

PANEL+[®]

WALL SYSTEM

Technical Data Sheets

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1. Manufacturer

Old Mill Building Products

42 E 1100 S, Ste 6, American Fork, UT 84003

Phone: (888) 264-6455

Web: www.oldmillbuildingproducts.com

2. Product Description

Basic Use

Thin clay brick units for use in adhered masonry construction for both interior and exterior applications. For residential, commercial and institutional applications.

Composition & Materials

Thin brick units are manufactured from clay, shale or similar naturally occurring earthy substances and subjected to a heat treatment at elevated temperatures (firing), creating a bond between the particulate constituents resulting in a severe-weathering brick with one or more finished faces. Custom shapes and sizes are available. The units are saw cut to approximately 1/2" thickness after firing.

Shapes & Sizes

Thin brick units are available in a modular face size of 2-1/4" (height) x 7-5/8" (length). Weight of all thin brick products does not exceed 15 psf.

Thin brick units are available in standard stretcher (flat) and as cut corner shapes.

Tolerances

Thin brick is manufactured to meet the tolerances of ASTM C 1088 TBX, TBS, and TBA as applicable.

Thin brick are inspected to be sound and free of cracks, blemishes or other defects that would either affect the serviceability or strength of the unit, or become exposed once installed and visible when viewed from a distance of not less than 20 ft. under diffused light.

Colors & Finishes

Colors for each of the thin brick are available from your sales representative. Colors vary by plant location.

As a manufactured material, products are monitored for color consistency. Slight variations between batches may occur and it is recommended that the installer mix units from different skids during installation.

User should review samples prior to selecting a particular color and finish.



3. Limitations & Disclaimers

Manufactured masonry products are generally intended for above grade installations. Manufactured masonry units, regardless of their composition, are inherently absorptive, and as such, are not intended for use below grade. Units installed below grade will wick moisture from the soil that is in contact with the masonry units effectively creating a condition known as "rising damp" in the masonry veneer.

Standard brick units are not intended to be used as pavers. Old Mill Building Products offers paving brick in a variety of colors for light traffic paving installations.

In colder climates, masonry walls at grade may also become exposed to de-

icing compounds. As with other types of manufactured masonry units, clay brick masonry units should not be installed where they will be directly exposed to de-icing compounds used to melt snow and ice from pavements. For further information with regard to installing masonry at or below grade refer to the "At Grade Design Ideas" brochure.

The function of caps and copings is to prevent moisture from entering the building envelope through the top of the wall. As most manufactured masonry units are produced in relatively short lengths, if they are used as a cap or coping material more mortar joints are required. These horizontal mortar joints are the most likely entry point for moisture to infiltrate the building envelope. As such, it is generally recommended within the industry to install proper flashing below all caps and copings or to use longer components such as quarried stone or metal parapet caps to reduce the number of joints thereby limiting the areas that may allow moisture infiltration of the building envelope.

4. Technical Data

Applicable Standards

Required properties for thin brick units are described in ASTM C 1088 Standard Specification for Thin Veneer Brick Units Made From Clay or Shale.

These standards classify clay and shale products as either moderate-weathering or severe-weathering depending on the material's tested physical properties of compressive strength and 24-hour absorption.

Old Mill Building Products meet and exceed the requirements necessary to comply with the severe-weathering classification. They have been extensively tested using standardized test methods found in ASTM C 67 Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile. Test reports are available upon request.

5. Installation

DELIVERY - Old Mill Brick products are delivered to the site in protective packaging.

HANDLING - Lift skids with proper and sufficiently long slings or forks with protection to prevent damage to units. Protect edges and corners.

STORAGE - Store Old Mill Brick products in a manner designed to prevent damage and staining of units. Stack units on timbers or platforms at least 3" above grade. Place polyethylene or other plastic film between wood and other finished surfaces of units when stored for extended periods of time. Stored units should be covered if exposed to extreme weather conditions.

Installation

Construct adhered masonry veneer in accordance with ACI 530-05/ASCE 5-05/TMS 402-05, Building Code Requirements for Masonry Structures in the United States, and any local requirements stipulated by the authorities having jurisdiction.

Old Mill Brick products must be connected to a structural substrate with an approved masonry connection system, designed by the consultant for each specific installation.

6. Availability & Cost

AVAILABILITY - Old Mill Building Products are available throughout the continental United States.

Delivery times for orders will vary based on the complexity of what is required.

Old Mill Building Products cannot be responsible for delays due to fire, acts of God, or any other cause beyond its control or which could not be reasonably foreseen.

COST - Quoted on a project basis for job-specific manufacturing to project requirements.

7. Maintenance

Old Mill Brick products should have excess mortar removed from their faces by brushing as they are placed within the wall at the point of tooling.

Clean Old Mill Brick products in accordance with the cleaning guidelines in BIA Technical Bulletin Brick Cleaning Information. Various masonry detergents and cleaning systems can change the color of masonry products. Acid-based cleaning agents will darken the color of the masonry units.

Always pre-test cleaning agents and methods on the job-site mock-up panel or a small inconspicuous area of the wall. The Consultant and/or Owner should approve the test area prior to the start of full-scale cleaning operations.

Old Mill Building Products does not recommend the application of water repellent or graffiti-proofing sealers to its masonry products.

8. Related References

Old Mill Building Products distributes an integrated technical information system, comprised of the following components:

- Sample detail drawings which are available in .pdf format.
- Architectural Catalog Shape drawings,
- BIA Technical Notes.

1. Manufacturer

Old Mill Building Products

42 E 1100 S, Ste 6, American Fork, UT 84003

Phone: (888) 264-6455

Web: www.oldmillbuildingproducts.com

2. Product Description

Basic Use

Stone ledgers are versatile, high-quality natural stone products designed for both interior and exterior applications. Ideal for enhancing the aesthetic appeal of residential and commercial spaces, these stone ledgers can be used in various settings such as feature walls, fireplaces, facades, garden walls, and accent walls. Composed of slate, quartzite, and limestone, stone ledgers are available in finishes such as split face, broken face, and 3-D geometric, offering a range of design options to suit any architectural style. Suitable for installation in areas subject to both dry and moist conditions.

