



Expanded Polystyrene (EPS)

Thermal insulation sheets for buildings

Due to its closed cell structure, which inhibits the passage of heat or cold, EPS has a high capacity for thermal insulation. Insulation is the most effective way to improve the energy efficiency in your home.

EPS Features and Benefits

- Excellent thermal insulation.
- Light weight for ease of construction works.
- Mechanical resistance for load bearing insulation applications
- Low water absorption, unaffected by damp, humidity or moisture.
- Ease of handling , installation and transportation.
- Chemical resistance, compatible with cements and plasters.
- Versatility, can be cut into the shape or size required.
- Ageing resistance.
- Does not induce metal corrosion.

EPS is suitable for

- Office partitions.
- Factory and housing insulation as well as hygienic building structures.
- Pipe and vessel insulation.
- Light weight wall cladding with rendered finish, and profile mouldings.
- Cold rooms, deep freeze facilities, refrigeration.

Automa Multistyrene (PTY) Ltd is ISO9001-2015 and ISO14001 - 2015 accredited

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Excellent thermal insulation
100% recyclable
CFC and HCFC free

Technical Properties

PROPERTY	CONDITIONS	UNIT		EPS GRADES					
				P32	P24	P20	Q15	S15	P12
Nominal Density:		Kg/m ³		32	24	20	15	15	12
Minimum Density:				28.80	21.60	18.00	14.40	13.50	10.80
WATER PROPERTIES									
Vapour Transmission	38° 88%RH	ngm/Ns MNs/gm	Max	4.2	4.2	5.0	6.9	8.0	
Vapour Resistivity			Min	238	238	200	145	125	
HEAT PROPERTIES									
Thermal Heat Conductivity (K-Value)	10°	W/m.K	Max	0.033	0.034	0.035	0.038	0.040	0.045
Thermal Resistance (R-Value)	100mm thick	m ² .K/W	Max	3.03	2.94	2.86	2.63	2.50	2.22
Dimensional Stability	7 days 80°	%	Max	1.0	1.0	1.0	1.0	1.0	1.0
Effect of High Temperature	Long term stable	°C	Max	80	80	80	80	80	80
	Short term stable	°C	Max	100	100	100	100	100	100
STRENGTH PROPERTIES									
Compressive Stress	@10% compression	kPa	Min	200	160	110	80	65	60
Cross-breaking Strength	@1% nominal compression	kPa	Min	250	205	150	140	100	80
Safe Working Load		kPa	Min	100	70	45	21	17	15

Biological Resistance

- Does not promote mould growth.
- Offers no food value to insects or rodents.

