### **Submittal 09 29 00**



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# WITH MOLD & MOISTURE RESISTANCE

American Gypsum's 1" M-Bloc® Shaft Liner gypsum panels consist of a fire-resistant type X core that is encased in a mold and **DESCRIPTION** moisture resistant blue face and back paper manufactured from 100% recycled paper. The face paper is folded around the long edges to reinforce and protect the core. The panels feature a double beveled edge for ease of installation, with the ends being square-cut and finished smooth. M-Bloc Shaft Liner panels are available: 1" thick x 2' wide, and in a variety of lengths. At an independent laboratory accredited in accordance with ISO 17025-2005, M-Bloc panels have been tested to the industry's most rigorous standards achieving the best possible results per ASTM D3273, scoring a perfect 10 thus minimizing the risk of mold and mildew growth. American Gypsum products contain no asbestos and no detectable levels of formaldehyde.

GREENGUARD CERTIFIED

1" M-Bloc Shaft Liner gypsum panels have achieved UL Environment's GREENGUARD GOLD Certification. GREENGUARD Certified products are scientifically proven to meet some of the world's most rigorous, third-party chemical emissions standards, helping reduce indoor air pollution and the risk of chemical exposure while aiding in the creation of healthier indoor environments. For more information, visit www.ul.com/gg.

### **BASIC USES**

M-Bloc Shaft Liner panels are used in conjunction with other American Gypsum products and metal framing members for Shaftwall and Area Separation Wall systems. M-Bloc Shaft Liner may be substituted for American Gypsum's standard 1" Shaft Liner panels.

Lightweight non-load bearing gypsum Shaftwall systems have replaced traditional masonry for interior vertical enclosures including stairwells, elevator enclosures and mechanical chases.

American Gypsum's M-Bloc Shaft Liner has been approved for use in the following assemblies:

- 2 Hour H-Stud Area Separation Wall System - U 375
- 1 & 2 Hour Shaftwall Systems using I, C-H and C-T Studs - V 455
- U 428 2 Hour Shaftwall System using C-H and C-T Studs
- 2 Hour Area Separation Wall System using C-H and C-T Studs - U 429

### **LIMITATIONS**

The use of 1" M-Bloc Shaft Liner panels in actual jobsite conditions may not produce the same mold resistant results as were achieved in a controlled laboratory setting. While no material can or should be considered mold proof, the use of good design and construction practices is the most effective strategy to manage the growth of mold and mildew.

Used in non-load bearing systems.

Not to be used in an unlined air supply duct.

Limiting heights and deflection criteria for the system should be based upon the metal stud manufacturer's recommendations.

Provide flexible sealant/caulk at partition perimeters and penetrations to avoid air leakage/whistling and dust collection.

Framing must be spaced no more then 24" o/c.

Avoid exposure to temperatures exceeding 125°F (52°C) for extended periods of time, e.g., located adjacent to wood burning stoves and or heating appliances.

STORAGE AND HANDLING

Gypsum board does not generate or support the growth of mold when it is properly transported, stored, handled, installed, and maintained. However, mold spores are present everywhere and when conditions are favorable; mold can grow on practically any surface. GYPSUM BOARD MUST BE KEPT DRY to prevent the growth of mold. Gypsum board must be stored in an area that protects it from adverse weather conditions, condensation, and other forms of moisture. Job site conditions that can expose gypsum board to water or moisture must be avoided.

Gypsum board should not be exposed to elevated levels of moisture for extended periods. Examples of elevated levels of moisture include, but are not limited to, exposure to rain, condensation, water leakage, and standing water. Some board exposed to these conditions may not need to be replaced, depending upon the source of the moisture and the condition of the gypsum board being considered for replacement.

When gypsum board is exposed to elevated levels of moisture, an assessment of the potential damage to the gypsum board must be made by the contractor/design professional/owner as to whether board exposed to these conditions must be replaced. Gypsum wallboard may experience limited intermittent exposure to moisture from a variety of sources, such as improper storage, construction or design defects, water leaks, etc. Gypsum board exposed to water should be replaced unless all of the following conditions are met.