Composition & Materials

Our stone ledgers are crafted from premium natural stones, including slate, quartzite, and limestone. These materials are available in various finishes such as split face, broken face, and 3-D geometric, ensuring a versatile and aesthetically pleasing option for any project. Each stone is carefully selected and processed to maintain its natural beauty and durability.

Limitations & Disclaimers

- For interior use, stone ledgers should not be installed more than 10 feet above ground level.
- Exceptions apply if the stone is adhered to Old Mill's Panel+ wall system.
- Ensure compliance with local building codes and regulations.
- Not recommended for use in areas subject to extreme moisture or temperature fluctuations without proper treatment.

Adhesives

For exteriors, we recommend
Old Mill's MasonGrip MS Polymer Adhesive

For interiors, we recommend
Old Mill's Brick Bond Multi-Purpose Adhesive



Approved Substrates

- Fully cured concrete
- Masonry Brick
- Regular Brick
- Cement Mortars
- Cementitious Backer Units
- Gypsum Plaster
- Gypsum Wallboard
- Exterior Grade Plywood

Advantages

- Quick and easy do-it-yourself installation
- Engineered real stone for optimum durability and versatility
- Pre-installed stone panels for quick and easy installation
- Easy maintenance
- Cuts easily with an angle grinder or wet tile saw
- Adds comfort, style, and value to your home or business

Size & Coverage

| Stone Ledger | Coverage |
|--------------------------------|----------|
| Panels: 6" x 24" | 1SF |
| Corners: 6" x 6" x 18" | 1SF |
| Single box of Panels (6 pcs) | 6SF |
| Single box of Corners (6 sets) | 6SF |
| Thickness .75" - 1.25" | |

Packaging



Panels: 6 pcs/box



Corners: 6 sets/ box

1. Manufacturer

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System Description

Panel+ is the most cost-effective way to incorporate Continuous Insulation into the building envelope. Our patented system of specialized adhesive, air + water barrier, and foam panels is easy to install, cost-effective, and passes code requirements for continuous insulation.

Uses

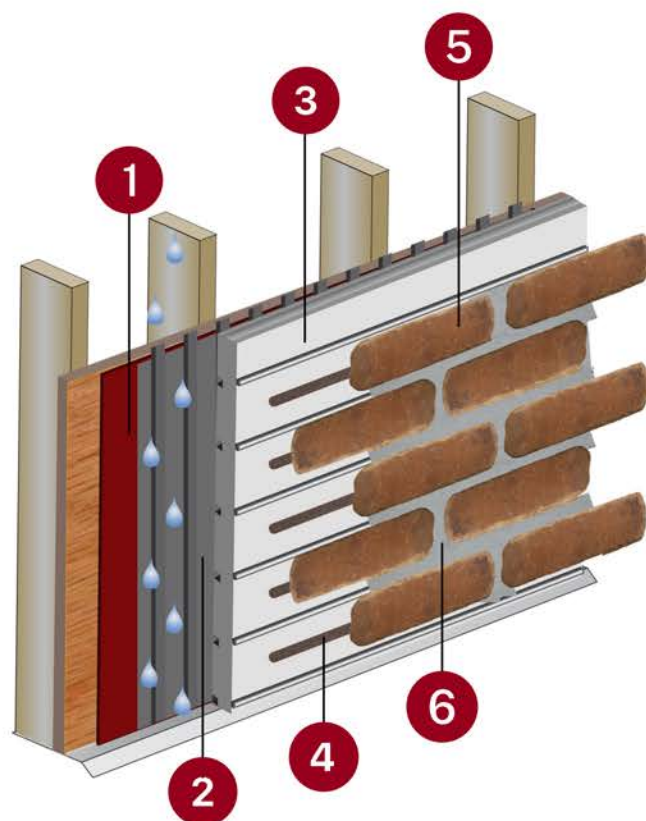
Panel+ may be used in fire-resistance-rated construction and in any construction type (IBC Types I through V), when installed in accordance with Old Mill System's Wall Systems instructions.

Material Substitution

Material substitution will adversely affect system performance and will void all warranty coverage unless approved in writing by Old Mill Building Products.

Warranty

Old Mill Building Products (OM) stands behind its Panel+ Wall System with a 15-Year Limited Warranty. This warranty covers the complete Panel+ Wall System from the date of purchase, provided it's installed in accordance with OM's specifications. Exclusions include misuse, structural issues, unauthorized alterations, and acts of nature. Labor costs are the owner's responsibility. Claims must be made within 30 days. The warranty is governed by Delaware law.



1 Weather Barrier

2 Adhesive

3 EPS Insulation Board

4 OM Adhesive

5 OM Adhered Veneer

6 Type S Pointing Mortar

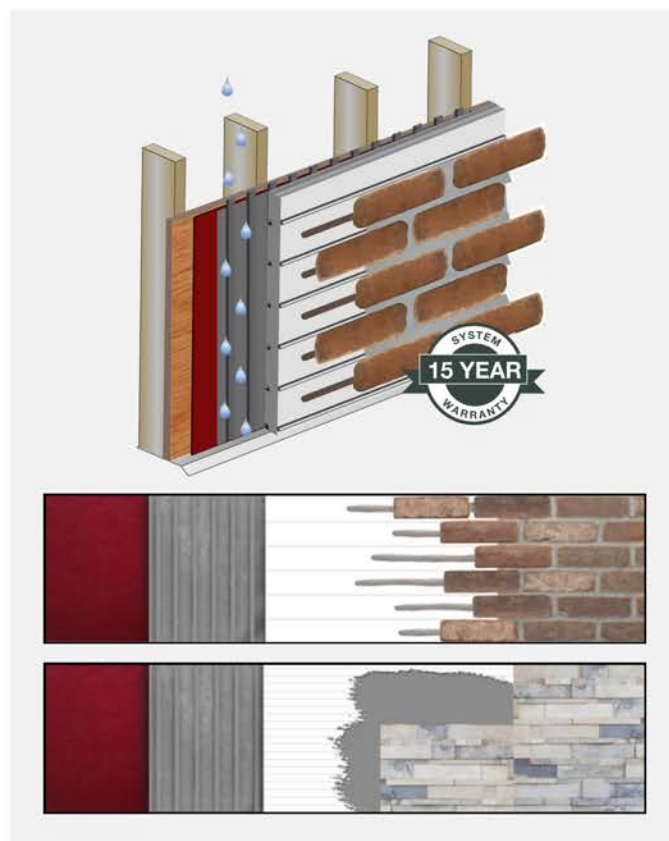
Acceptable Substrates

PermaBase® Cement Board and other cement boards conforming with ASTM C1325 (Type A - exterior); poured concrete/unit masonry; ASTM C1177 type sheathings, including Weather Defense™ Platinum sheathing, GreenGlass® sheathing, eXPTM sheathing, GlasRoc® sheathing, Securock™ glass-mat sheathing, and DensGlass® exterior sheathing; DensElement (sheathing only), gypsum sheathing (ASTM C79/C1396); Exposure I or exterior plywood (Grade C/D or better); or Exposure I OSB; Huber Zip (sheathing only).

