

GOLD BOND® BRAND eXP® SHEATHING

MANUFACTURER

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DESCRIPTION

Gold Bond® BRAND eXP® Sheathing is a moisture and mold resistant gypsum panel designed for attachment to the outside of sidewall and soffit framing as a water resistant underlayment for various exterior materials.

eXP Sheathing is manufactured with an enhanced moisture and mold resistant core and facer. The facer is composed of a coated fiberglass mat with National Gypsum's original PURPLE® color which provides superior weather resistant capabilities. It is produced in 1/2" and 5/8" thicknesses, 4' wide in 8', 9' and 10' lengths. eXP Sheathing is lightweight, scores and cuts easily and is specially coated on the front, back and sides for easy handling.

BASIC USES

eXP Sheathing can be used in both wood and metal stud construction to provide fire resistance, weather protection and to add to structural strength. eXP Sheathing can be used as a substrate for various air and water resistive barriers including building wraps, self-adhesive membranes and liquid applied coatings. It can be used as a component in curtainwall or Exterior Insulated Finish Systems (EIFS), and under various exterior finishes such as metal, vinyl, wood or fiber-cement siding; brick/

stone veneer, or conventional stucco.*

The 5/8" eXP Fire-Shield® Type X gypsum panel can be utilized for exterior fire-rated wall and soffit assemblies.

ADVANTAGES

- Manufactured to meet ASTM C 1177 ("Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing").
- Will withstand up to 12 months of exposure to typical weather conditions, subject to the terms, conditions and exclusions of National Gypsum's Limited Warranties.
- Resists the growth of mold per ASTM D 3273 with a score of 10, the best possible score.
- Superior water resistance which does not impede vapor transmission.
- Dimensionally stable under changes in temperature and relative humidity and resists warping, rippling, buckling and sagging for a flat and even substrate.
- Noncombustible material.
- No special tools or fasteners required for installation.
- Approved for inclusion in specific UL fire-rated designs.

- Can be scored and snapped to the exact size without sawing.
- Coated fiberglass mat on face and back for easy handling.
- Ideally suited for soffit applications.
- Suitable for radius applications.
- Non-combustible per ASTM E 136.

MOLD AND MILDEW RESISTANCE

eXP Sheathing was designed to provide extra protection against mold and mildew. When tested by an independent laboratory per ASTM D 3273 ("Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber"), eXP Sheathing achieved a score of 10, the best possible score for this test.

The use of eXP Sheathing in actual installations may not achieve the same results as were achieved in controlled, laboratory conditions. No material can be considered "mold proof," nor is it certain that any material will resist mold indefinitely. When used in conjunction with good design, handling and construction practices, eXP Sheathing can provide increased mold resistance versus standard

sheathing products. As with any building material, avoiding water exposure during handling, storage and installation, and after installation is complete, is the best way to avoid the formation of mold or mildew.

LIMITATIONS

- eXP Sheathing is not a finished surface nor is it a substrate for the direct application of joint compound, paint or textures in exterior wall applications.
- All materials used in conjunction with eXP Sheathing should be installed per the manufacturer's recommendations.
- eXP Sheathing should never be used as a nailing base. Mechanical fasteners should pass through the sheathing and engage the framing member behind the panel.
- eXP Sheathing is resistant to weather, but it is not intended for immersion in water and should not be subjected to cascading water conditions.
- Do not apply eXP Sheathing below grade. Always follow building code grade clearance requirements.
- eXP Sheathing should be protected from the elements and maintained in reasonable condition prior to installation. Boards should be stacked flat

Job Name _____

Contractor _____ Date _____

Submittal Approvals: (Stamps or Signatures)

*Follow manufacturer's directions and comply with all local building code requirements for the installation of all exterior cladding finishes (EIFS, stucco, brick, wood, fiber-cement, etc.)

with care taken to prevent sagging or damage to edges, ends and surfaces. Following installation, the structure must be adequately maintained by the contractor and/or building owner.

- Do not laminate eXP Sheathing to masonry surfaces; use furring strips or framing over masonry surfaces.
- eXP Sheathing is not intended for tile applications. For tile applications, eXP Tile Backer or PermaBase® BRAND Cement Board is recommended.
- eXP Sheathing is not a replacement for structurally engineered sheathings required for racking qualities, and should not be used in lieu of plywood when required.
- eXP Sheathing application to framing by adhesive only is not recommended.
- Stud spacing must not exceed 24" o.c.

- All design details such as fasteners, sealants and control joints, per system specifications, must be properly installed. Openings and penetrations must be properly flashed and sealed according to code, building design and weather resistive barrier manufacturer's instructions. Failure to do so will void the warranty. (See eXP Sheathing Warranty for terms, conditions and limitations.)

COMPOSITION & MATERIALS

eXP Sheathing is manufactured with a moisture and mold resistant core and facer. The facer is composed of a coated fiberglass mat which provides superior weather resistant capabilities. eXP Fire-Shield® Exterior Sheathing (Type X) has special additives in the core to enhance its fire-resistive properties.

eXP Sheathing contains no asbestos.

