

## DESCRIPTION

InsulThin® HT is a thin, high-temperature, hydrophobic, flexible microporous blanket insulation. Microporous insulation is a highly efficient insulation material and has been in service in a variety of commercial insulation applications for more than 35 years.

## APPLICATIONS

InsulThin HT, with service temperature capability to 1200°F, is ideal for applications that require space-saving performance with high thermal stability. This highly flexible product is hydrophobic and water repellent. InsulThin HT is a problem solver in niche applications where space constraints limit the use of more conventional insulation.

## AVAILABLE FORMS & SIZES

Roll Dimensions

36" Wide	60" Wide
55 lbs	92 lbs
5mm (0.2") x 36" x 50'	5mm (0.2") x 60" x 50'
10mm (0.4") x 36" x 25'	10mm (0.4") x 60" x 25'

### Notes

All rolls contain splices

- 25' roll = 2 splices/roll
- 50' roll = 5 splices/roll

Due to the nature of the material, the edge thickness feathers

- 36" wide: usable width = 35"
- 60" wide: usable width = 59"

## CUSTOM FABRICATION

The Johns Manville nationwide network of Approved Fabricators specializes in secondary processing to supply custom parts to meet specific customer requirements. Die-cutting, laminating, special packaging and just-in-time delivery are just a few of the multiple capabilities our fabricators can provide.

## FABRICATION METHODS

**Industrial Shears:** very sharp blade required for clean cuts. Dull blade will not cut through the fabric. Blades with nicks and chips catch on the fabric threads.

**CO2 Laser:** very effective cutting technology with added benefit of cauterized edges

**Round Blade Cutter:** wheel must be very sharp for cutting through entire thickness of material

**Water Jet:** cuts effectively but time is required to adjust settings for a quilted material

After fabrication, material edges should be sealed. Common sealing methods: tape or staples.

**Note:** Plasma cutting and steel rule die-cutting are not recommended for InsulThin HT.



## SPECIFICATION COMPLIANCE

Core Density (Avg.)	12 pcf (192kg/m³)
ASTM C165 Compressive Resistance at 10% deformation (psi)	> 3.6
ASTM C356 Linear Shrinkage (%) width, length & thickness at 1200°F	< 2 (length & width) < 10 (thickness)
ASTM C447 Recommended Continuous Operating Temperature (*See SDS for additional information)	1200°F (650°C)
ASTM C665 Corrosivity to Steel	Passes
ASTM C1101 Flexibility	Flexible
ASTM C1104 Water Vapor Sorption (%)	< 5
ASTM C1676 Standard Specification for Microporous Thermal Insulation, Type II, Grade 2B1	Passes
ASTM E84 Surface Burning Characteristics	Flame Spread: 0 Smoke Developed: 0

**THERMAL CONDUCTIVITY (k) per ASTM C518**

Mean Temperature		BTU • in/(hr • ft <sup>2</sup> • °F)	W/m • °C
100°F	38°C	0.189	0.027
200°F	93°C	0.195	0.028
300°F	149°C	0.203	0.029
400°F	204°C	0.213	0.031
500°F	260°C	0.224	0.032
600°F	316°C	0.237	0.034
700°F	371°C	0.252	0.036

**ACOUSTICAL PERFORMANCE (10mm Thickness)**

Frequency (Hz)	Absorption Coefficient (α)
100	0.07
160	0.05
200	0.05
250	0.05
315	0.08
400	0.16
500	0.30
630	0.48
800	0.52
1000	0.33
1250	0.25
1600	0.27
2000	0.35
2500	0.36
3150	0.31
4000	0.29
5000	0.22
SAA (Sound Absorption Average)	0.27
NRC (Noise Reduction Coefficient)	0.25



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**PRODUCT & TECHNICAL  
INFORMATION**

800-654-3103

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of InsulThin HT listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

**All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit [www2.jm.com/terms-conditions](http://www2.jm.com/terms-conditions) or call (800) 654-3103.**