

# THERMAFIBER® SOUND ATTENUATION FIRE BLANKETS (SAFB)

#### Insulation for unsurpassed sound and fire performance in walls and ceilings

- More fire, sound and thermal tests than any other insulation product.
- High density of THERMAFIBER<sup>®</sup> SAFBs makes them resist sagging and stand up better in stud cavities.
- High fire protection—adds to fire performance of many assemblies.
- Efficient sound performance—adds STCs to wall and floor-ceiling sound ratings.
- Special details—can be used in acoustical ceilings as overlayment to reduce flanking sound; "creased" systems provide additional sound performance through acoustic engineering.

# Description



THERMAFIBER® Sound Attenuation Fire Blankets (SAFB) are the best way to stop sound in wall and floor-ceiling assemblies. Because THERMAFIBER® Sound Attenuation Fire Blankets are manufactured from slag, a by-product of iron ore reduction, and naturally occurring rock, the mineral fiber in THERMAFIBER® Blankets is highly resistant to fire. Thus many of the systems this product is used in have high fire ratings as well as sound ratings. A fire test conducted according to ASTM E119 test procedure showed that THERMAFIBER® Insulation remained intact at temperatures in excess of 2,000°F for five hours.

Tests prove that THERMAFIBER® SAFB is the best performance value for multi-family residential projects, hotels and motels, offices and retail businesses. The mineral fiber blankets are resilient enough to fit around obstacles, yet are rigid enough to stand up well in stud cavities. SAFBs are available in two densities, 4 pcf (available 1" thick only) and 2.5 pcf (nominal densities). Two types of SAFBs are available, regular and "Creased." Creased SAFBs are 1" wider than regular blankets and are designed to bow in the stud cavities, providing an "engineered" sound performance. For system information on assemblies containing THERMAFIBER® Sound Attenuation Fire Blankets, see brochure TF885.

#### Installation

# Sound Attenuation Fire Blanket Application

Install THERMAFIBER® Sound Attenuation Fire Blankets in stud cavities of sound-rated partitions and where required to achieve fire-rated design. Friction fit securely between studs. Butt ends of blankets closely together and fill all voids.

# Creased Sound Attenuation Fire Blanket Application

Install Creased THERMAFIBER® Sound Attenuation Fire Blankets after gypsum panels are applied to the resilient channel and before panels are applied to the other side of the studs. Insert 17" wide blankets in 16" stud cavities or 25" wide blankets in 24" stud cavities of sound-rated partitions and where required to achieve a fire-rated design. Bow the blankets slightly to fit in the stud cavities. Slit the blankets approximately 1" deep with a sharp utility knife or hook-bill knife to ease the pressure of the blanket against the gypsum panels when they are installed. Butt ends of blankets closely together and fill all voids.

# **Floor-Ceiling Application**

Install THERMAFIBER® Sound Attenuation Fire Blankets between joists in joist cavity or over metal furring channels below joists where required to achieve fire-rated design.

# Ceiling Overlayment Application

Install THERMAFIBER® Sound Attenuation Fire Blankets over ceiling panels (1-1/2" single or double layer over entire ceiling) (3" over entire ceiling) extending 48" beyond all partitions and tightly fit around all grillage, hangers and other vertical penetrations.

#### **Technical Data**

Notes: Thermal resistance values (R = 1/C) for use in calculating heat transmission coefficients (u) are based on listings in ASHRAE Handbook of Fundamentals (1985). For test data, contact Thermafiber, Inc.
Representatives will provide certified test data for published fire, sound and structural systems designed and constructed according to their published specifications.

THERMAFIBER® Sound Attenuation Fire Blankets	4 pcf Nominal Density SAFB	2.5 pcf Nominal Density SAFB
R-Value, per 1" Thickness	4.0	3.7
"k" @ 75°F (24°C) btu • in./hr. • sq. ft. • °F (per ASTM C518)	0.25	0.27
Widths	16", 17", 24", 25"	16", 17", 24", 25"
Length	48"	48"
Thickness	1"	1-1/2", 2", 2-1/2", 3", 3-1/2", 4", 5", 6"
Flame Spread (per ASTM E84, Surface Burning Characteristics)	15	15
Smoke Developed (per ASTM E84, Surface Burning Characteristics)	0	0
Density Tolerance (Tacoma)	<u>+</u> 0.5	<u>+</u> 0.5
Density Tolerance (Wabash)	05 + 1.0	05 + 1.0