Installation Options

Adhesive Fluid Applied

The Fluid Applied Adhesive method is integral to constructing the Panel+ wall system, offering a purposeful solution for attaching EPS Foam Panels to various substrates. This approach involves preparing a specially formulated adhesive mortar that provides high bond strength and necessary flexibility. When mixed and applied, it creates a durable layer that secures the panels in place, ensuring compatibility and resilience in the overall structure. This method is key for achieving a steadfast, long-lasting build that stands up to the demands of any construction project.



Mechanically Fastened

The mechanical fastening method employs robust 2-inch polymer-based washer fasteners, meticulously engineered to bear the full weight of the insulation panels. These fasteners are crucial in preventing pop-ups, ensuring a secure and stable installation. Compatible with all thicknesses of Old Mill Panel Insulation, they are adept at providing superior performance and maintaining their integrity in a variety of environmental condition. Their design not only guarantees a firm hold but also contributes to the longevity and durability of the Panel+ system, making them an essential component in modern construction.



Code Compliance

| Code | Code Description |
|--------------------------------|---|
| ASTM C578 | (See product marking for type) |
| ASTM E2485 / E248M | Freeze / Thaw Resistance of EIFS |
| UL QORW.R16529 | Physical Properties |
| UL BRYX.R16529 | Surface Burning |
| UL ER16529-01 | NFPA 285 Approved Assemblies |
| ULC BOZCC.R16529 | CAN/ULC-S102.2, S701 |
| ICC-ES ESR-1962, UL ER16529-01 | International Energy Conservation Code (IECC) |
| ICC-ES ESR-1962, UL ER16529-01 | International Residential Code (IRC) |
| ICC-ES ESR-1962, UL ER16529-01 | International Building Code (IBC) |

Limitations

For use on above grade vertical walls. System must terminate a minimum of 8-inches (200 mm) above grade. • Additives are not permitted for any Old Mill Building Products' product unless approved in writing by Old Mill Building Products. • All products must be installed at minimum 40 °F (4 °C) ambient and substrate temperatures unless otherwise noted on specific Old Mill Product Bulletins. • Protect all work from precipitation for at least 24-hours after application. • All products must be stored in accordance with specific instructions on relevant Old Mill Product Bulletins. • All substrates must be clean, dry and sound without planar irregularities greater than 1/4-inch per 10-feet (6 mm per 3 m).

Warranty Statement

Old Mill Building Products (OM) stands behind its Panel+ Wall System with a 15-Year Limited Warranty. This warranty covers the complete Panel+ Wall System from the date of purchase, provided it's installed in accordance with OM's specifications. Exclusions include misuse, structural issues, unauthorized alterations, and acts of nature. Labor costs are the owner's responsibility. Claims must be made within 30 days. The warranty is governed by Delaware law.

1. Manufacturer

Old Mill Building Products

42 E 1100 S, Ste 6, American Fork, UT 84003

Phone: (888) 264-6455

Web: www.oldmillbuildingproducts.com

2. Product Description

Basic Use

Old Mill Air & Water Barrier is a high quality, elastomeric, single component, fluid applied membrane specifically formulated for use as a load bearing, crack isolation, waterproofing and air barrier that is easily applied by roller, brush, trowel or spray. Old Mill Air & Water Barrier forms a continuous air & water barrier that protects approved substrates from air infiltration/exfiltration as well as incidental water damage. Specifically designed to also be a component of the Old Mill Panel+ continuous insulation engineered wall system. It is suitable as a substrate for affixing adhered masonry veneers as well as EPS Foam Panels when used in conjunction with Old Mill Adhesives.

Composition & Materials

Old Mill Air & Water Barrier is 100% acrylic, single component, water based, Low VOC liquid.

All Old Mill manufacturing is quality controlled to ensure product performance and uniformity.

Limitations & Disclaimers

- Do Not Use in Negative Hydrostatic Pressure Applications
- Always Consult With Design Professional for Placement Location and Permeability Requirements
- Comply With Local Building Code Requirements
- Apply When Temperature is Between 42F and 95F
- Not for Use as a Roofing Membrane Over Occupied Space
- Do Not Use Solvent Based Cleaners or Expose to Solvents

Packaging

- 5 Gallon Plastic Pails

Coverage per pail (sf/sm)*

Roller: 450-500 sf (42-46 sm)


Spray: 300-350 sf (28-32.5 sm)

Trowel: 200-250 sf (18-23 sm)

*All coverage is approximate for a single coat of 15 mils wet film thickness (WFT), 10 mils dry and depend upon substrate, details and individual application.

Shelf Life

2 Years

- 
- A photograph showing a red weather barrier being applied to a wall using a red roller. The wall is partially covered with the red material, and the roller is in the process of applying it to a wooden substrate.
- ✓ 100% Coverage
 - ✓ Doesn't rattle in the wind
 - ✓ Vapor permeable with low air infiltration rate
 - ✓ Used as water barrier and flashing

Approved Substrates

- Poured in Place Concrete*
- Precast Concrete*
- Concrete Masonry Unit (CMU)
- Brick Masonry
- Cement Backer Unit (CBU)
- Cement Mortar/Plaster/Scratch Coat
- Ceramic/Porcelain Tile
- Natural Stone
- Exterior Rated Gypsum Sheathing
- Oriented Strand Board (OSB)
- Exterior Glue Plywood (EGP)

