Gold Bond®
eXP® Tile Backer

DESCRIPTION

Gold Bond eXP® Tile Backer is manufactured with an enhanced moisture- and mold-resistant core encased in specially designed coated glass mat facers. The facer is then coated with a specially formulated acrylic coating, which provides superior protection against moisture and humidity. It provides an integral water barrier, eliminating the need for a separate water barrier. eXP Tile Backer is available in either a Regular or Type X core.

eXP Tile Backer is an acrylic-coated, moisture- and mold-resistant gypsum panel specially designed for use as a substrate for tile applications in high moisture rooms, including showers, bathrooms, indoor swimming pools, laundry rooms and kitchens.

Use eXP® Fire-Shield® Tile Backer as a code-compliant substrate for tile and other finishes in both wet and non-wet areas, areas of high humidity and fire-rated assemblies (5/8" Type X). It is ideally suited for interior walls and ceilings.

BASIC USES

Applications

- Use in both wood- and metal-framed construction for interior wall, ceiling and countertop assemblies as a substrate for tile and other finishes. It provides increased mold and moisture resistance in both wet and non-wet areas, areas of high humidity and in fire-rated assemblies.

- The specially formulated 5/8" (15.9 mm) Type X core has superior fire-resistive performance when used in specific fire-rated assemblies.

Advantages

- Acrylic-coated fiberglass front facer provides an integral water barrier, eliminating the need for a separate water barrier.

- Approved for use in high-moisture environments, such as baths, showers, indoor pools, kitchens and laundry rooms.

- 5/8" (15.9 mm) eXP Fire-Shield Tile Backer is an approved component in specific UL fire-rated designs.

- Resists the growth of mold per ASTM D3273 with a score of 10, the best possible score.

- Coated fiberglass facers for easy handling.

- Dimensionally stable under changes in temperature and relative humidity and resists warping, rippling, buckling and sagging.

- Achieves UL GREENGUARD Gold Certification for low chemical emissions into indoor air during product usage. For more information, visit **ul.com/gg**.

INSTALLATION RECOMMENDATIONS

General

- Install eXP Tile Backer in accordance with methods described in ASTM C840 and GA-216.

- Examine and inspect framing materials to which tile backer boards are to be applied. Remedy all defects prior to installation of the gypsum panel.

- Do not embed eXP Tile Backer into mortar bed in showers. Install with gray side facing away from the framing, apply tile/finishes to the gray side.

- Score/cut from the gray side using a standard utility knife. Cutouts are made easily with a utility knife or saw. Panel joints must be tight. Fill gaps and inside corners with flexible sealant.

- Drive fasteners flush with the panel surface; do not countersink.

- Hold tile backer boards in firm contact with the framing member while driving fasteners. Fastening should proceed from center portion of the panels toward the edges and ends. Take care to avoid breaking the facer of the tile backer board. Remove improperly driven nails or screws.

- Provide minimum 1/4" (6.4 mm) clearance between boards and adjacent concrete or masonry to minimize wicking of moisture.

- Embed alkali-resistant fiberglass tape with the tile setting material at tile backer board joints prior to tile installation.

- Maintain a room temperature of not less than 40°F (4°C) during application of tile backer boards.

- Maintain a room temperature of not less than 50°F (10°C) when using adhesive to attach the tile backer boards and during joint treatment, texturing and decoration, beginning 48 hours prior to application and continuously thereafter until completely dry. Maintain adequate ventilation in the working area during installation and curing period.

- Install fire-rated assemblies in accordance with the details found in the UL Fire Resistance Directory or the Gypsum Association, GA-600, *Fire Resistance and Sound Control Design Manual*.

- Avoid installing water-sensitive materials on eXP Tile Backer Panels in pre-rock applications until the building is enclosed.