TECHNICAL DATA

PHYSICAL PROPERTIES	1/2" eXP Sheathing Regular	5/8" eXP Sheathing Fire-Shield - Type X
	Thickness, nominal	1/2" (12.7 mm)
Width, nominal	4' (1219 mm)	4' (1219 mm)
Length, standard	8', 9', 10' (2438, 2743, 3048 mm) + 1/4" (6 mm)	8', 9', 10' (2438, 2743, 3048 mm) + 1/4" (6 mm)
Weight, lbs./sq.ft. (kg/m ²)	1.9 (9)	2.5 (12)
Bending Radius	6' (1829 mm)	8' (2438 mm)
Composition	Coated fiberglass mat/gypsum core	
Racking Strength, lbs./ft. (dry) (N/m) (Ultimate - not design value)	>540 (>7878)	>654 (>9544)
Flexural Strength, parallel, lbf. (N) (4' weak direction)	80 (356)	100 (445)
Compressive Strength	Min. 500 psi	Min. 500 psi
Humidified Deflection, inches	1/8" (3 mm)	1/8" (3 mm)
Permeance (perms) (ng/Pa.s.m ²)	22 (1260)	19 (1090)
Non Combustible per ASTM E 136	Yes	Yes
Linear Expansion with Change Moisture in/in/%RH (mm/mm/%RH)	6.25 x 10 ⁻⁶	6.25 x 10 ⁻⁶
Flame Spread, E84 CAN ULC-S102	0/0	0/0
Coefficient of Thermal Expansion in/in/°F (mm/mm/°C)	9.26 x 10 ⁻⁶ (1.67 x 10 ⁻⁵)	9.26 x 10 ⁻⁶ (1.67 x 10 ⁻⁵)
Resists Growth of Mold (tested, as manufactured, per ASTM D 3273)	Yes	Yes
Handling Characteristic	Scores with utility knife and snaps easily	
Fasteners	Standard	Standard

APPLICABLE STANDARDS AND REFERENCES

ASTM C 1177
ASTM C 1280
ASTM C 1396
ASTM E 72
ASTM C 473
ASTM E 96
ASTM E 119
ASTM C 518
ASTM E 136
ASTM E 84
ASTM E 228
ASTM D 3273
Gypsum Association GA-253
Gypsum Association GA-801

FIRE RESISTANCE RATINGS

Fire resistance ratings represent the result of tests on assemblies made up of specific materials in specific configurations. When selecting construction designs to meet certain fire resistance requirements, caution must be used to ensure that each component of the assembly is the one specified in the test. Further, precaution should be taken that assembly procedures are in accordance with those of the tested assembly. (For copies of specific tests, call 1-800-NATIONAL. For fire safety information, see nationalgypsum.com)

5/8" eXP Fire-Shield Sheathing is tested in accordance with ASTM Standard E 119 and is classified as Type X for use in UL Listings.

UL CORE DESIGNATION

5/8" eXP Sheathing: FSW-6

INSTALLATION

RECOMMENDATIONS

- eXP Sheathing must be installed in accordance with Gypsum Association document GA-253, ASTM C 1280 or National Gypsum Co. *Gypsum Construction Guide*.
- eXP Sheathing can be attached parallel or perpendicular to wood or metal framing. Use appropriate board orientation for specific fire assemblies and shear wall applications as required by the design.
- Framing members shall not vary more than 1/8" from the plane of the faces of adjacent framing.

- Fasteners should be driven flush with the panel surface (not countersunk) and into the framing. Locate fasteners at least 3/8" from the ends and edges of the sheathing. For wood studs: Nails should be galvanized, 11 gauge, 7/16" head, 1-3/4" long. Screws should be 1-1/4" bugle head, corrosion resistant Type W for wood and Type S for steel. Fasteners should be spaced not more than 8" o.c. along vertical ends or edges and intermediate supports. When using eXP Sheathing for racking shear panels, place perimeter fasteners 4" o.c.
- Install eXP Sheathing with end joints staggered on horizontal applications. Ends and edges of the sheathing should fit snugly.
- The location of control joints shall be as required by either the building design or the manufacturer of the specified exterior material.

JOINT TREATMENT

eXP Sheathing is compatible with a variety of exterior systems. For applications requiring joint treatment, joint finishes must be compatible with the exterior system specified. Consult your weather/water resistant barrier manufacturer, cladding manufacturer or local building code authority to determine the appropriate joint treatment. The eXP Sheathing 12-month exposure limited warranty does not require, for its applicability, the use of joint treatment or a weather barrier.

DECORATION - *Soffit and Ceiling applications only*

Embed 2" wide fiberglass mesh tape in ProForm® BRAND Quick Set™ Setting Compound, or equivalent, over all joints. Once dry, apply a skim coat of Quick Set Compound, or equivalent, over the panels to achieve a uniform, smooth finish over the entire area. Prime with exterior grade primer and finish with two coats of exterior grade paint.

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