

3M™ Thinsulate Acoustic Insulation SM600L

Technical Data Sheet



Product Description

3M™ Thinsulate Acoustic Insulation SM600L is a non-woven mat with excellent sound absorbing properties useful in many automotive applications, for example inside door panels, instrument panels, pillar trim, package trays, wheelarch liner, etc. It is compressible lightweight and can be easily die-cut. A black polyolefin scrim on one side protects the fibers.

Thinsulate SM600L is made of a web and a black scrim on one side. The web is composed of 35% polyester staple fibers, and 65% polypropylene fibers. The polypropylene fibers are extremely fine, producing the high-energy absorption characteristic with low weight. Polyester fibers are added to strengthen the web. The black scrim is 100% polypropylene non-woven fabric.

It can be processed by conventional techniques such as die-cutting and heat sealing. Not recommended for applications where temperatures will be continuously above 120°C.

Typical Physical Properties

Note: The following technical information and data is based upon limited 3M testing conditions and should not be used for specification purposes. Data in the table below is based on roll goods.

Basis Weight ^A	672 g/m ²
Thickness ^B	42 mm
Density	15.3 kg/m ³
Flammability	Self-Extinguishing (SE) as per SAE J369 (FMVSS 302, ISO 3795, DIN75200)
Temperature resistance	120°C (tested for 2000 hours)

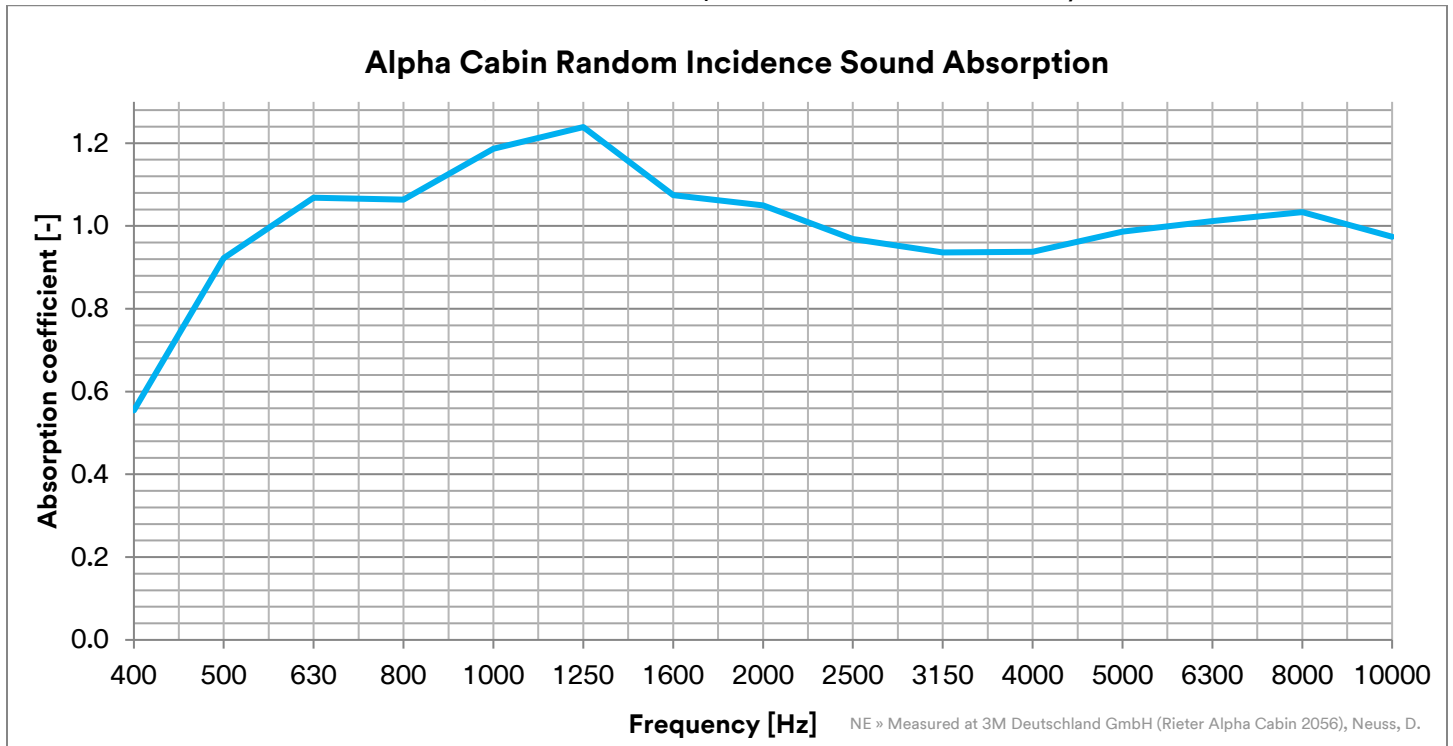
^A Weight is the mass per unit area of the entire absorber composite.

