

# 3M™ Thinsulate™ Acoustic Insulation SF Series

## Technical Data Sheet

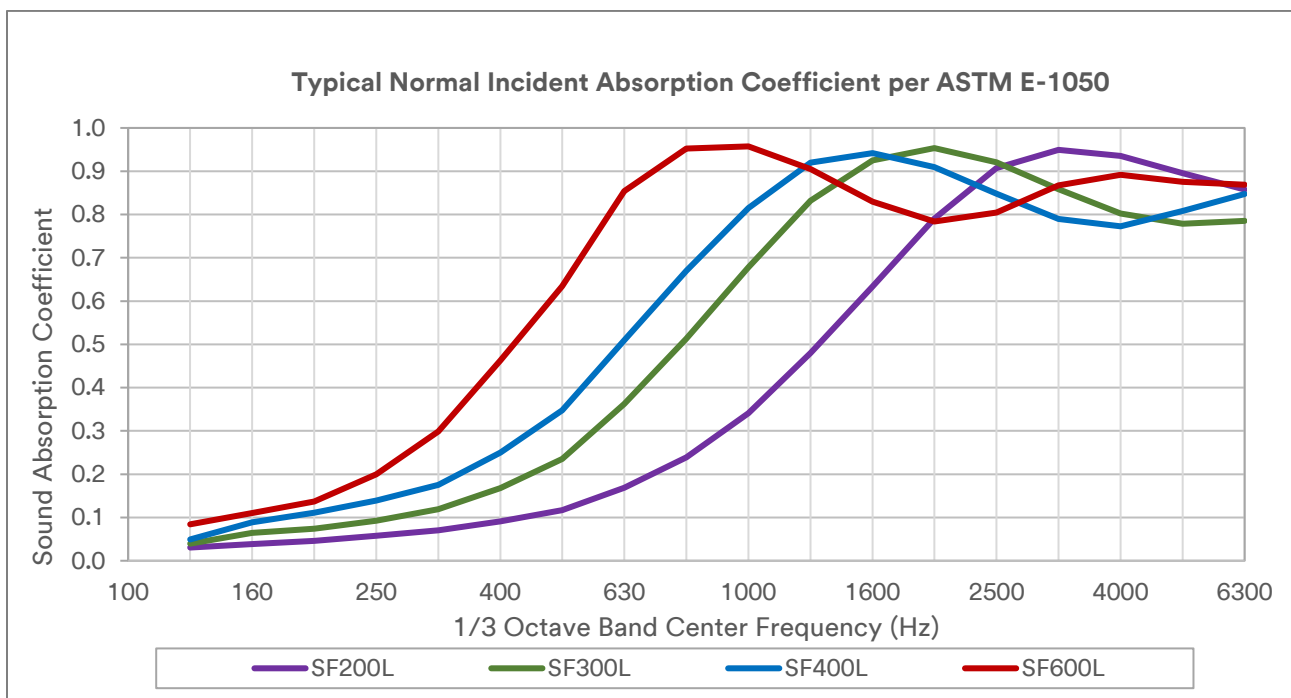


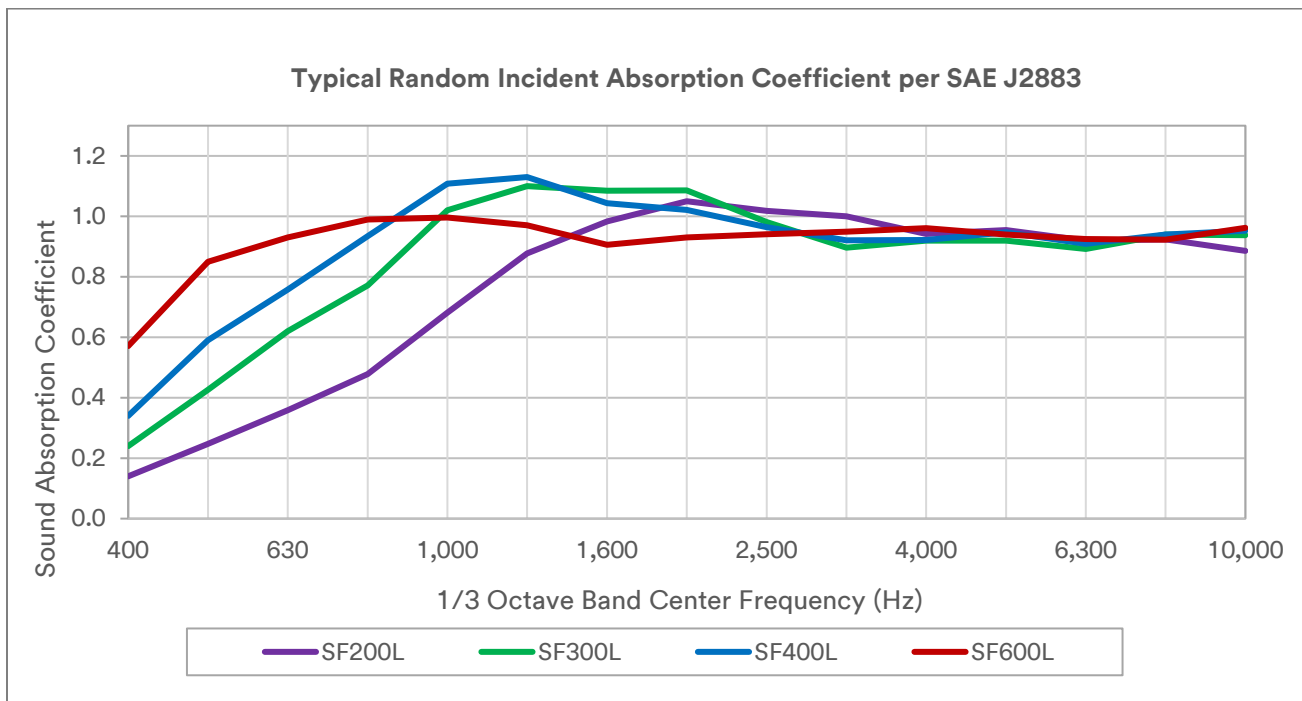
3M™ Thinsulate™ Acoustic Insulation SF Series is an acoustic absorber for automotive sound insulation applications. The products are uniquely high performance and low density making them ideal for mass reduction applications. They are readily processed by conventional techniques such as die-cutting, heat sealing, and ultrasonic bonding.

Thinsulate SF Series is applied to exterior application, such as engine under cover, floor under cover and fender liner. This product has better acoustic performance compared to 3M™ Thinsulate™ Acoustic Insulation SM Series without adding weight and thickness. It has improved low to mid frequency performance, which is effective for tire/road noise management.

### Acoustic Properties

The following technical information and data is based upon limited 3M testing conditions and should not be used for specification purposes.





### 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.

	Unit	SF200L	SF300L	SF400L	SF600L
Full Product Weight <sup>A</sup>	g/m <sup>2</sup>	243	343	443	643
Web Weight without scrim <sup>A</sup>	g/m <sup>2</sup>	200	300	400	600
Thickness <sup>B</sup>	mm	13	21	26	42
Density	kg/m <sup>3</sup>	19.5	16.3	17.0	15.3
Thermal Properties:					