Job Name _____

Contractor _____ Date _____
Submittal Approvals: (Stamps or Signatures)

Gold Bond® eXP® Tile Backer

TECHNICAL DATA

Physical Properties	1/2" eXP Tile Backer	5/8" eXP Fire-Shield Tile Backer
Thickness[1], Nominal	1/2" (12.7 mm)	5/8" (15.9 mm)
Width[1], Nominal	4' (1,219 mm)	4' (1,219 mm)
Length[1,4], Standard	8' (2,438 mm)	8' (2,438 mm)
Weight, Nominal	2.0 lbs./sq. ft. (9.76 k/m²)	2.5 lbs./sq. ft. (12.21 k/m²)
Edges[1]	Square	Square
Flexural Strength[1], Perpendicular	≥ 100 lbf. (445 N)	≥ 140 lbf. (623 N)
Flexural Strength[1], Parallel	≥ 80 lbf. (356 N)	≥ 100 lbf. (445 N)
Humidified Deflection[1]	≤ 2/8" (6.4 mm)	≤ 1/8" (3.2 mm)
Nail Pull Resistance[1]	≥ 70 lbf. (311 N)	≥ 90 lbf. (400 N)
Hardness[1] – Core, Edges and Ends	≥ 15 lbf. (67 N)	≥ 15 lbf. (67 N)
Bending Radius	12' (3,658 mm)	16' (4,877 mm)
Thermal Resistance[5]	R = .43	R = .50
Permeance[6]	2 perms	2 perms
Water Absorption[1] (% of Weight)	≤ 5%	≤ 5%
Surface Water Absorption[1]	≤ .5 grams	≤ .5 grams
Linear Expansion with Change Moisture	6.25 x 10⁻⁶ in./in./%RH	6.25 x 10⁻⁶ in./in./%RH
Coefficient of Thermal Expansion	9.26 x 10⁻⁶ in./in./°F	9.26 x 10⁻⁶ in./in./°F
Mold Resistance[7], ASTM D3273	Score of 10	Score of 10
Mold Resistance[8], ASTM D6329	Pass	Pass
Product Standard Compliance	ASTM C1178	ASTM C1178
Fire-Resistance Characteristics		
Core Type	Regular	Type X
UL Type Designation	N/A	FSW-6
Combustibility[2]	Non-combustible Core	Non-combustible Core
Surface Burning Characteristics[3]	Class A	Class A
Flame Spread[3]	0	0
Smoke Development[3]	0	0
Applicable Standards and References		
ASTM C473 *Standard Test Methods for Physical Testing of Gypsum Panel Products*		
ASTM C518 *Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus*		
ASTM C840 *Standard Specification for Application and Finishing of Gypsum Board*		
ASTM C1178 *Standard Specification for Coated Glass Mat Water-Resistant Gypsum Backing Panel*		
ASTM D3273 *Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber*		
ASTM D6329 *Standard Guide for Developing Methodology for Evaluating the Ability of Indoor Materials to Support Microbial Growth Using Static Environmental Chambers*		
ASTM E84 *Standard Test Method for Surface Burning Characteristics of Building Materials*		
ASTM E96 *Standard Test Methods for Water Vapor Transmission of Materials*		
ASTM E119 *Standard Test Methods for Fire Tests of Building Construction and Materials*		
ASTM E136 *Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C*		
Gypsum Association, GA-214, *Levels of Finish for Gypsum Panel Products*		
Gypsum Association, GA-216, *Application and Finishing of Gypsum Panel Products*		
Gypsum Association, GA-238, *Guidelines for Prevention of Mold Growth on Gypsum Board*		
Gold Bond Building Products, LLC Manufacturer Standards, *NGC Construction Guide*		

1. Specified values per ASTM C1658, tested in accordance with ASTM C473.
2. Tested in accordance with ASTM E136.
3. Tested in accordance with ASTM E84.
4. Please consult your local sales representative for all non-standard lengths and widths. Minimum order requirements may apply.
5. Tested in accordance with ASTM C518.
6. Tested in accordance with ASTM E96.
7. Tested in accordance with ASTM D3273 and rated in accordance with ASTM D3274.
8. Tested in accordance with ASTM D6329.

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Ceilings

- Apply tile backer boards first to ceilings at right angles to framing members, then to walls. Use panels of maximum practical length so that the minimum number of end joints occur. Bring panel edges into contact with each other but do not force into place.

- Install batt or blanket ceiling insulation **before** the tile backer boards on ceilings. Install the insulation **immediately** after the panels when using loose fill insulation. Avoid installation practices that might allow condensation to form behind panels.

- When used as a tile substrate for ceilings, apply panels perpendicular to the supports spaced a maximum of 12" (305 mm) o.c. for 1/2" (12.7 mm) and 16" (406 mm) o.c. for 5/8" (15.9 mm). Space fasteners 8" (203 mm) o.c. along all support members.

