

3M[™] Flexile Acoustic Material FAB Series

Technical Data Sheet



Product Description

3M[™] Flexile Acoustic Material FAB Series solves current and future NVH-T challenges by leveraging the synergy between acoustic particles and a fibrous structure to address difficult to treat noises in a single layer. The thin material features both absorber and barrier properties and has excellent low frequency absorption without sacrificing performance in high frequencies.

Application

The 3M FAB Series can be used in various applications to address tire and road noise or other noises that would typically be treated by a combination of absorbers and barriers. 3M FAB1210 is excellent for treating low frequencies beginning at 300 Hz. 3M FAB0910, 3M FAB0610 3M FAB0510 and 3M FAB0310 are excellent for use in applications with limited space that require improved absorption across a broad frequency range (>500Hz).

Typical applications include, but are not limited to, wheelhouse liner, inner dash, quarter trim panels, consoles, HVAC duct, underbody shields, doors and pillars.

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.

Product	3M FAB1210	3M FAB0910	3M FAB0610	3M FAB0510	3M FAB0310
Basis Weight ^A	1270 gsm	900 gsm	670 gsm	500 gsm	370 gsm
Thickness ^B	19.5 mm	12.0 mm	10.0 mm	5.5 mm	4.5 mm
Thermal conductivity (k-Value)	0.0359 W/mK	0.0373 W/mK	0.0376 W/mK	0.0413 W/mK	0.0424 W/mK
Thermal resistance (R-value)	0.543 m ² ·K/W	0.322 m ² ·K/W	0.266 m ² ·K/W	0.133 m ² ·K/W	0.106 m²·K/W
Flammability (FMVSS302)	Pass	Pass	Pass	Pass	Pass
Scrim	Black/White	Black/White	Black/White	Black/White	Black/White

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

^B Nominal thickness is measured using a 12.125 in² plate with 0.0142 psi (= 98N/m²) applied to the sample per SAE J1355.

Random Incidence Acoustic Absorption Coefficient per SAE J2883

Note: test was performed with the black scrim facing the noise source



Normal Incidence Transmission Loss per ASTM E2611

Note: test was performed with the black scrim facing the noise source



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 <u>www.3M.com/msds</u>.

The product is published as a material entry and is available for access on <u>www.mdsystem.com</u>. For product IMDS I.D. number, email requests to <u>3M-IMDSrequest@mmm.com</u>.

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.

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information. Product Selection and Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property. Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. IF a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. Limitation of Liability: Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.



Automotive Aerospace Solutions Division 3M Center, Building 223 St. Paul, MN 55144-1000 Phone: 1-800-328-1684 Web: www.3m.com/acousticsolutions

3M is a trademark of 3M Company Please recycle. Printed in USA © 3M 2023 All rights reserved.