M.B.I. Products Company

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Metal Building Interior Products Company

MR-MANUFACTURER

MBI Products Co.

In its 30 year history, MBI has manufactured thermal/acoustical materials for over 20,000 building projects in both the U.S. and abroad. Projects include 500 hospitals, 700 schools, thousands of industrial buildings, airports, and power plants. Quality products, and consistent on time delivery, makes MBI the obvious choice for your sound control needs.

PP-PRODUCT PRESENTATION

Product Description

The ultimate quiet environment with the ultra clean look is available with MBI[™] San Pan[®], the high tech system of the 21st century.

MBI San Pan is an acoustical panel that drops into a grid as a ceiling panel, hangs on the wall or from the ceiling with grommets as a baffle, or installs with extrusions as a finished wall system.

MBI San Pan high density fiberglass core is dimensionally stable and highly sound absorptive. The fiberglass core is encapsulated in sanitary, chemically resistant PVF plastic film. After hermetically heat sealing the edges, the PVF film is shrunk tightly around the panel.

San Pan is ideally suited for hospitals, cleanrooms, commercial and institutional kitchens, food processing and pharmaceutical facilities.

San Pan is USDA/FDA listed. San Pan is fungus and bacteria resistant and provides no sustenance for growth or development.

UA-USES, APPLICATIONS

Where to Specify:

Animal shelters Animal hospitals Bakeries Bottling plants Breweries Cafeterias Canneries Car washes Cheese plants Clinics Cold storage warehouses Convenience stores

Cleanrooms Computer rooms Dairies Fast food outlets Fisheries Food processing plants Frozen food plants Freezer rooms Hospitals Institutional kitchens Kennels Kitchens Laboratories Locker rooms Meat packaging plants Marine vessels Milking parlors Nursing homes Operating rooms Parking garages Poultry hatcheries Poultry processing plants Restaurants Restrooms Sewage treatment plants Shower rooms Slaughter houses Supermarkets Schools Tobacco plants Waste water treatment Wineries Plus OEM applications

Product Advantages:

- Washable
- Dust free and sanitary
- Excellent acoustics
- Durable
- Chemically and UV resistant
- Temperature -98°F to +225°F
- Outdoor or indoor use
- U.S.D.A. listed
- Ceiling, Baffle or Wall systems
- Available in colors
- Dimensionally stable
- Stain resistant
- Resists acids, bases, solvents
- Complete systems
- Finished both sides

AI-ASSEMBLY, INSTALLATION

Typical Installation Procedure

MBI San Pan systems are easy to install. A detailed installation procedure is available upon request.

MF-MATERIALS, FINISHES

- Available in 20 decorative colors
- Chemically inert finish
- Resists fading and chalking
- Outstanding stain resistance
- Excellent cleanability
- Outstanding weatherability
- Ripstop available for abuse areas*
- Available in satin gloss white
- Five U.S.D.A. listed* colors
- 1 Mil through 4 Mil thick surface
- Excellent light reflectivity
- *Listed for incidental food contact

Color Selection Guide

Shell White* Georgian Gold Sable Brown* Mediterranean Olive Salem Blue* Concord Cream Clay Beige Pewter Gray Bayberry Charcoal* Desert Sand Brownstone Red Granite Grav Spruce Green Doeskin Colonial Red Dawn Gray* Sun Yellow

* Standard U.S.D.A. listed colors

TS-TECHNICAL SUPPORT

Call Collect (216) 431-6400 FAX 216/431-9000

- Immediate Budget Prices
- Next Day Samples
- Area Availability

Design and Technical Assistance

The staff at MBI wants to share with you not only their knowledge about their product, but also the creative thoughts that architects, engineers, and consultants have taught them about uses for their product. An experienced staff awaits your collect call and is eager to provide you with immediate design and technical assistance along with next day sample delivery. Call collect (216) 431-6400.

Colors:

MBI San Pan is available in 20 colors.

Weight:

MBI San Pan Panels weigh 5/8# per square foot.

Size:

MBI San Pan Panels are available in standard SAE and metric sizes along with special sizes where required. Minimum size is 6" x 12" and maximum size is 4' x 8'. Most effective thickness is one inch.

Fire Rating:

MBI San Pan meets ASTM E 84 5/0/15

Maintenance:

MBI San Pan is very easy to maintain. It is chemically inert and is impervious to most harsh environments. MBI San Pan will never require acoustically destructive painting like other yellowing materials. MBI San Pan can be easily cleaned if required, and will withstand steam cleaning or scrubbing.

Dimensional Stability:

MBI San Pan remains dimensionally stable under adverse conditions of water, moisture, temperature and abuse.

Chemical Resistance:

No effect after one year exposure to acids, bases or solvents at room temperature.

Thermal Performance:

1" thick = R-5. Thermal performances to R-19 can be obtained by adding MBI Superbatts.

U.S.D.A. Listing:

MBI San Pan Type PVF is listed for use in food process areas. Standard colors used are Shell White, Charcoal, Salem Blue, Sable Brown and Dawn Gray. Five special colors are also U.S.D.A. listed.

Light Reflectivity:

Light Reflectivity up to .80 L.R. per ASTM C523-68.

Sound Transmission:

San Pan is available with a T.L. back applied to the fiberglass core before encapsulation. MBI sound stop barriers are also available.

Perm Listing:

1 mil = .7, 1-1/2 mil = .5, 2 mil = .35, 4 mil = .2 Perm per total panel per ASTM E-96E-80.