Walls

- Locate gypsum panel joints at openings so that no joint will occur within 12" (305 mm) of the edges of the opening unless installing control joints at these locations. Stagger vertical end joints. Joints on opposite sides of a partition should not occur on the same stud.

- Install tile backer boards either horizontally or vertically to framing using fasteners every 8" (203 mm) o.c. When applying tile, use minimum 20-gauge steel or wood framing spaced 16" (406 mm) o.c.

Fasteners

Framing	1/2" eXP Tile Backer	5/8"eXP Tile Backer
Wood Framing	1-1/2" min. galvanized roofing nail	1-1/2" min. galvanized roofing nail
	1-1/4" min. corrosion resistant coarse thread bugle head	1-1/4" min. corrosion resistant coarse thread bugle head
Metal Framing	1" min. corrosion resistant sharp point or drill point bugle head screw	1" min. corrosion resistant sharp point or drill point bugle head screw

* Or as required in specified fire rated assembly.

Countertops

- Apply eXP Tile Backer over a minimum 23/32" (18.3 mm) exterior-grade plywood sub-base using a bed of thin-set mortar applied with a 1/4" (6.4 mm) x 1/4" (6.4 mm) notched trowel between the plywood and eXP Tile Backer. Fasten using 1-1/2" (38.1 mm) long corrosion-resistant roofing nails or 1-1/4" (31.7 mm) coarse thread bugle-head screws spaced no more than 8" (203 mm) o.c. in both directions.

Penetrations

- Caulk or seal fixture or plumbing penetrations and abutments to dissimilar materials.

Safety

Installers should wear long pants and a long-sleeved, loose fitting shirt. Use protective gloves and special eye protection (goggles or safety glasses with side shield). Wear a dust mask when sanding; you may need additional breathing protection in extremely dusty conditions. Do not use a power saw to cut this product.

Caution: Because this product contains fiberglass, dust and glass fibers may be released during normal handling, which could result in eye or skin irritation or cause difficulty in breathing. Whenever possible, avoid contact with the skin and eyes and avoid breathing dust or fibers that may be released during installation. Consult the SDS for this product, available at **goldbondbuilding.com** before use.

FINISHING

Tile Application Over eXP Tile Backer

Tile can be set using either thin-set mortar (ANSI A118.1 or A118.4) or organic adhesive (ANSI A136.1). Embed alkali-resistant fiberglass tape with the tile-setting material prior to tile installation. Install using manufacturer's instructions. Allow tile-setting material to cure for a day prior to grout application.

Non-Tile Application Over eXP Tile Backer

Dry Non-Tile Applications: Outside the wet areas of showers and baths, tape joints with gypsum board tape and embed with setting type joint compound. Skim the entire surface with a joint compound to create a smooth surface for finishing. Use setting compound or all-purpose ready mix joint compound for skim coat.

High Humid Area Applications

For areas of higher than normal humidity, such as swimming pools and process facilities, finish the walls with materials suitable for humid environments, such as direct-applied finish systems. Caulk all transitions and abutments to dissimilar materials with a flexible caulk. Seal all penetrations, including outlets and switches.

LIMITATIONS

- For interior use only.

- Always apply tile/finishes to the acrylic face.

- Treat joints under tile with alkali-resistant fiberglass mesh tape set in thin-set mortar or tile adhesive.

- Do not use conventional paper gypsum board tape, joint compound, gypsum board nails and gypsum board screws in wet areas.

- Do not use on floor installations.

- Do not use in shower pans or shower curbs.

- Do not use as a base for nailing and mechanical fastening.

- Do not expose to temperatures exceeding 125°F (52°C).

- Avoid continuous exposure to extreme conditions in applications such as saunas, steam rooms and radiant barriers at fireplaces.

- Do not install a vapor barrier directly behind tiled eXP Tile Backer. Consult your local building code for vapor barrier requirements.

- Do not apply eXP Tile Backer directly to concrete or masonry block.

FOR MORE INFORMATION

Architectural Specifications

Gold Bond Building Products CSI MasterFormat® 3-part guide specifications are downloadable as editable Microsoft® Word documents at: **goldbondbuilding.com.**

Latest Technical Information and Update

Visit **goldbondbuilding.com** or call National Gypsum Company Construction Services: 1-800-NATIONAL (628-4662).

Technical Information *Información Técnica*

1-800-NATIONAL®
1-800-628-4662

National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC.

The eXP family of products is manufactured by Gold Bond Building Products, LLC.

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