* Release agents must be mechanically removed prior to application

Advantages

- Provides Maximum Adhesion
- High Permeability (Non-Permeable Version Available)
- Highly Flexible to Bridge Cracks in Substrate
- Meets ASTM E2537 Air Leakage of Building Assemblies
- Meets ASTM D1970 Nail Seal-ability Requirements
- Install Adhered Masonry Veneers Directly
- Sprayable With Airless Spray Equipment
- UV Exposure Window of Up to Six Months
- User Friendly Single Component
- Water Based for Safety and Simple Clean-up
- Freeze/Thaw Stable in Service
- Consistent Quality Control
- Fluid Applied Simplifies Sealing Complex Detailing
- Qualifies for a 5 or 15 Year System Warranty
- Can be Used Below Grade and in Immersion

3. Technical Data

Applicable Standards

ASTM C297/E2134 | ASTM D1970 | ASTM D2247
ASTM E72 | ASTM E84 | ASTM E96 | ASTM E330
ASTM E331 | ASTM E1233 | ASTM E1354 |
ASTM E2178 | ASTM E2357 | ASTM E2485 |
AATCC 127 | ICC ES AC212 | NFPA 285

Physical Properties

| | |
|-----------------------------|-------------------------|
| VOC Content, g/L | 10 |
| Color | Maroon |
| ASTM D1970 Nail Sealability | Pass |
| Maximum Service Temperature | 180F |
| ASTM E96 Permeance | 30 Perms |
| ASTM E2357 Air Leakage | 0.003L/s-m ² |
| ASTM E330 | Pass @ 150 PSF |
| Application Range | 42 – 95 F |

4. Installation

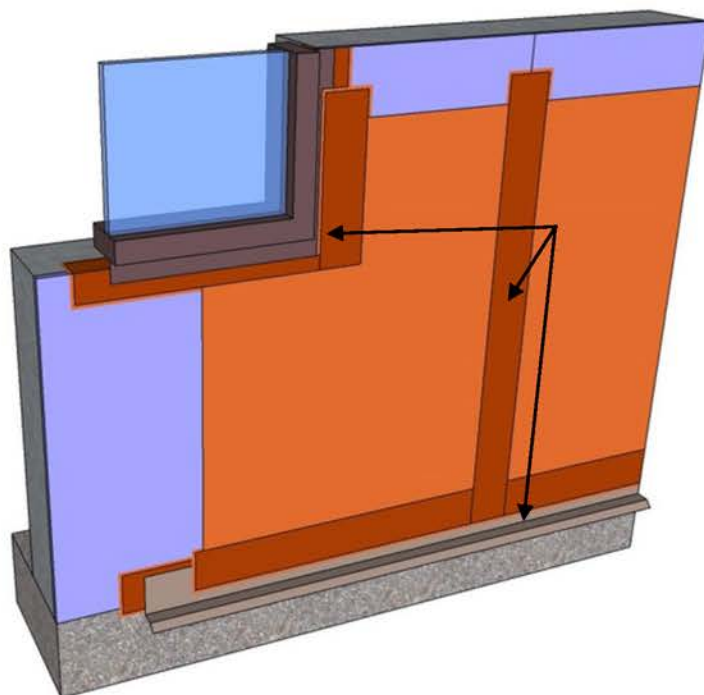
Surface Preparation

All surfaces should be dry, structurally sound, clean and free of dirt, dust, efflorescence, grease, oils, sealers, curing compounds, adhesive residues or any contaminant that could impede bond. Existing tile should be abraded to provide for a mechanical bond. Do not proceed with work until the surfaces to be applied to comply with all manufacturer's requirements.

Exterior sheathing panels should be installed in compliance with manufacturer's instructions. Masonry walls should be treated to patch cracks, voids and other irregularities and remove any protrusions. Fill mortar joints and strike flush. Cast concrete must cure 28 days prior to application of membrane and all form releases must be mechanically removed.

Mixing

Thoroughly stir Old Mill Air & Water Barrier to a homogenous consistency. Do not add water, accelerators or retarders.



Application

Old Mill Air & Water Barrier is applied by first treating the sheathing joints (where applicable), fastener locations, and changes of plane/substrate by first applying a thin layer of Old Mill Air & Water Barrier then embedding Old Mill Poly laminate Fabric into the wet air barrier and troweling smooth. Fastener locations may be spot treated with a brush or trowel and do not require the reinforcing mesh.

Coat the entire surface to be treated using brush, roller (½" to ¾" nap), trowel or airless spray equipment techniques. Apply an even, continuous coat of 15 mils wet film thickness (wft). CMU, OSB and other rough, absorptive substrates require two coats to achieve a pinhole free coating.

Clean tools and equipment with soapy water.

Spray Application

Old Mill Weather Barrier is compatible with GRACO and Titan airless spray equipment with the following specifications.

- Minimum 1 gallon per minute output.
- Minimum hose width of 3/8 inch.
- Minimum tip size of 0.027-0.031.
- Minimum pressure requirement to spray of 2,000 psi at the gun with an airless sprayer rated no lower than 3,300 psi.
- Remove all filters in sprayer and gun before application.
- Hopper Gun: 3/16"-1/4" (6-6.5 mm) orifice, 23-25 psi.

1. Manufacturer

Old Mill Building Products

42 E 1100 S, Ste 6, American Fork, UT 84003

Phone: (888) 264-6455

Web: www.oldmillbuildingproducts.com

2. Product Description

Basic Use

Old Mill Panel+ EPS Foam Panels are engineered continuous insulation panels designed for use in the Old Mill Panel+ engineered wall system. These patented panels provide the insulation layer as well as the substrate for adhered masonry veneers in commercial and residential applications. Specifically designed with functional profiles to accommodate drainage, ventilation, structural integrity and alignment for the various finishes that can be employed with the system, these panels are an integral part of the patented Old Mill Panel+ Full Wall System.

Composition & Materials

Old Mill Panel+ EPS Foam Panels are made of superior closed cell, lightweight and resilient expanded polystyrene (EPS).

All Old Mill manufacturing is quality controlled to ensure product performance and uniformity.

