system 3 of attestation of conformity - Annex ZA.
- The product is subjected to a quality management system according to ISO 9001-2008, IQNET certificate No. RO9240.

Commissioning

- Is carried out in accordance with the technical norms and guidelines, complying with the rules of good practice specific to the thermal insulations with expanded polystyrene.
- The technical solutions addressed will take into account the need to protect the thermal insulation to ultraviolet radiation, at excessive temperatures combined with long lasting static loads greater than 5 kPa (500 kgf/m²).

Transport and storage

- Storage must be made in dry locations and protected from prolonged exposure to direct sun rays.
- During the application of the polystyrene on the facades heavily exposed to the sun, it will be protected with shading curtains.
- The product will be kept until use in the original package, protected from direct exposure to sunlight.
- Avoid the storage on the edge.



S.C. SWISSPOR S.A. - Sos. Centură Ploiesti-Est – Ploiesti – 107060 – Prahova County – Romania

EPS 100 LambdaRoof

TECHNICAL SHEET

Warranty terms

- SC SWISSPOR SA guarantees the physical characteristics of the products thus manufactured.
- Commercial warranty: 24 months (Law 449/2003), provided that the requirements of storage-handling are complied with.
- The guarantee of compliance: 10 years (Law 10/1995) of the reception of the commissioning, according to the law and according to the manufacturer's recommended applications.