

Mat-Faced Micro-Aire®
Fiber Glass Duct Board Type 475 & Type 800
Description

Mat-Faced Micro-Aire Duct Board is produced from durable glass fibers, bonded with a thermosetting resin. The airstream side of Mat-Faced Micro-Aire Duct Board features a black fiber glass mat which minimizes visibility of the duct system at supply air and return air outlets while providing excellent durability in high velocity conditions. The exterior surface features a fire-resistant Foil-Scrim-Kraft facing extending the full width of the male edge to serve as an integral closure flap for section joints.

Mat-Faced Micro-Aire Duct Board is molded with double-density, male/female edges for secure connections.

Uses

Mat-Faced Micro-Aire Duct Board is ideal for fabrication into rectangular ductwork for use in heating, ventilating, and air conditioning systems in new commercial or residential construction, or for renovating older sheet metal systems.

General Properties

| | |
|---|---------------------------|
| Operating temperature (max.) - ASTM C 411 | 250°F (121°C) |
| Air velocity (max.) - ASTM C 1071 | 5000 fpm (25.4 m/sec.) |
| Internal pressure (max.) - UL 181 | 2" w.c. (498 Pa) |
| Fungi resistance - ASTM C 1338 | Does not breed or promote |
| Fungi resistance - ASTM G 21 | No growth |
| Bacteria resistance - ASTM G 22 | No growth |

Standard Thicknesses and Packaging

To facilitate cost-effective fabrication and installation, Mat-Faced Micro-Aire Duct Board is available in cartons or on pallets in several size configurations. (1½" [38 mm] and 2" [51 mm] thickness available as Type 800 only.)

| Size | | Thickness | |
|-----------|--------------|-----------|------------|
| in | mm | in | mm |
| 48 x 120 | 1219 x 3048 | 1, 1½, 2 | 25, 38, 51 |
| 96 x 120* | 2438 x 3048* | 1, 1½ | 25, 38 |

*Wide Board™ available on pallets only.

Note: 48" x 96" x 1" (1219 mm x 2438 mm x 25 mm) size available on a Special Product Price Inquiry (SPPI) basis only.

Surface Burning Characteristics

Mat-Faced Micro-Aire meets the Surface Burning Characteristics and Limited Combustibility of the following standards:

Standard/Test Method

| | | |
|----------------------------|-------------------------------|----|
| • ASTM E 84 | Maximum Flame Spread Index | 25 |
| • UL 723 | Maximum Smoke Developed Index | 50 |
| • NFPA 90A and 90B | | |
| • Canada: CAN/ULC S102-M88 | | |

UL labels supplied on packages when requested on order.

Specification Compliance

- UL 181 Class 1 Rigid Air Duct Listed
- ICC Compliant
- Universal Building Code (UBC)
- International Mechanical Code (IMC)
- Canada: CGSB 51.10-92 and CAN/ULC-S110M


Advantages

Durable Airstream Surface. Mat-Faced Micro-Aire exhibits superior toughness compared to standard fiber glass duct board. It provides increased resistance to damage that can occur from in-shop handling, fabrication, jobsite shipping, and installation.

Low Resistance to Air Flow. Mat-Faced Micro-Aire Duct Board has a smooth interior surface that offers minimal resistance to air flow. Air friction data is available from your Johns Manville representative by requesting AHS-165.

Quiet Operation. Fabricated Mat-Faced Micro-Aire duct systems noticeably decrease the audibility of crosstalk, equipment noise, and eliminates the sounds associated with the expansion and contraction of sheet metal duct systems.

Will Not Support Microbial Growth. The airstream surface of Mat-Faced Micro-Aire Duct Board is treated with an antimicrobial agent specifically registered with the EPA for HVAC applications to resist potential growth of fungus or bacteria on the airstream surface.

Mat-Faced Micro-Aire Duct Board passes UL 181 mold growth resistance testing. Tests were conducted in accordance with ASTM C 1338 and ASTM G 21 (fungi testing) and ASTM G 22 (bacteria resistance testing). Detailed information is available in Johns Manville fact sheet HSE-103FS.

Note: As with any type of surface, microbial growth may occur in accumulated duct system dirt, given certain conditions. This risk is minimized with proper design, filtration, maintenance and operation of the HVAC system.

Cleanability. If cleaning is necessary, the airstream surface may be cleaned using standard industry-recognized dry methods. See the North American Insulation Manufacturers Association (NAIMA) "Cleaning Fibrous Glass Insulated Air Duct Systems".

"Friendlier Feel". The smooth mat facing creates a friendlier surface for fabrication and installation, and reduces exposure to normal construction dust.

Flexural Rigidity

Mat-Faced Micro-Aire Duct Board is available in stiffness values of 475 and 800 EI. The stiffness or flexural rigidity is the product of Young's Modulus of Elasticity (E) and the Moment of Inertia (I), as determined in accordance with NAIMA AHC-100-74 (REF, ASTM D 1037).