

**haysite**

reinforced plastics

[www.haysite.com](http://www.haysite.com)

Advance-Engineered For  
Max-Mold/Platen Efficiency

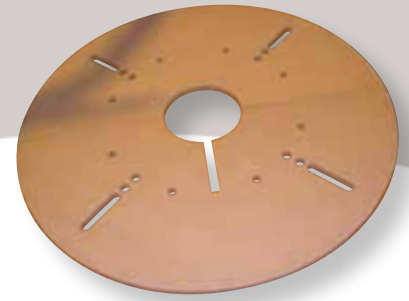
# PLATEN INSULATION

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Shaping Composite Innovation.

MEMBER OF  
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GROUP

# Platen Insulation



Haysite's family of mold and platen insulation products are specially engineered fiberglass reinforced thermoset polyester composites which offer superior energy efficiency, temperature control, and durability for high temperature mold and platen thermal applications.

When compared to other available insulating materials, Haysite's Thermalate® and Heatmeiser® provide proven, cost effective products for the plastic or rubber molder.

## THERMALATE® H320/H330

Haysite Thermalate® composites offer a number of specific advantages over other insulation materials:

- Asbestos Free.
- Cost Effective: Increased efficiency allows for short payback.
- Low Thermal Conductivity/Energy Efficient: Saves and allows more precise temperature control.
- High Heat Resistance: Designed to operate at temperatures up to 550°.
- High Compressive Strength: Will not take a compressive "set", causing mold alignment problems, when subject to extremely high molding pressures.
- Tough and Durable: Does not crack or break easily during mold setup or tear down. More durable than mica or asbestos materials.
- Resists Oils and Fluids: Other more absorbent insulators, such as concrete asbestos, can deteriorate or alter their thermal conductivity.
- No Maintenance.

## HEATMEISER® H340

Heatmeiser® exemplifies Haysite's engineering and R&D capabilities. A true breakthrough material in thermal insulation sheet, Heatmeiser® is a specially engineered composite offering superior energy efficiency, temperature control and durability for high temperature mold jacket and platen thermal insulation applications. Heatmeiser® thermal conductivity results separate this material from all other glass reinforced products.

Typical Properties	Test Method	Thermalate® H320	Thermalate® H330	Heatmeiser® H340
Maximum Service Temperature		450 F	550 F	550 F
Compressive Strength PSI, Condition A	D-695	42,000	44,000	18,150
@300 Degree F		23,400	31,700	16,280
@400 Degree F		16,100	30,600	16,100
@500 Degree F		N/A	26,200	15,980
Impact Strength Izod Ft. Lbs./in. notch	D256	10	13	9
Flexural Strength, PSI	D-790	22,000	22,800	21,000
Moisture Absorption, % @ 3/8" Sanded	D-570	.25	.25	0.25
Thermal Conductivity (K Factor) BTU/Hr/Ft2/Ino F	D-177	1.90	1.85	1.20
Co-Efficient of Thermal Expansion In/In/o C	D-696	2.90 x 10 <sup>-5</sup>	2.84 x 10 <sup>-5</sup>	2.32 x 10 <sup>-5</sup>
Youngs (Tensile) Modulus	D-638	1.6 x 10 <sup>6</sup>	1.6 x 10 <sup>6</sup>	1.6 x 10 <sup>6</sup>
Poisson Ratio	E-132	.332	.332	.332
Color		Brown	Orange	Light Gray

## COMPARATIVE PROPERTIES OF PRESS INSULATION MATERIALS

Insulation Material	Compression Strength PSI	Moisture Absorption %	K Factor	Maximum Operating Temperature °F	Impact Strength
Concrete Asbestos	14,000	22.00	4.50	600	0.60
Calcium Silicate	2,400	85.00	0.88	1,200	0.25
Thermalate® H320	42,000	0.25	1.90	450	10.00
Thermalate® H330	44,000	0.25	1.85	550	13.00
Heatmeiser® H340	18,150	0.25	1.20	550	9.00
G-3 (Reinforced Phenolic)	50,000	1.50	2.15	350	6.50
G-11 (Reinforced Epoxy)	60,000	0.10	2.03	320	7.00
G-7 (Reinforced Silicone)	45,000	0.15	2.20	460	8.50
Mica	60,000	2.77	0.87	1,000	--

- Standard Stocked Sheet Sizes: 36"x72" and 48"x 96". 48"x60" is available upon request: (Minimum order quantity will apply)
- Thickness available: 1/4" to 2".
- Thickness Specification: +/- .004
- Flatness Specification: NEMA standards
- All Platen Insulation is sanded on both sides.
- Special cut sizes and unsanded material is also available upon special request.



Haysite Reinforced Plastics  
 5599 New Perry Highway  
 Erie PA 16509-3598  
 PH: 814.868.3691  
 FX: 814.864.7803  
 www.haysite.com

