

TECHNICAL DATA SHEET

DESCRIPTION OF LIGHT STONE

Expanded Polystyrene Hard Foam is a kind of insulation material obtained from petrol that is in the form of foam, thermoplastic taht has closed pore and typically white colour.

In the EPS (Expanded Polystyrene Hard Foam) product which is obtained with blowing up polystreene particles and then combination of these them, the gas used to blow up particles and obtain foam is "pentane". After providing formation of many small pores within particles, pentane replaces with air in a short period of time during the time of production and following the production. Thus, EPS is confined to stagnant air within the numbers (3-6 billion in 1m³ EPS) of very small closed porous cells in EPS plates. 98% of the material is still and dry air.

It is one of the other important reason to be economic, despite its high technical specifications, because production is not energy-intensive. Replacement of blowing gas with air in a very short period of time as well as active mechanical resistance provides the performance of product to be stable during the use life. Its thicknes does not becomes thin, its heat conductivity does not increase and no defromation occurs in its specifications.

In the stage of shaping (moulding) that's the last stage in in EPS production, tightly combination of particles is provided. Achievement of that application is seen through the honeycomb appearance of particles on the product surface.

PLACES OF USE

Expanded polistiren foam is commonly used for the insulation of constructions' side walls, terrace penthouses, ground floor and cellars against heat-cold, in the light prefabricated constructional elements, cooling facilities, commercial warehouses, dilata-tion and rain streams, transportation of glass and breakable product, packing, in the fishing sector as mould and advertising and decoration sector. In Its new form we started using EPS on exterior wall and building.

(LIGHT STONE) USES OF HEAT INSULATION PLATES

- Provides perfect heat insulation
- Lambda value (heat permeability coefficient) is in compliance with DIN 4102 standards
- It's not corrosive
- Resistant against chemicals
- Resistant against bacteria development
- It has a very good shock absorbtion feature
- It has a very small water absorbtion value. (With the additional acrylic coating we use, it becomes waterproof and fire proof)
- Very convenient for application
- It has infinite life
- Environmentalist
- Its use is common in our country and in the world
- It does not contain CFC that's harmful for ozone layer in it and in its production
- Recycling
- It is the preference of the world with optimum breating ability for internal insulation and external face thermal insulation appli-cations (coating) of constructions.
- Economical

5 cm The EQUIVALENT THICKNESS OF INSULATION AND BUILDING MATERIALS

	4.4 cm Polyurethane
	5 cm Expanded Polystyrene
	5 cm Glasswool (Levha - Plate 100) (2.5+2.5 cm)
	19 cm Heraklith
	26 cm Bims Brick
	31 cm Perlit Concrete - Plaster
	31 cm Gas Concrete
	38 cm Porous Brick
	63 cm Porous normal brick
	97 cm Filing Brick
	264 cm Concrete
	294 cm Stone

ISOLATION AND CONSTRUCTION MATERIALS FOR EQUIVALENT 5 cm.

Material	Intensity (kg/m ³)	Heat Conductivity (kcal/m ⁰ C)	Required thickness in order to insulate. heat eguivalent to 5 cm EPS.
Polyurethane	30	0.030	4.4
EPS	10 - 32	0.034	5
Glasswool	14 - 100	0.034	5
Heraklith	570	0.13	19
Perlit plaster	700	0.21	31
Gas concrete	600	0.21	31
Porous brick	700	0.26	38
Bims brick	700	0.18	26
Porous brick	1200	0.43	63
Concrete	2400	1.80	264
Stone	1600 - 2600	2.00	294