



STRUCTURAL GRADE EPS

Expanded Polystyrene is a lightweight, rigid, closed-cell, cellular plastic material made by the expansion of raw material, polystyrene beads, consist of 95-98% air and 2-5% solid plastic. It is very strong but has very low density (1% of traditional construction materials.)

QUALITY ASSURANCE / QUALITY CONTROL

Manufactured to meet ASTM D6817 and ASTM C578, quality control is monitored under by in-house testing facilities. Third-party tests are also available.

DIMENSIONS

Thickness range - 1/2in to 24in, or 12mm to 610mm

Width - 4ft (1.22m)

Length - 8ft (2.44m)

Special limited and custom cuts and sizes are available.

DESIGN CONSIDERATIONS

For most applications, long-term design loads should not exceed the linear elastic range of each type. Combined live and dead load stresses should not exceed the compressive resistance at 1% strain.

ADDITIONAL INFORMATION

All EPS has a flame spread of 20, and smoke developed index of 150 to 300. Although this material is classified as flame retardant and used to provide additional margin of safety, it is still considered combustible. The maximum recommended long-term exposure temperature for any EPS material is 165°F (74°C).

EPS POWERBLOCK

STRUCTURAL GRADE EPS (EXPANDED POLYSTYRENE)

PROPERTY		PBK25	PBK40	PBK50	PBK75	PBK103
DENSITY, min	lbs/cu.ft	0.9	1.15	1.35	1.8	2.4
	kg/cu.m	14.4	18.4	21.6	28.8	38.4
Compressive Resistance @ 1% deformation, min	psi	3.6	5.8	7.3	10.9	15
	psf	520	840	1050	1570	2160
	kPa	25	40	50	75	103
Compressive Resistance @ 5% deformation, min	psi	8	13.1	16.7	24.7	35
	psf	1150	1890	2400	3560	5040
	kPa	55	90	115	170	241
Compressive Resistance @ 10% deformation, min	psi	10.2	16	19.6	29	40
	psf	1470	2300	2820	4180	5760
	kPa	70	110	135	200	276
Elastic Modulus, min	psi	360	580	730	1090	1500
	kPa	2500	4000	5000	7500	10300
Flexural Strength, min	psi	25	30	40	50	60
	kPa	172	207	276	345	414
Water absorption total immersion, max	volume %	4	3	3	2	2
Oxygen index, min	volume %	24	24	24	24	24
Bouyancy Force	lbs/cu.ft	61.5	61.3	61.1	60.6	60
	kg/cu.m	980	980	980	970	960
Thermal Resistance, min per 1in thickness, R-value	25degF	degF sq.ft h/Btu	4.2	4.4	4.6	4.8
		K sqm./W	0.74	0.77	0.85	0.84
	40degF	degF sq.ft h/Btu	4	4.2	4.4	4.6
		K sqm./W	0.7	0.74	0.77	0.81
	75degF	degF sq.ft h/Btu	3.6	3.8	4	4.2
		K sqm./W	0.63	0.67	0.7	0.74

For inquiries, please contact our EPS specialist
Engr. Robie Cortez (robie@mpc.com.ph)
+639175539757 (Viber, Whatsapp)

MEGA PACKAGING CORPORATION
Airstrip Road, Canlubang Industrial Estate,
Canlubang Laguna Philippines
www.megapackaging.com.ph
sales@mpc.com.ph