



**Johns Manville**

OEM Insulations

## **Micromat®** *HVAC Equipment Liner*

**Micromat** is a flexible, resilient, blanket-type fiber glass insulation faced on one side with a smooth, durable, non-woven mat. It is recommended specifically for use as a thermal and acoustical control liner in HVAC equipment. It is also suited for other equipment applications requiring effective thermal and acoustical control, low air friction, damage resistance, and attractive appearance.

It is rated for a maximum air velocity of 5000 fpm. This product is easily die-cut, trimmed, and packaged to specified configurations.

### **The Advantages of using Micromat.**

The borosilicate glass fibers that make up Micromat insulation are incombustible and non-hygroscopic. Micromat does not support fungi or vermin. Micromat is unaffected by oil, grease and most acids.

The high tensile strength inherent in Micromat blankets helps the product resist damage during fabrication and installation.

Because of their resiliency and flexibility, Micromat blankets resist settling, breakdown, sagging from vibration, and damage from impact.

**Available Forms.** Micromat is available in a variety of thicknesses and densities as specified on the reverse side.

**Custom Fabrication.** In addition to the standard dimensions, a JM Approved Fabricator can provide specially-cut pieces and shapes to customer specifications.



### **Applications:**

- **Air Conditioners**
- **Furnaces**
- **VAV Boxes**
- **Roof Curbs**
- **Other HVAC Equipment**

### **Insulation Properties:**

- **High Thermal and Acoustical Performance**
- **Resistant to Air Erosion**
- **Ease of Handling, Fabrication, and Installation**
- **Abuse Resistant**

# Micromat®

## HVAC Equipment Liner

### Specifications

#### ■ Temperature Limit:

250° F (121° C)

#### ■ Fire Hazard Classification:

25/50 (per ASTM E 84, UL 723, and CAN/ULC S102-M88).  
Labels supplied when requested on order. Meets NFPA 90A and 90B.

#### ■ Maximum Air Velocity:

5,000 fpm (25.0 m/sec) and tested at two and one-half times (12,500 fpm) (63.5 m/sec) this velocity. Meets the erosion requirements of UL 181.

#### ■ ASTM:

Micromat has been tested and conforms to the physical properties and regulations of ASTM C1071-2000, including corrosiveness when tested per ASTM C 665 against copper, aluminum, and galvanized steel.

#### ■ Fabricated Products:

Micromat is manufactured to specific customer width requirements. Contact your Johns Manville sales representative for limitations. Die-cut or fabricated pieces are supplied by one of the strategically-located Johns Manville fabricators which are specially equipped to provide prompt service to OEM manufacturers in their area.

#### ■ For Information

Write Johns Manville Product Information Center, P.O. Box 5108, Denver, Colorado 80217-5108, or Call toll-free 1-800-654-3103 (outside Colorado); (303) 978-4900 (inside Colorado).

#### ■ Limited Warranty

All Johns Manville products are sold subject to Johns Manville's Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville Limited Warranty and Limitation of Remedy, write to:

Johns Manville Product Information Center  
P.O. Box 5108  
Denver, CO 80217-5108

or call toll free: 1-800-654-3103 or contact your local Johns Manville sales representative.

### Standard Thicknesses and Densities

| Thicknesses |    | Density |                   | Width   |           |
|-------------|----|---------|-------------------|---------|-----------|
| inches      | mm | pcf     | kg/m <sup>3</sup> | inches  | mm        |
| 1/2         | 13 | 1.5     | 24                | 135-144 | 3375-3658 |
| 1/2         | 13 | 2.0     | 32                | 135-144 | 3375-3658 |
| 3/4         | 19 | 1.0     | 16                | 135-144 | 3375-3658 |
| 3/4         | 19 | 1.5     | 24                | 135-144 | 3375-3658 |
| 1           | 25 | 1.0     | 16                | 135-144 | 3375-3658 |
| 1           | 25 | 1.5     | 24                | 135-144 | 3375-3658 |
| 1-1/2       | 38 | 1.5     | 24                | 135-144 | 3375-3658 |

Minimum width of a single roll is 34" (864mm).

### Thermal Conductivity (k)

| Density |                   | Mean Temp @ 75° F (23° C)         |      |
|---------|-------------------|-----------------------------------|------|
| pcf     | kg/m <sup>3</sup> | Btu•in./hr. •ft. <sup>2</sup> •°F | W/mK |
| 1.0     | 16                | 0.26                              | .037 |
| 1.5     | 24                | 0.24                              | .035 |
| 2.0     | 32                | 0.23                              | .033 |

### Acoustical Performance

Type "A" Mounting Sound Absorption Coefficients\*

| Density |                   | Thicknesses |    | Frequency (Hz) |      |      |      |      |      |       |
|---------|-------------------|-------------|----|----------------|------|------|------|------|------|-------|
| pcf     | kg/m <sup>3</sup> | inches      | mm | 125            | 250  | 500  | 1000 | 2000 | 4000 | NRC** |
| 1.0     | 16                | 1           | 25 | 0.09           | 0.29 | 0.56 | 0.73 | 0.84 | 0.92 | 0.60  |
| 1.5     | 24                | 1/2         | 13 | 0.08           | 0.15 | 0.37 | 0.55 | 0.70 | 0.79 | 0.45  |
| 1.5     | 24                | 3/4         | 19 | 0.06           | 0.16 | 0.43 | 0.63 | 0.75 | 0.89 | 0.50  |
| 1.5     | 24                | 1           | 25 | 0.16           | 0.37 | 0.66 | 0.83 | 0.91 | 0.91 | 0.70  |
| 1.5     | 24                | 1-1/2       | 38 | 0.12           | 0.41 | 0.82 | 0.95 | 1.01 | 1.00 | 0.80  |
| 2.0     | 32                | 1/2         | 13 | 0.06           | 0.13 | 0.35 | 0.55 | 0.70 | 0.78 | 0.45  |

\*Tested in accordance with ASTM C 423-00 and ASTM E 795-00

\*\*Noise Reduction Coefficient

Custom fabricated by:



## Johns Manville

**Johns Manville  
OEM Insulations Division**

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The physical and chemical properties of Johns Manville Micromat® represents typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by this or any other materials under actual fire conditions. Check with your Johns Manville representative to obtain current information.