GOLD BOND® BRAND e²XP® EXTENDED EXPOSURE SHEATHING

MANUFACTURER

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DESCRIPTION

Gold Bond® BRAND e²XP® Extended Exposure 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.

e²XP 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. e²XP Sheathing is lightweight, scores and cuts easily and is specially coated on the front, back and sides for easy handling.

BASIC USES

e²XP Sheathing can be used in both wood and metal stud construction to provide fire resistance, weather protection and to add to structural strength. e²XP 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" e²XP 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.

MOLD AND MILDEW RESISTANCE

e²XP Sheathing was designed to provide extra protection against mold and mildew compared to standard gypsum board products. When tested by an independent lab per ASTM D 3273 (*"Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chanber"*), e²XP Sheathing achieved a score of 10, the best possible score for this test. No material can be considered "mold-proof," nor is it certain that any material will resist mold or mildew indefinitely. When used in conjunction with good design, handling and construction practices, e²XP Sheathing can provide increased mold resistance versus standard gypsum board 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

- e²XP 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 conjuction with e²XP Sheathing should be installed per the manufacturer's recommendations.
- e²XP Sheathing should never be used as a nailing base. Mechanical fasteners should pass through the sheathing and engage the framing member behind the panel.
- e²XP 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 e²XP Sheathing below grade. Always follow building code grade clearance requirements.
- e²XP Sheathing should be protected from the elements and maintained in reasonable condition prior to installation. Boards should be stacked flat 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.

(Continued next page)

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.)

- Do not laminate e²XP Sheathing to masonry surfaces; use furring strips or framing over masonry surfaces.
- e²XP Sheathing is not intended for tile applications. For tile applications, PermaBase® BRAND Cement Board is recommended.
- e²XP Sheathing is not a replacement for structurally engineered sheathings required for racking qualities, and should not be used in lieu of plywood when required.
- e²XP 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 e²XP Sheathing Warranty for terms, conditions and limitations.)

COMPOSITION & MATERIALS

e²XP Sheathing is manufactured with a moisture and mold resitant core and facer. The facer is composed of a coated fiberglass mat which provides superior weather resistant capabilities. e²XP Fire-Shield® Exterior Sheathing (Type X) has special additives in the core to enhance its fire-resistive properties.

e²XP Sheathing contains no asbestos.

TECHNICAL DATA

PHYSICAL PROPERTIES	1/2" e²XP Sheathing Regular	5/8" e²XP Sheathing Fire-Shield - Type X
Thickness, nominal	1/2" (12.7 mm)	5/8" (15.9 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/m²)	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.m²)	22 (1260)	19 (1090)
Combustibility	Noncombustible	Noncombustible
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 results of tests on assemblies made up of specific materials in specific configuration. 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 precautions 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" e²XP 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" e²XP Sheathing: FSW-6

INSTALLATION

RECOMMENDATIONS

- e²XP Sheathing must be installed in accordance with Gypsum Association document GA-253, ASTM C 1280 or National Gypsum Co. *Gypsum Construction Guide*.
- e²XP 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 e²XP Sheathing for racking shear panels, place perimeter fasteners 4" o.c.
- Install e²XP 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

e²XP 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 e²XP 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 Sta-Smooth® Setting Compound, or equivalent, over all joints. Once dry, apply a skim coat of Sta-Smooth Setting 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.

National Gypsum®