

# M2Tech® Shaftliner

## SHAFTLINER TYPE X DRYWALL PANEL

M2Tech Shaftliner for use in Shaftwall and Area Separation Firewall Systems is a 1" (25.4mm) thick drywall panel with a specially formulated fire resistive, noncombustible gypsum core, enclosed in a heavy moisture and mold resistant, blue gray colored, 100% recycled paper.

M2Tech Shaftliner drywall panel is designed and engineered for use in constructing lightweight Shaftwall and Area Separation Firewall assemblies. M2Tech Shaftliner drywall panel is UL/cUL Classified and ULC Listed in fire resistance designs and features double beveled edges for ease of installation.

In addition to its fire resistive properties M2Tech Shaftliner drywall panel is also designed and engineered to provide added protection against mold when exposed to incidental or intermittent moisture during and after construction. When tested for mold resistance by an independent lab at the time of manufacturing, M2Tech Shaftliner achieved the best possible score of 10 out of 10 per ASTM D3273.

### Basic Uses

M2Tech Shaftliner is used in conjunction with other CertainTeed and M2Tech drywall panel products in Shaftwall and Area Separation Firewalls.

Gypsum Shaftwall systems can replace traditional masonry for interior vertical enclosures including stairwells, elevator enclosures and mechanical chases. Some inherent advantages of gypsum shaftwall systems are: one sided construction, lighter weight, reduced thickness, ease and speed of installation, and no requirement for scaffolding.

M2Tech Shaftliner can also be used in Horizontal Systems for membrane and duct protection and corridor ceilings. UL/cUL I515, provides a 1-hour and 2-hour fire resistance rated assembly.

M2Tech Shaftliner Shaftwall systems provide up to four hour fire resistive ratings, in non-loadbearing configurations. UL/cUL U417 or ULC W446, provides a 1-hour, 2-hour, or 3-hour fire resistance rated assembly. UL/cUL W471 provides a 4-hour fire resistance rated assembly. The systems are designed to withstand the intermittent surges of air pressure caused by fast moving elevator cabs.

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Date \_\_\_\_\_

Products Specified \_\_\_\_\_

### PRODUCT DATA

PROPERTIES	M2TECH SHAFTLINER TYPE X
Thickness	1" (25.4 mm)
Width	2' (610 mm)
Length	8', 10', 12' standard (2440 mm, 3050 mm, 3660 mm)
Weight	3.7 lb/ft <sup>2</sup> (18 kg/m <sup>2</sup> )
Edges	Double beveled
Packaging	Per piece

Custom lengths may be available on special order. Consult your CertainTeed sales representative.

### TECHNICAL DATA

APPLICABLE STANDARDS AND REFERENCE	
Product Standard	ASTM C1396
Installation Guidelines	ASTM C840 / GA-216
Finishing Guidelines	ASTM C840 / GA-214
Code References	International Building Code (IBC)
Code References	International Residential Code (IRC)
Code References	National Building Code of Canada (NBCC)
UL/ULC Designation	Type Shaftliner

PHYSICAL PROPERTIES	1" (25.4 mm) M2TECH SHAFTLINER	TEST METHOD
Nominal Width	2' (610 mm)	-
Standard Lengths	8' (2440 mm), 10' (3050 mm), 12' (3660 mm)	-
Face Surface	Paper	-
Weight - lb/ft <sup>2</sup> (kg/m <sup>2</sup> )	3.7 lb/ft <sup>2</sup> (18 kg/m <sup>2</sup> )	-
Edge Profile	Double Bevel	-
Surface Burning Characteristics - Flame Spread	15 (0)	ASTM E84 / UL 723 (CAN/ULC-S102)
Surface Burning Characteristics - Smoke Developed	0 (0)	ASTM E84 / UL 723 (CAN/ULC-S102)
Surface Burning Characteristics	Class A	ASTM E84 / UL 723 (CAN/ULC-S102)
Combustibility	Non-Combustible	ASTM E136
Mold Resistance	10 out of 10	ASTM D3273
Core Hardness - End	≥ 11 lbf (49 N)	ASTM C473 (Method B)
Core Hardness - Edge	≥ 11 lbf (49 N)	ASTM C473 (Method B)
Flexural Strength - Parallel	≥ 77 lbf (343 N)	ASTM C473 (Method B)
Flexural Strength - Perpendicular	≥ 228 lbf (1014 N)	ASTM C473 (Method B)

## Basic Uses *continued*

CertainTeed Area Separation Firewalls offer the advantages of fire resistance and noise attenuation between adjoining housing units. These walls offer a 2-hour or 3-hour fire resistance rating line of defense between units and provide sound ratings up to an STC 73. UL/cUL U366 or ULC W311, provides a 2-hour resistance rated assembly. UL/cUL W467 provides a 3-hour fire resistance rated assembly.