- 1. The source of the water or moisture is identified and eliminated.
- 2. The water or moisture to which the gypsum board was exposed was uncontaminated.
- 3. The gypsum board can be dried thoroughly before mold growth begins (typically 24 to 48 hours depending on environmental conditions).
- 4. The gypsum board is structurally sound and there is no evidence of rusting fasteners or physical damage that would diminish the physical properties of the gypsum board or system.

Below are the general recommendations for drying out gypsum wallboard once exposed to moisture:

- The source of water or moisture must be eliminated.
- Adequate ventilation, air circulation, and drying are essential to minimize the potential for mold or other fungal growth. Fans should be used to increase
- The interior of the building must be thoroughly dried immediately.
- The indoor humidity can be lowered by using fans and portable dehumidification equipment and by opening up the building when the outside air is drier than the air inside the structure.

- Damaged gypsum board and other wet materials that are to be replaced must be removed from the building to facilitate drying.

- Closets, cabinets, and doors between rooms should be opened to enhance circulation of air.
- For more detailed information, a water damage restoration specialist should be contacted.

IMPORTANT - IF THERE IS EVER A DOUBT ABOUT WHETHER TO KEEP OR REPLACE GYPSUM BOARD THAT HAS BEEN EXPOSED TO MOISTURE - REPLACE IT.

CAUTION: When replacing gypsum board in a fire resistance or sound rated systems, care must be taken to ensure that all repairs are consistent with the specific fire or sound rated design initially constructed (gypsum board type, fasteners and their spacing, and staggered joints).

Gypsum board must be protected during transit with a weather-tight cover in good condition. Plastic shipping bags are intended to provide protection during transit only and must be promptly removed upon arrival of the load. Failure to remove the shipping bag can increase the likelihood of developing conditions favorable to the growth of mold.

Gypsum board must be stored off the ground and under protective cover. Sufficient risers must be used to assure support for the entire length of the wallboard to prevent sagging.

Gypsum board must be delivered to the job site as near to the time it will be used as possible. Individuals delivering gypsum board to jobsites should ensure that it is carried, not dragged, to place of storage/installation to prevent damage to finished edges.

Gypsum board shall always be stacked flat - NEVER on edge or end. Gypsum board stacked on edge or end is unstable and presents a serious hazard should it accidentally topple. Gypsum board should be placed so weight is evenly distributed and the floor is not overloaded.

GOOD BUILDING PRACTICES

Installation - Installation of 1" M-Bloc Shaft Liner panels shall be consistent with specified application details for Shaftwall or Area Separation Wall systems. The assembly must be erected in the proper manner and with all approved components used in a successfully completed fire endurance test. The contractor, design professional and or owner shall ensure that only the components that were a part of the approved test are used; do not substitute components.

Handling and application shall be consistent with methods described in the noted standards and references indicated below.

The design professional has the ultimate responsibility for location of control joints.

### **APPLICABLE STANDARDS**

Mold Resistance	Score of 10 (ASTM D 3273)	
Manufacturing	ASTM C 1396	
Installation	ASTM C 840 Gypsum Association GA-216 Gypsum Association GA-214 Gypsum Association GA-620	
Surface Burning Characteristics	ASTM E 84 Flame Spread 0 Smoke Developed 0	

## PRODUCT DATA

Thickness	Widths	Lengths	Edge Type	UL Types
1" (25.4mm)	2' (610mm)	8' - 12' (2438mm - 3658mm)	Double Beveled	AG-S

Special lengths or edges may be available on special order. Consult your American Gypsum sales representative for details. Thermal Resistance "R" Value

**FIRE RESISTANCE RATINGS** 

Desired fire rated assemblies are specified from tests performed by independent laboratories. These designs are made up of specific materials in a precise configuration. When choosing construction designs to meet certain fire resistance requirements, vigilance must be taken to insure that each component of the selected assembly is the one specified in the test and are assembled in accordance with the requirements of the

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assembly.

Job Name:	
Contractor:	Date: