



3M™ Thinsulate™ High Temperature Acoustic Absorber HT Series

Technical Data Sheet



3M™ Thinsulate™ High Temperature Acoustic Absorber HT Series are superior sound-absorbing materials specifically designed for a variety of acoustic control applications. Thinsulate HT Series is designed to withstand higher temperatures – up to 150°C for 336 hours or 180°C for 48 hours – , than other 3M™ Thinsulate™ Acoustic Insulation products, making it suitable for use in engine compartment applications, including: engine beauty covers, hoodliners, front of dash, and engine undercovers. It is available regionally with the same performance globally.

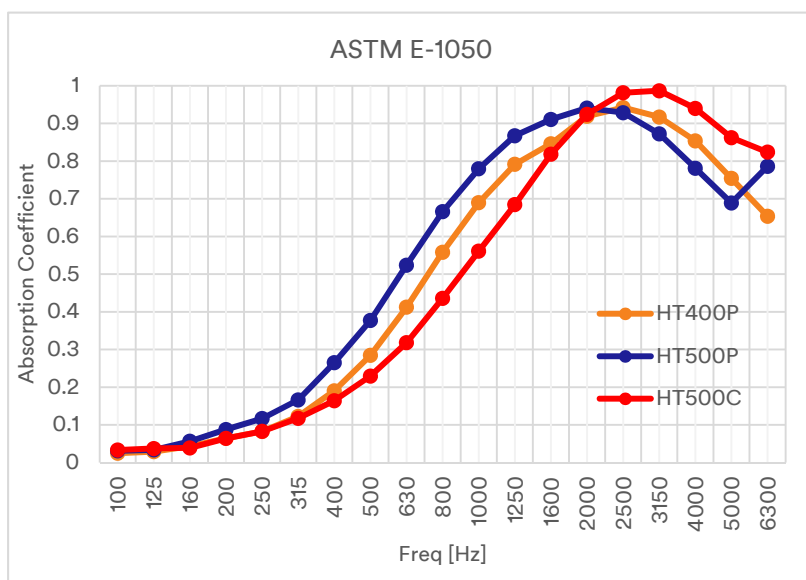
Thinsulate HT Series has the ability to be die-cut into standard flat parts with sealed edges. Thinsulate HT Series provides high acoustic absorption, is lightweight, and can easily be attached to many substrates via heat staking or ultrasonic welding.

3M™ Thinsulate™ High Temperature Acoustic Absorbers HT500P and HT400P feature a black, high-performance, chemical resistant scrim designed to improve acoustic performance and provide resistance to typical engine compartment fluids. 3M™ Thinsulate™ High Temperature Acoustic Absorber HT500C features a black scrim designed for cosmetic purposes.

Acoustic Properties

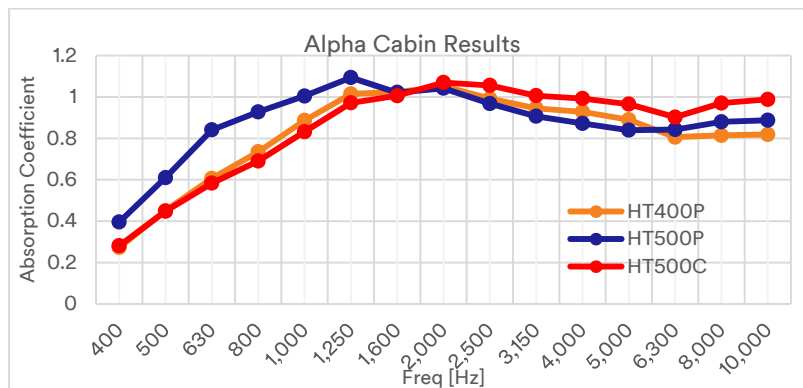
Typical performance of Thinsulate HT Series is shown below. The following technical information and data is based upon limited 3M testing conditions and should not be used for specification purposes.

Typical Normal Incidence Absorption Coefficient per ASTM E-1050



Acoustic Properties (continued)

Typical Random Incidence Absorption Coefficient per SAE J2883



Physical Properties

	Unit	HT400P	HT500C	HT500P
Weight ^A	g/m ²	475	568	575
Thickness ^B	mm	21	23	26
Density	Kg/m ³	22.6	24.7	22.1
Thermal Properties: R-Value ^C k-Value ^D	m ² K/W W/mK	0.523 0.040	0.585 0.039	0.576 0.040
FMVSS 302		Pass	Pass	Pass

^A Weight is the mass per unit area of the entire absorber composite.

^B Nominal thickness is measured using a 12 in² plate with 0.002 psi (= 14N/m²) applied to the sample per SAE J1355.

^C R-Value is the thermal resistance of the insulation measured at the corresponding thickness per ASTM C518.

^D k-value is thermal conductivity of the insulation material per ASTM C518.

Regulatory Information

Please refer to the product label and Safety Data Sheet (SDS) for health and safety information before using. Observe proper handling precautions as outlined in the SDS, which is available on request or at www.3M.com/msds. To obtain published IMDS ID numbers, email requests to 3M-IMDSrequest@mmm.com.

Contact Information

The information provided in this technical document is intended as a guide for these products. For more information or help in selecting a 3M product for an application, please contact your 3M technical service representative or call 1-800-328-1684.

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