Limitations & Disclaimers

- Do Not Use in Below Grade Installations
- Comply With Local Building Code Requirements
- Not for Use as a Roofing or Below Grade Insulation
- Do Not Use Solvent Based Cleaners or Expose to Solvents

Packaging

- 2' x 4' Panels
- 4' x 4' Panels
- Thicknesses from 1"-4"
- Custom shapes, thicknesses and sizes also available



Advantages

- Environmentally Friendly
- Stable, Long-Term R-value – No Thermal Drift
- Water Resistance – No Swelling
- Code Approvals
- Cost Efficient
- Insect and Mold Resistance
- Superior Drainage and Drying Potential
- Recyclable
- Freeze/Thaw Stable in Service
- Consistent Quality Control
- Zero Ozone Depletion Potential (ODP)
- Qualifies for a 5 or 15 Year System Warranty



3. Technical Data

PHYSICAL PROPERTIES

| PROPERTY | ASTM TEST METHOD | RESULT |
|--|---|---------|
| Compressive Strength (psi) at 10% Deformation ¹ | D1621 | 15 |
| ASTM Classification | C578 | Type II |
| R-value per inch at 75°F Mean Temperature | C518 | 4.2 |
| R-value per inch at 40°F Mean Temperature | C518 | 4.6 |
| R-value per inch at 25°F Mean Temperature | C518 | 4.8 |
| Flexural Strength (psi) | C203 | 35 |
| Water Absorption (% by volume) | C272 | |
| 24 Hour Immersion | | 2.0 |
| 24 Hour Immersion & 24 Hours @ 50% RH | | 0.3 |
| Water Vapor Permeance at 1" Thick (perms) | E96 | 3.5 |
| Surface Burning - Flame Spread | E84 | <25 |
| Surface Burning - Smoke Developed | E84 | <450 |
| Maximum Use Temperature | Short Term (10-15 minutes) 180°F, Long Term 165°F | |

Panel+ Insulation Board is elastic up to 1% deformation. A safety factor of 3 is recommended for long term loads to minimize long term deflection.

APPLICABLE STANDARDS

| | | |
|-----------|------------|-------------|
| ASTM C203 | ASTM C578 | ASTM E96 |
| ASTM C272 | ASTM D1621 | ICC ES AC12 |
| ASTM C518 | STM E84 | NFPA 285 |

4. Installation

Adhesive - Fluid Applied

Solid substrates (brick, block, concrete, etc.): Begin by applying a 10 mil WFT coat of Old Mill Air & Water Barrier liquid. After a minimum of 20 minutes, double back with a second pass and apply an additional 10 mil coat WFT of Old Mill Air & Water Barrier liquid over entire wall. Allow curing for a minimum of 18 hours protected from precipitation and freezing conditions. Old Mill panel may be applied after 18 hours. Nail able substrates (OSB, plywood, gypsum): Begin by applying a 10 mil WFT coat of Old Mill Air & Water Barrier liquid. Immediately embed runs of Old Mill Poly laminate Reinforcing Fabric at all sheathing joints and outside corners by using a trowel and working from the center and moving outward, press the fabric into the wet weather barrier. Lap runs of mesh at least 2-1/2". After a minimum of 20 minutes, double back with a second pass and apply an additional 15 mil WFT coat of weather barrier over entire wall. Allow curing for 12-24 hours protected from precipitation and freezing conditions. Old Mill panel may be applied after 12-24 hours. Begin panel installation at an outside corner. Panels must overlap where they meet at outside corners at inside corners, position panel to accommodate a backer rod and sealant. Install pre-bricked panels as indicated on drawings being sure the appropriate panel configuration is installed to match the designation on the drawings. Do not install panels below grade. Use a utility knife to cut panels where necessary. Where panels abut wall openings, maintain a 1/4" clearance between the panels and the flashings. Offset successive vertical rows of panels at least 16."

Mechanically Fastened

Begin by attaching drainable building wrap to entire wall surface where Old Mill Panel+ will be used. Attach foam panel over building wrap through sheathing with Old Mill plastic 2" washers using screws at least 1" longer than the thickness of the panel and substrate. These fasteners should be installed every 16" horizontally and 8" vertically. More fasteners should be used around edges. Care must be taken to assure that the fastener is firmly seated on the foam panel and fastened so that the outer surface of the fastener is flush with the outer surface of the panel.

(Mechanically Fastened Continued)

Begin panel installation at an outside corner. Panels must overlap where they meet at outside corners at inside corners, position panel to accommodate a backer rod and sealant. Do not install panels below grade. Use a utility knife, hand saw or hot knife to cut panels where necessary. Where panels abut wall openings, maintain a 1/4" clearance between the panels and the flashings. Offset successive vertical rows of panels at least 16."

5. Availability & Cost

Old Mill Systems' products are available in all US markets and in select regions of Canada. Contact Old Mill Building Products for more information or go to www.oldmillbuildingproducts.com for more information.

6. Warranty

To view the Old Mill 5/15 Year Commercial System Warranty please visit www.oldmillbuildingproducts.com.

7. Maintenance

No maintenance required.

8. Technical Services

Technical assistance, including more detailed information, product literature, test results, project lists, samples, assistance in preparing project specifications and arrangements for job site inspection and consultation, is available by contacting Old Mill Building Products.

9. Filing Systems

Additional Information is available from the manufacturer upon request.

1. Manufacturer

Old Mill Building Products

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Phone: (888) 264-6455

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2. Product Description

Basic Use

Old Mill Adhesive is a premium, polymer modified, fiber-reinforced adhesive mortar designed specifically for the installation of thin adhered masonry veneer, including thin brick, natural stone, manufactured stone, tile, calcium silicate units and other code compliant adhered masonry materials when applied to approved substrates. Old Mill Adhesive may be used for vertical, horizontal and overhead applications in both interior and exterior exposure. In addition, it is designed to adhere Old Mill Panel+ EPS panels to approved substrates. This versatile mortar may also be used as EIFS base coat and adhesive.

Composition & Materials

Old Mill Adhesive is a dry, pre-blended, proprietary mortar containing cementitious materials, high-performance polymers, fiber and sand.

All Old Mill manufacturing is quality controlled to ensure product performance and uniformity.