Acoustical Performance

Ceilings - Type 600 PVF 125 - .39 250 - .67 **500 -** .76 1000 - .95 2000 - .93 **4000 -** 67 **NRC - 85** Ceilings - Type 600 PVF/RS 125 - .45 250 - .69 500 - .73 1000 - .88 2000 - .66 **4000 -** .48 **NRC -** .75 Wall Panels - Type 600 PVF (no air space) 125 - .09 **250 -** .30 **500 -** .75 1000 - 1.0 2000 - .98 4000 - .73 **NRC -** .75 Wall Panels - Type 600 PVF/RS (no air space) 125 - .20 **250 - .**53 **500 -** .76 1000 - .77 2000 - .71 **4000 -** .61 NRC - .70 Wall Panels - Type 600 PVF (3" air space) 125 - .39 250 - .67 **500 -** .76 1000 - .95 2000 - .93 4000 - .67 NRC - .85 Baffles (Sabins/Unit) - Type 300 PVF (2' x 4' x 1") 125 - 2.5 **250 -** 3.9 **500 -** 6.7

1000 - 11.5 **2000 -** 12.1 **4000 -** 8.7

Baffles (Sabins/Unit) - Type 200 PVF (2' x 4' x 2") 125 - 3.2 250 - 5.9 500 - 11.3 1000 - 13.8 2000 - 12.5 4000 - 9.1

MBI San Pan Guide Specification

Part I: General

1.1 Work Included

The work consists of furnishing all labor, materials, accessories and equipment necessary to cover all areas shown on the drawings and specified herein with MBI Panels.

1.2. Delivery and Storage

Store this product in unopened cartons in a clean, cool, dry, interior space. Cartons and product must be protected against marring, water, dirt, or damage during delivery and storage.

Part II: Product

2.1 Product and Manufacturer: MBI San Pan Series #_____ Acoustical Panels exclusively manufactured by MBI Products Co., 5309 Hamilton Avenue, Cleveland, Ohio 44114-3909 216-431-6400

2.1.1 Geometric Shape: (square) (rectangular) (custom)

2.1.2. Size & Thickness: (maximum 4' x 8' x 2")

2.1.3 Core: (2#) (3#) (6#) (7#) fiberglass

2.1.4 Surface Finish: Surface finish shall be 1 mil PVF. (Available 1-1/2 thru 3 mils). Optional rip-stop (RS) inner liner may be specified for extreme abuse areas. U.S.D.A. listed.

2.1.5 Color: To be selected by architect from manufacturer's standard selection.

2.1.6 Edge Shape: (square)

2.1.7 Edge Construction: Watertight sealed externally on all edges.

2.1.8 Acoustical Performance: _____ N.R.C. or Sabins (select from data)

2.1.9 Incombustibility: Class "A"/ASTM E-84

2.1.10 Suspension Provision Baffles Only: (Grommets)

Part III: Execution

3.1 Installation

3.1.1 MBI Acoustical Panels shall be located and spaced as detailed on reflected ceiling plans and/or detailed on the interior elevation drawings and as indicated on room finish schedule.

3.1.2 Suspend Panels with: _____ (Ceiling - MBI Clean/Grid) (Walls - MBI Extrusions) (Baffles - MBI Grommets)

3.1.3 Attachment Method Baffles only: (plastic tie)

3.1.4 Workmanship: The acoustical system shall be installed only by an approved contractor.

All work shall be completed in a workmanlike manner. All panels shall be properly installed and left in a clean, sanitary condition. Contractor shall remove and dispose of shipping containers and debris.

CC-CODES, CERTIFICATION

M.B.I. San Pan systems meet:

- 1) U.S.D.A. Listed
- 2) Class "A" ASTM E 84 5/0/15
- 3) .85 NRC per ASTM C 423-84a & E795
- 4) All health and sanitation standards
- 5) All clean room requirements
- 6) Integration with sprinkler systems
- 7) Perm .7 to .2 vapor barrier per ASTM-96E-80
- 8) Light reflectivity to .80 per ASTM C523-68
- 9) S.T.C. 41 TL backed per ASTM E 90
- 10) R-5 Thermal Requirements

OM-OPERATIONS AND MAINTENANCE

MBI San Pan Type PVF will not support bacteria. San Pan PVF will withstand steam cleaning or scrubbing if necessary. Usually a simple wash down with a satisfactory cleaning agent and disinfectant is sufficient.

Maintenance:

MBI San Pan is very easy to maintain. It is chemically inert and is impervious to most harsh environments. MBI San Pan will never require acoustically destructive painting like other yellowing materials. MBI San Pan can be easily cleaned if required, and will withstand steam cleaning or scrubbing.

CP-COMPONENTS/PARTS

Accessories Available

For Ceiling Systems:

- Corrosive resistant aluminum extra wide 1-1/2" grid system
- Gasketed grid to seal plenum

• Escussions to facilitate penetration of sprinkler heads or services

For Wall Systems:

• Corrosive resistant U.S.D.A. listed PVC extrusions for San Pan wall attachment

For Baffle Systems:

- Factory installed non-corrosive U.S.D.A. listed brass or zinc grommets for pendant suspension from ceilings or walls
- Tie connectors for connecting baffles to grid clips
- Grid clips for attachment to grid for pendant attachment of baffles

For Repairs and Cuts:

• PVF tape for repairing or closing field cut panels

Contracting Tools:

• Tools that facilitate easier and superior installation

NOTE: We believe this information is the best currently available on the subject. It is subject to revision as additional knowledge and experience are gained. M.B.I. makes no guarantee of results and assumes no obligation or liability whatsoever in connection with the use of this information.