

EPS insulation supplied by SAKHAT for roofs, walls, floors, foundations and cold-storage facilities. Lightweight, easy to cut and install, with a closed-cell structure and recyclable material.



STYROPAN BOARDS

Board sizes	200 × 100 cm; 100 × 100 cm; 100 × 50 cm
Thickness / density	0.5–50 cm / 10–40 kg/m ³
Facing	Unfaced
Uses	Thermal and sound insulation; double walls, floors, ceilings, roofs, hangars and cold rooms; concrete expansion joints and void filling.

TECHNICAL PERFORMANCE

Thermal conductivity	0.030 W/m·K
Compressive strength	12–40 psi (0.8–2.5 kg/cm ²)
Water absorption	1.5% by volume after several months
Water vapour transmission*	2.4 perm-in (source also lists 0.8 g/m ² per 24 h)
Thermal expansion	7×10^{-5} per °C
Acoustics	Airborne sound absorption best around 600 Hz; impact sound reduction with pre-compressed EPS in floating floors.
Fire-retardant grade	Available on special request

INSULATION THICKNESS GUIDE

Buildings: roof 3–6 cm; wall 2–5 cm; floor 2–4 cm. The source associates lower values with lower-altitude regions.

Cold room temperature (°C)	10	5	0	–5	–18	–24	–30	–35
EPS thickness (cm)	5	10	12	14	20	24	28	30

Cold-room guide assumes an average outdoor temperature of 30 °C. Thickness recommendations are reproduced from the source brochure.

*Units reproduced as supplied. Density uses kg/m³, consistent with the product specification; the source performance page prints kg/m².

STYROBEADS

Expanded polystyrene beads for lightweight concrete, furniture filling, decoration and packaging. Beads have low apparent density, low thermal conductivity and limited moisture uptake due to their closed-cell structure.



Bead size	0.8–2.5 mm
Density	13 kg/m ³ ; other densities on request
Packaging	1 kg, 2.5 kg, 3 kg and 3.5 kg plastic bags

LIGHTWEIGHT CONCRETE

Styrobeads replace conventional aggregates and occupy approximately 60–70% of the mix volume. The source gives concrete densities of 200–900 kg/m³ and identifies 600 kg/m³ as a typical choice. Its mixes use 9 kg of beads per cubic metre, with bead density around 13 kg/m³.

MIX TABLE — PER CUBIC METRE

Concrete density (kg/m ³)	200	300	400	500	600	700	800	900
Styrobeads (kg)	9	9	9	9	9	9	9	9
Cement (kg)	150	200	250	300	350	350	350	375
Fine sand (kg)	—	—	25	50	100	175	250	325
Water (kg)	50	100	125	150	150	175	200	200
Compression (kgf/cm ²)	—	3	7	14	20	32	45	60
Flexure (kgf/cm ²)	—	2	4	6	7	8	10	12

“—” indicates no value provided in the source. Mix quantities and strength values are reproduced from the supplied brochure.



The spherical beads support formation of the cement matrix. The source describes sufficient cement at the 600 kg/m³ mix density to fill spaces between beads and develop concrete strength.

STYROHOURDI

Density: 13 kg/m³; others on request.

Dimensions: made to customer requirements.

Use: replaces conventional hourdi blocks in concrete ceilings. Lightweight and easy to handle, with thermal and sound insulation. The source reports 15–30% load reduction, dependent on the building design.



STYROPACK

Dimensions: as requested. **Thickness:** 0.5–50 cm.

Density: 10–40 kg/m³.

Uses: protective packaging, carton-box inserts, shock absorption, cake and ice-cream box insulation. Loose protective pieces shown in the source: 3 × 1 × 1 cm.



STYROPIPE

Thickness: 2–10 cm. **Diameter:** 13–500 mm.

Density: 18–20 kg/m³; others on request. **Facing:** unfaced.

Uses: thermal insulation for industrial piping, cooling and chilling systems. Metric diameter range follows the source; its inch range is inconsistent.



STYROMOULD

Shapes: vegetable boxes in different sizes; other shapes on request.

Uses: moulded vegetable boxes, ice-cream boxes, electronic-product protection and similar packaging.



STYROCRAFT

Custom architectural shapes and decorative elements for weddings, anniversaries, theatres, storefronts and exhibitions; marketing props, building ornamentation and decorative structures.



SAKHAT supplies the material. Correct selection, design and installation depend on the intended application. Specifications and reference values are condensed from the supplied Styropan brochure.