Limitations & Disclaimers

- Do Not Cover Over Movement Joints With Mortar
- Substrate Maximum Design Deflection of $l/360$
- Comply With Local Building Code Requirements
- Apply When Temperature is Between 42oF and 95oF
- Do Not Retemper Once Mixed. Do Not Overwater
- For White and Light Colored Stones, Conduct a Test Area to Ensure There is no Staining or Shadowing

Coverage

| Method of Application | Coverage |
|---------------------------------|----------|
| (1/2"x2"x1/2" U-Notch) | 70SF |
| 1/4" x 3/8" Square Notch Trowel | 66SF |
| 1/2" x 1/2" Square Notch Trowel | 40SF |
| Backbutter Method | 30-40SF |
| Grout Bag Method | 70SF |



Approved Substrates

- Poured in Place Concrete*
- Precast Concrete*
- Concrete Masonry Unit (CMU)
- Brick Masonry
- Cement Backer Unit (CBU)
- Cement Mortar/Plaster/Scratch Coat
- Ceramic/Porcelain Tile
- Natural Stone
- Exterior Rated Gypsum Sheathing†
- Oriented Strand Board (OSB)†
- Gypsum Wallboard/Plaster (interior, dry areas only)
- Exterior Glue Plywood (EGP) (interior, dry areas only)†

* Release agents must be mechanically removed prior to application

† Exterior use only when coated with Old Mill Air & Water Barrier

Advantages

- Provides Maximum Adhesion
- High Strength Fiber Reinforcement
- Excellent Workability for Easy Installation
- Greater Efflorescence Resistance than Type S/N Mortar
- Low Shrinkage Reduces Cracking/Debonding Risk
- Mix With Water Only
- Freeze/Thaw Stable
- Consistent Quality Control
- Flexible Formulation Accommodates Movement
- Qualifies for a 5 or 15 Year System Warranty
- Can be Used Below Grade and in Immersion

Packaging

- 50 lb. Multi-wall bags

3. Technical Data

Physical Properties

| Test | Test Method | Results: |
|------------------|-------------|-----------|
| Shore A Hardness | ASTM C661 | 57 +/- 5 |
| Max Tensile | ASTM D412 | 575 psi |
| LAP Shear | ASTM D1002 | > 300 psi |
| Elongation Break | ASTM D412 | > 110% |
| Low Temp Flex | ASTM C734 | Pass |

4. Installation

Surface Preparation

All surfaces should be dry, structurally sound, clean and free of dirt, dust, efflorescence, grease, oils, sealers, curing compounds, adhesive residues or any contaminant that could impede bond. Glossy surfaces should be mechanically roughened by sanding, shot-blasting, sandblasting or other mechanical means. Existing tile should be abraded to provide for a mechanical bond. Do not proceed with work until the surfaces to be applied to comply with all manufacturer's requirements. Also, clean the backs of the veneer pieces to be installed to the same standard as the substrate. Chip off any protrusions that would impede even setting of the veneer pieces. When used, allow Old Mill Air & Water Barrier to dry overnight (12-24 hours) prior to application of finish.

Mixing

Into a clean 5 gallon pail add 5 quarts of clean potable water and slowly add the entire contents of a bag of Old Mill Brick & Panel Adhesive while mixing with a slow speed mixer for 1-2 minutes until a smooth, creamy consistency is achieved. Allow to slake for 5 minutes and remix for 1 minute. If necessary, adjust water slightly at this time adding only slight amounts of water being careful not to overwater the mix.

Admixtures

No admixtures of any kind should be used and use of admixtures will void all warranty coverage.

Application

Based on the substrate and type of finish being installed, select from one of the following application methods:

Notched Trowel Method

Using the appropriate size notched trowel based on finish piece size, start by keying in a thin coat of mortar into the substrate using the flat edge of the trowel. Then spread more material over the area sufficient to allow combing of the material to the desired size ridges with the notched side of the trowel. Spread only enough mortar that can be covered before skinning over. Apply additional mortar to the back of the finish piece to ensure full coverage when set. Place the veneer piece and adjust to desired position. Clean excess mortar from around the edges and apply to the next piece being set

Backbutter Method

Key in a thin layer of mortar to the back of the veneer piece being set. Add mortar to build approximately one half inch of mortar on the back of the piece ensuring the entire space between the veneer and substrate will be filled with mortar. Press the piece to the substrate and slide a bit sideways and back to squeeze out excess mortar all around the veneer being set. Using the trowel scrape the excess mortar from around the piece and apply to the next one.

Grout Bag Method

When setting thin brick into the Old Mill BrickPanel+ EPS panels, use a grout bag to apply a $\frac{3}{4}$ " bead along the course between alignment ridges. Press the individual thin bricks into the mortar ensuring mortar extrudes out all around the thin brick. Scrape off any excess mortar that extrudes over the alignment ridges and reuse.

Grouting/Pointing (if needed)

Allow the veneer to set overnight (12-24 hours) before attempting to point the joints. Using a grout bag filled with Old Mill Colored Pointing Mortar or Type S/N masonry mortar, apply pointing mortar into the joints between the veneer pieces ensuring to fill the full depth of the joint and overfilling the joint beyond the face of the veneer to allow the needed material for compaction into the joint. Allow the pointing mortar to become thumbprint hard and tool as specified. Once dried, brush off crumbs and excess pointing mortar with a stiff bristle brush. Do not use metal brushes for this process.



1. Manufacturer

Old Mill Building Products

42 E 1100 S, Ste 6, American Fork, UT 84003

Phone: (888) 264-6455

Web: www.oldmillbuildingproducts.com

2. Product Description

Basic Use

Old Mill Fasteners are specifically designed for compatibility with the Panel+ system when fastened mechanically over drainable building wrap products. Our fasteners are equipped with greater flexibility to eliminate crushing or tearing through the foam. They contain 36 holes designed to interlock with and increase base coat adhesion, and the plastic material has been engineered to provide great performance in hot or cold weather.

3. Installation

Panel Attachment

Attach foam panel to sheathing with Old Mill plastic 2" washer using screws at least 1" longer than the thickness of the panel. These fasteners should be installed every 16" horizontally and 8" vertically. Care must be taken to assure that the fastener is firmly seated on the brick spacer and fastened so that the outer surface of the fastener is flush with the outer surface of the panel.