## Advantages

### AREA SEPARATION FIREWALLS & SHAFTWALL SYSTEMS

- Achieves best possible score of 10 out of 10 for mold resistance per ASTM D3273\*
- Economical and efficient installation.
- Scores and snaps easily with no special handling required.
- No requirement for additional trade on job.
- UL Classified and ULC Listed for Fire Resistance and Surface Burning Characteristics.
- One sided construction of Shaftwalls eliminates the need for extensive scaffolding.
- Rapid ease of installation reduces overall construction time and provides a cost effective system.
- Lightweight construction.

- Reduced wall thickness means greater floor area.
- Area Separation Firewall ratings up to three hours.
- Shaftwall fire-resistance rating up to four hours.
- GREENGUARD Gold Certified.

## Installation

### LIMITATIONS

- Not recommended for continuous exposure to temperatures exceeding 125° F (52° C).
- Panels should not come in direct contact with concrete, masonry or other surfaces that have high moisture content.
- Panels should be stacked flat on a smooth, level surface, not directly on the ground during storage.
- Panels should always be kept dry prior to installation.
- Storage should be in accordance with the Gypsum Association GA-801, *Handling and Storage of Gypsum Panel Products*.
- Panels should be carried with care to place of installation to prevent damaging of finished edges.

\* The performance of CertainTeed Moisture and Mold Resistant drywall panel in actual use may not accurately reproduce the results achieved in this ASTM laboratory test. Good design and construction practices that prevent water and moisture exposure of building products are the most effective strategy to avoid the growth of mold.

## Installation *continued*

### SHAFTWALL SYSTEMS

- For non-loadbearing partitions only.
- Exposure to continuous moisture should be avoided.
- Not designed to serve as an unlined air supply duct.
- Limiting heights and deflection criteria for the system should be based upon the stud manufacturer's recommendations.
- 1 to 3-hour vertical shaftwall UL fire rated assembly UL/cUL U417 or ULC W446.
- 4-hour vertical shaftwall UL fire rated assembly UL/cUL W471.
- 1 or 2-hour horizontal shaftwall UL fire rated assembly UL/cUL I515.

### AREA SEPARATION FIREWALLS

- The Area Separation Firewall is a non-loadbearing partition.
- Interior finish walls (protected walls) are loadbearing or non-loadbearing walls.
- Unsupported wall height between floors should not exceed 12' (3660 mm). The assembly may be used in buildings with a total height not to exceed 70' (21336 mm).
- Penetrations are typically not permitted in the double layer 1" shaftliner wall, but are permitted in the protective flanking walls. Consult local building code authorities.
- 3-hour Area Separation Firewall Assembly - UL/cUL W467

### Recommendations

Installation of M2Tech Shaftliner Drywall Panels should be consistent with methods described in the standards and references noted.

### Certifications

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### BIM/CAD INFORMATION

The BIM and CAD UL fire rated assemblies and sound assemblies can be found on CertainTeed's BIM and CAD Design Studio at [bimlibrary.saint-gobain.com/certainteed](http://bimlibrary.saint-gobain.com/certainteed). CertainTeed's BIM and CAD Design Studio provides BIM and CAD details to many UL fire rated assemblies and sound assemblies in easy to view experience. Plus, downloadable Revit and DWG and PDF CAD Details are available.

### SUSTAINABILITY

Sustainable documentation, including recycled content, EPD's, HPD's, VOC Certifications, can be found at [saintgobain.ecomedes.com](http://saintgobain.ecomedes.com).

### NOTICE

The information in this document is subject to change without notice. CertainTeed assumes no responsibility for any errors that may inadvertently appear in this document.

For Fire Resistance, no warranty is made other than conformance to the standard under which the assembly was tested. Minor discrepancies may exist in the values of ratings, attributable to changes in materials and standards, as well as differences between testing facilities. Assemblies are listed as "combustible" (wood framing) and "noncombustible" (concrete and/or steel construction).