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

Alpha Cabin

Alpha Cabin Measurement with 1,2m² sample measuring Random Incidence Sound

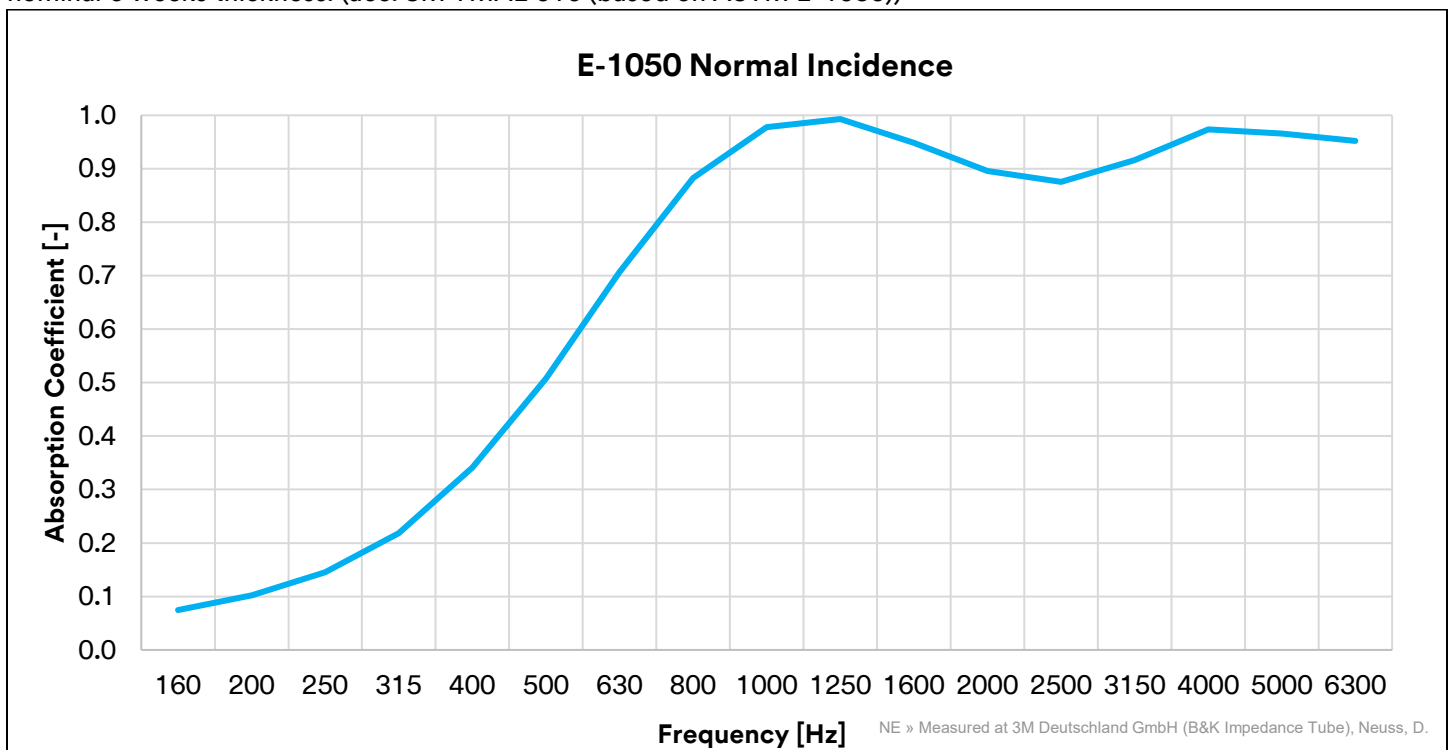
Result is average of 30 samples, tested after 6 weeks on roll (24hrs conditioning @ RT), black scrim facing noise and 30mm frame used (acc. 3M TMAE 017 (Rieter standard Alpha Cabin test) at 3M Germany in Neuss)



Impedance Tube

Dual Microphone Impedance Tube Method that measures Normal Incidence Sound

Combined result average of min 5 samples (100mm & 29mm tube), on nominal weight samples and thickness set at nominal 6 weeks thickness. (acc. 3M TMAE 016 (based on ASTM E-1050))



Regulatory Information

Please refer to the product label, Article Information Sheet (AIS) or Safety Data Sheet (SDS) for health and safety information before using. Observe proper handling precautions as outlined in the AIS or SDS, which is available on request or at www.3M.com/msds.

The product is published as a material entry and is available for access on www.mdssystem.com. For product IMDS I.D. number, 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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