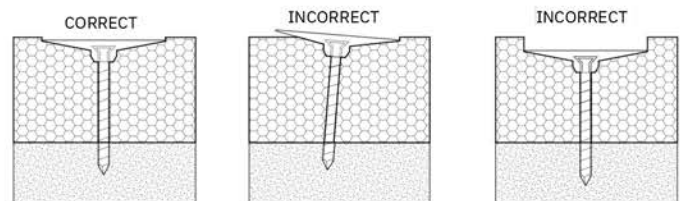
Packaging

- Box of 1,000 (in sleeves of 25 for easy handling)

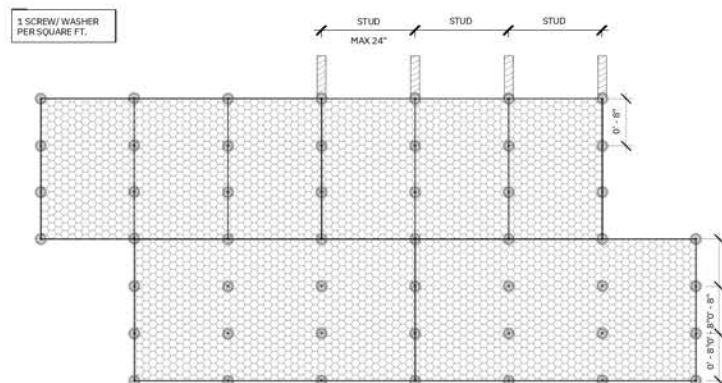


4. Diagrams

Fastener Washer Installation



Fastener Washer Layout



1. Manufacturer

Old Mill Building Products

42 E 1100 S, Suite 6, American Fork, UT 84003

Phone: (888) 264-6455

Web: www.oldmillbuildingproducts.com

2. Product Description

Basic Use

MasonGrip MS Polymer Adhesive is a high strength, high viscosity, one-component elastic adhesive for indoor and outdoor applications based on MS Polymer. Specially designed for fast and non-rigid structural bonding in the construction industry and as an alternative to thin-set mortar, it has excellent adhesion to most substrates. Completely weather resistant, odorless and does not contain solvents, silicones or isocyanate's, and as a result will not leach or stain Brick or natural stone.

Limitations & Disclaimers

It is important not to tool the sealant too thin or smear it on both sides of the joint. If the material is smeared on both sides, it can cause premature joint failure and color fading. Do not tool or smear/feather on pre-finished colored claddings (i.e. siding, trim, etc.) as this will reduce any sealant's ability to withstand UV exposure and joint movement, causing premature joint failure and color fading.

Color & Packaging

This product is packaging in 9.8 oz / 290 ml cartridges and 20 oz sausages / 600 ml.

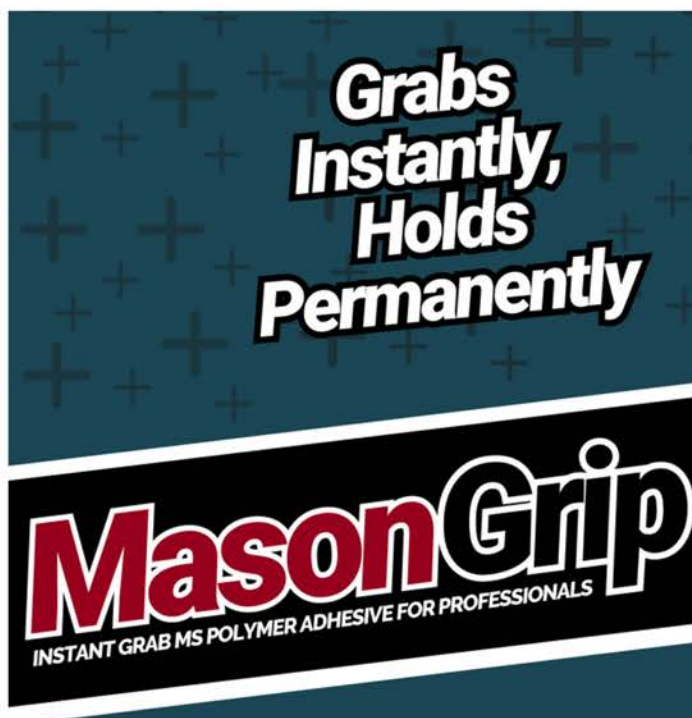
Colors: Grey, other colors available on request and subject to minimum order quantities

Shelf Life

18 months

Diverse Applications

From thin brick to fiber cement, and from kitchen fixtures to exterior siding, MasonGrip is your go-to solution for a wide range of construction needs.



Fields of Application

- Old Mill Panel+ Wall System
- Bonds & Seals to most surfaces
- Kitchen & Bathroom fixtures
- Countertops & Backsplashes
- Windows & Doors
- Wood, Moulding/Trim, & Siding
- Thresholds, Sills, Siding, & Vents
- Ductwork & HVAC
- Aluminum, Brass, Steel...
- Polystyrene, SM Insulation Board
- Brick, Stone, Fiber Cement, & Tile
- Concrete Marble, Granite...

Benefits & Advantages

- High Performance Instant Grab
- Seals & Bonds in any condition
- Suitable for both indoor and outdoor use
- Environment-friendly with no VOCs
- Exceptional tensile strength
- Waterproof, flexible, and crack-proof
- Vibration & Impact resistant
- Non-Sag, Vibration, & Impact Resistant
- For Interior & Exterior use
- An Alternative to Thin-Set Mortar
- Eliminates the need for nails, screws, or clamps
- Cures within 24 hours under normal conditions

3. Technical Data

Information

Raw material basis: MS Polymer
Consistency: No-slump, non-sagging paste
Specific gravity: Approx. 1.30 g/ml +/- 0.02
Working time: 10-20 minutes (@ 73.4 °F; 50% R.H.)
Curing time: 2-3 mm/24 hr
Consumption: Approx. 25 linear
Application temperature: Between 41 °F to 104 °F

Applicable Standards

ASTM C661 | ASTM D412 | ASTM C734
ASTM D1002

Physical Properties

| | |
|------------------------------|------------------|
| Service Temperature | -40 °F to 212 °F |
| Shore A Hardness | 57 +/- 5 |
| UV Ratings after 2,000 hours | No Change |
| Max Tensile | 575 psi |
| Elongation at Break | > 110% |
| Movement Capacity | +/- 25% |
| Corrosive/ Staining | None |
| Shrinkage | Zero |

4. Installation

Application

For optimal results the substrates must be clean, dry, and free of old residues, polish, liquid sealants, wax, dust, grease and other contaminants which may affect the adhesion.