R-value <sup>C</sup>	m <sup>2</sup> K/W	0.37	0.56	0.70	1.08
k-value <sup>D</sup>	W/mK	0.04	0.04	0.04	0.04
Flammability, FMVSS 302		Pass	Pass	Pass	Pass

<sup>A</sup> Full product weight is the target mass per unit area of the entire absorber composite. Target weight and visual surface texture may differ by manufacturing location, but performance targets remain the same.

<sup>B</sup> Nominal thickness is measured using a 12 square inch plate with 0.002 psi (=14 N/m<sup>2</sup>) applied to the sample per SAE J355.

<sup>C</sup> R-value is the thermal resistance of the insulation measured at the corresponding thickness per ASTM C518.

<sup>D</sup> k-value is thermal conductivity of the insulation material per ASTM C518.

### Product Construction

Composition: polyester and polyolefin mix, with polyolefin scrims.

Scrim details:

- SFX00L: black scrim on performance side
- SFX00LA: black scrim on performance side, white scrim on backside
- SFX00WL: black scrim on performance side, black cosmetic scrim on backside

### 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](http://www.3M.com/msds).

The product is published as a material entry and is available for access on [www.mdsystem.com](http://www.mdsystem.com). For product IMDS I.D. number, email requests to [3M-IMDSrequest@mmm.com](mailto: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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