#### **Product Data** Standards THERMAFIBER® Sound Attenuation Fire Blankets (SAFB) meet the following: Class A interior finish rating per NFPA 101, life safety code; ASTM C665, Type 1, per Federal Specification HH-I-521F; ASTM C553 (SAFB Blankets absorb less than 1% moisture by weight and volume); ASTM C612, Type 1, per Federal Specification HH-I-558B; ASTM E136 (rated noncombustible as defined by NFPA Standard 220 when tested according to ASTM E136). THERMAFIBER® SAFB are accepted by New York City Department of Buildings (MEA-207-82M); approved by the New York City Board of Standards & Appeals for use in New York City under Calendar Nos. 35-66-SM, 173-77-SM, 249-74-SM and 34-66-SM. Availability and Cost THERMAFIBER® Sound Attenuation Fire Blankets are distributed throughout the United States and worldwide. For additional information call Thermafiber, Inc. at 1-888-TFIBER1 (or 834-2371). Composition and THERMAFIBER® Blankets are a mineral fiber material manufactured from slag, a by-product of iron ore reduction, and naturally occurring rock. **Materials** Warranty System performance following substitution of materials or compromise in assembly design cannot be certified and may result in failure of sound and/or fire performance under certain conditions. Products

Thermafiber, Inc. for complete warranty details.

# **Good Design Practices**

1. System performance following substitution of materials or compromise in assembly design cannot be certified and may result in failure of sound and/or fire performance under certain conditions. For example, substitution of a low-density glass fiber insulation in place of the THERMAFIBER® SAFB may compromise the acoustic balance and therefore reduce the acoustical performance of the system.

provided by Thermafiber, Inc. are warranted to be free from defects in material workmanship. Contact

- 2. Adjacent assemblies should be designed or selected to be of similar sound control performance. Flanking sound paths should be acoustically treated or eliminated. The combined sound performance of the systems between adjacent spaces will be close to that of the lowest performing element.
- 3. Proper application of acoustical sealant\* is critical to effectively seal the wall and reduce sound transmission. For drywall partitions, place a continuous bead of sealant along all perimeter edges between the gypsum wall board panels\* and the surrounding floor, wall and ceiling elements. Do this on each side of the wall. Also, place a bead of acoustical sealant\* around ducts, electrical boxes, sprinkler heads, telephone jacks and any other penetrations.
- 4. Wall Penetrations and Perimeters—Penetrations for windows, HVAC and all wall perimeters must be sealed with acoustical sealant\*. Insulation must be used behind medicine cabinets and other wallinserted devices to prohibit passage of sound.
- 5. When penetrations, such as telephone jacks, electrical outlets, pipes, etc., occur on the opposite sides of a demising wall, offset them by at least one stud cavity.
- 6. When outlet boxes occur on the opposite side of a demising wall, the backs and sides of the outlet boxes should be acoustically caulked with acoustical sealant\*; acoustically caulk any gap surrounding the box as well.
- 7. Vapor Retarders—Vapor retarders normally are placed on the warm side of the wall to prevent moisture from entering the stud cavity. Actual placement of moisture barrier should be specified by a qualified professional engineer, based on local climatic conditions.
- 8. Ceilings—Insulation should be carefully fitted around—not over—light fixtures. Improperly covering light fixtures with insulation causes heat to build up, possibly resulting in fire. Note that THERMAFIBER® Sound Attenuation Fire Blankets may be used in a wide variety of acoustical applications, including those in occupied spaces and ceiling air plenums.

# Submittal Approvals:

# Job Name

# Contractor

For further information on these products, including nonstandard sizes, contact Thermafiber, Inc. at 1-888-TFIBER1 (or 834-2371).

#### rademarks

THERMAFIBER and THE NAME IN MINERAL WOOL are trademarks of Thermafiber, Inc.

#### Notice

We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

# Date

Follow good safety and industrial hygiene practices while handling and installing products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

#### Note

Products described here may not be available in all geographic markets. Consult your local sales office or representative for information.



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<sup>\*</sup> See UL Design for list of approved manufacturers.