Painted surfaces must be well cured and free of loose paint. The product is suitable for many types of construction materials, however, a preliminary adhesion test is recommended on every surface.

After substrate preparation, apply with a manual- or pneumatic caulking gun. Uncured product may be easily removed with any solvent. Cured sealant must be removed mechanically.

If worried about UV exposure, see limitations.

Optimum bonding will be obtained after complete curing, i.e. after 24 to 48 hours at 73°F for a thickness between 2 to 3 mm.

5. Availability & Cost

Old Mill Systems' products are available in all US markets and in select regions of Canada. Contact Old Mill Building Products for more information or go to www.oldmillbuildingproducts.com for more information

6. Warranty

To view the Old Mill 5/15 Year Commercial System Warranty please visit www.oldmillbuildingproducts.com.

7. Maintenance

No maintenance required.

8. Technical Services

Technical assistance, including more detailed information, product literature, test results, project lists, samples, assistance in preparing project specifications and arrangements for job site inspection and consultation, is available by contacting Old Mill Building Products.

9. Filing Systems

Additional Information is available from the manufacturer upon request.

Contact Us



Old Mill Building Products
42 E 1100 S, Suite 6
American Fork, UT 84003
888.264.6455



1. Manufacturer

Old Mill Building Products

42 E 1100 S, Suite 6, American Fork, UT 84003

Phone: (888) 264-6455

Web: www.oldmillbuildingproducts.com

2. Product Description

Basic Use

Transform your interior spaces with Old Mill's Brick Bond, a high-performance, multi-purpose adhesive that redefines convenience and reliability. Brick Bond is a Type 1, acrylic-based adhesive meticulously crafted from premium organic resins and latexes, designed to set all types of vitreous and non-vitreous ceramic wall and floor tiles on both vertical and horizontal surfaces. With Brick Bond, you get a ready-to-use solution that offers instant grab and no slippage, making your tiling projects faster and more efficient. Say goodbye to the hassle of traditional thin-set mortar—Brick Bond delivers superior adhesion with zero VOC and low odor, ensuring a safer working environment.

Elevate your projects with Old Mill's Brick Bond—where innovation meets performance, giving you the confidence and results you deserve.

Limitations & Disclaimers

Brick Bond is designed for interior use only and is not suitable for heavy weight tile or stone on vertical surfaces or areas with prolonged water exposure such as steam rooms or shower stall floors. It should not be used in environments where it may come into contact with chemicals or paint. Performance may vary based on environmental factors such as temperature and moisture, so testing on a small area is recommended before full application.

Application Equipment & Coverage

Bonding Flat Back Ceramic & Mosaic:

- "V"-notched trowel 1/8" × 1/8": **65-75 ft²**

Bonding Glazed Wall Tile:

- "V"-notched trowel 3/16" × 5/32": **25-30 ft²**



**Grabs
Instantly,
Holds
Permanently**

BrickBond
INTERIOR ADHESIVE FOR BRICKWEBB, BRICK, STONE & TILE

FIELDS OF APPLICATION

- Gypsum wall board
- Glass fiber mesh reinforced concrete backer board
- Exterior grade plywood
- Existing ceramic tile
- Well-cured, dry, dimensionally stable concrete (above or below grade)
- Suitable for both walling and flooring applications

ADVANTAGES

- Ready-to-use, full-spread adhesive for brick, stone, and tile
- Instant grab with no slippage
- Fast and efficient application
- Zero VOC / Low odor
- Alternative to thin-set mortar

3. Technical Data

- Raw Material Basis: Acrylic co-polymer
- Consistency: Non-slump, non-sagging paste
- Solids: 67%
- VOC: <25 g/l
- Weight per Gallon: 11.6 lbs.
- Working Time @ 70°F: Up to 45 minutes (depending on trowel size, relative humidity, temperature, and substrate)
- Coverage: Approx. 75 sq/ft per gallon (depending on trowel size)
- Minimum Applied Thickness: Skim coat, feather edge
- Maximum Applied Thickness: 12.7 mm (0.5")

Properties of Cured Product

- Shear Strength (Dry/Water Immersion): >220 psi (15.5 kg/cm²) / >70 psi (5 kg/cm²)
- Freeze Thaw Stable: Yes (tested up to 3 cycles)

These values may vary depending on environmental factors such as temperature, moisture, and type of substrates.

Color & Packaging

- Packaging: 3.5-gallon pails
- Colors: Beige/White
- Shelf Life: 18 months

Storage & Safety

Store in original packaging, sealed, and in a dry place at temperatures from 41°F (+5°C) to 86°F (+30°C). The shelf life is 18 months from the manufacturing date. Avoid skin and eye contact. Refer to the Safety Data Sheet for further safety information.

4. Product Limitations

Brick Bond should not be used to install certain heavy weight tile, or stone, on vertical surfaces or interior areas requiring prolonged water resistance. It is not suitable for high moisture exposure or wetness areas such as steam rooms, shower stall floors, or water-submerged surfaces.

5. Directions for Use

1. Consult Manufacturer Instructions: Always follow the stone, brick, or tile manufacturer instructions, recommendations, and limitations before installation.
2. Surface Preparation: Ensure all substrates are structurally sound before application. The surfaces must be clean, dry, and free from contaminants such as dirt, dust, oil, grease, frost, and mildew.
3. Temperature Considerations: Bring Brick Bond to a temperature range between 40°F to 80°F (4°C to 27°C).
4. Adhesive Application:
 - Apply adhesive with the flat side of the trowel to key-in the adhesive and uniformly cover the entire surface.
 - In moisture-prone areas, apply a skim coat of Brick Bond adhesive first and allow it to dry.
 - Use the notch side of the trowel to apply additional adhesive on areas that can be covered with tiles before the adhesive skins over.
 - Remove any adhesive that skins over and reapply fresh adhesive.
 - Press thin brick, Brickwebb, or stone, into the fresh, wet adhesive to ensure maximum contact and proper alignment.
 - Check occasionally to ensure the adhesive has not skinned over by removing a tile to check for proper coverage.

6. Clean-Up

Remove wet adhesive residue with a clean, white cloth dampened with soapy water. Use mineral spirits for dried adhesive residue, carefully following warnings on the container. Test a small area before proceeding to ensure it does not damage the surface being cleaned.

Contact Us



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