

PLATEN INSULATION BOARD

Acrolab Insulation grades are compression molded, glass mat reinforced polyester laminates. These thermoset materials are engineered to offer superior energy efficiency, temperature control, and durability for high temperature mold and platen insulation. Their physical properties include: high heat resistance, high compressive strength, low thermal conductivity, low moisture absorption, and exceptional durability. Our insulation machines easily and provides more precise temperature control and thermal uniformity to minimize or eliminate "cold spots" in a mold.

H320 Insulation Board

A tough and durable composite with high compressive strength and resistance to oil and fluid absorption. Recommended for use in operating temperatures up to 450 F, this material used as press insulation will result in energy and maintenance savings. Standard color is brown.

H330 Insulation Board

A thermoset insulation material with exceptional property retention at operating temperatures up to 550 F. Demonstrating superior compressive strength at high temperature, this grade provides extended use and greater maintenance and energy savings. Standard color is orange.

Insulation board is available sanded to a tolerance of + or - .002.

Available in thicknesses from 1/4" to 2" and 7mm to 25mm and sheet size 36" x 72", 48" x 60" and 48" x 96". Special thicknesses up to 2" and custom cut to size and pre-drilled panels can be ordered. Minimum quantities may apply.



TYPICAL PROPERTIES*

	ASTM	H320	H330
Thermal Conductivity			
(K Factor) BTU/Hr/Ft ² In°F	D-177	1.75	1.85
Coefficient of Thermal Expansion In./In./°C	D-696		
Moisture Absorption, % 3/8" Sanded	D-570	0.18	0.20
Impact Strength Izod Ft. Lbs./in.notch	D-256	10	13
Flexural Strength, PSI	D-790	23,000	22,800
Maximum Service Temperature		450°F	550°F
Compression Strength, PSI, Cond. A	D-696	44,300	44,000
@300°F		23,400	31,700
@400°F		16,100	30,600
@500°F		N/A	26,200

Comparative Properties of Press Insulation Materials*

Insulation Material	Cost Factor	Compression Strength, PSI	Moisture Absorption, %	K Factor	Maximum Operating Temp, °F	Impact Strength
Concrete Asbestos	1.0	14,000	22.00	4.50	600	0.60
Calcium Silicate	1.2	2,400	85.00	0.88	1,200	0.25
H320	2.9	44,300	0.18	1.75	450	10.0
H330	3.5	44,000	0.20	1.85	550	13.0
G-3 (Reinforced Phenolic)	6.0	50,000	1.50	2.15	350	6.50
G-11 (Reinforced Epoxy)	7.5	60,000	0.10	2.03	320	7.0
G-7 (Reinforced Silicone)	15.0	45,000	0.15	2.20	460	8.50
Mica	16.5	60,000	2.77	0.87	1,000	-

*Unless otherwise indicated, all properties published are based on tests performed on standard ASTM test samples and according to ASTM test methods. Values shown are for test samples made from production materials and they are believed to be conservative. No warranty is to be construed, however. In fabricated or molded form, parts may vary considerably from this standard test data. Where specific or unusual applications arise, tests should be made on actual parts, and test procedures agreed upon between Acrolab Ltd. and the customer.