

Gold Bond[®] BRAND **e²XP[®] Tile Backer**



**Gold
Bond[®]**
BRAND
Gypsum Board

National 
Gypsum[®]

Gold Bond® BRAND e²XP® Tile Backer

Description

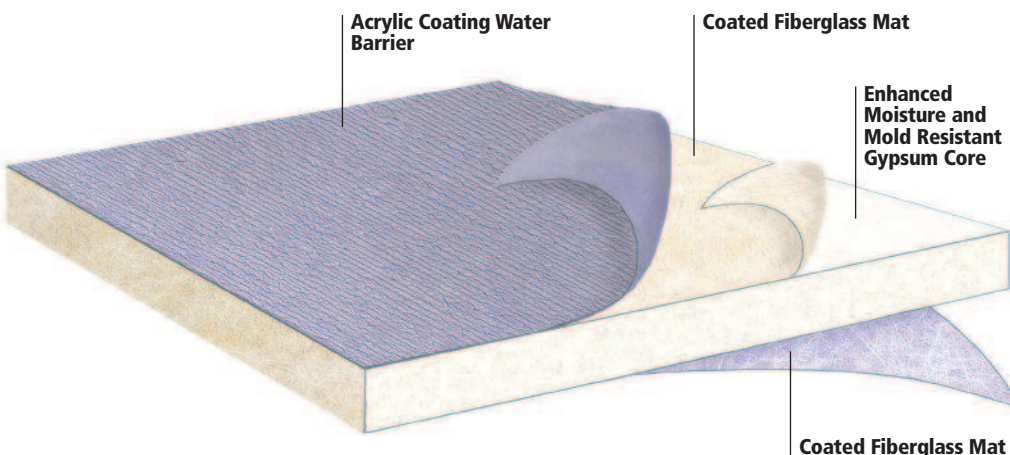
e²XP® Tile Backer is an acrylic coated moisture and mold resistant gypsum panel specially designed for use as a substrate for interior tile applications in high moisture areas.

e²XP Tile Backer is manufactured with an enhanced moisture and mold resistant core and facer. The front facer is composed of an acrylic coated fiberglass mat which provides superior moisture resistant capabilities.

It is produced in 1/2" Regular and 5/8" Fire-Shield® Type X, 4' wide in standard lengths. e²XP Tile Backer is lightweight, has a non-combustible core, scores and snaps easily and is specially coated on the front, back and sides for easy handling. e²XP Tile Backer is identified by National Gypsum's original PURPLE™ color on the back and gray acrylic coating on the front.

Features/Benefits

- Manufactured to meet ASTM C 1178 ("Standard Specification for Coated Glass Mat Water-Resistant Gypsum Backing Panel").
- e²XP Tile Backer is GREENGUARD Children & Schools™ Certified for indoor air quality.
- e²XP Tile Backer is GREENGUARD Certified for microbial resistance per ASTM D 6329.
- Resists the growth of mold per ASTM D 3273 with a score of 10, the best possible rating.*
- Achieves a flame spread of 0 and smoke developed of 0 per ASTM E 84.



- 5/8" e²XP Tile Backer contains a Fire-Shield Type X gypsum core and is approved for inclusion in specific UL fire-rated designs.
- Acrylic coated fiberglass facer provides an integral water barrier, eliminating the need for a separate water barrier.
- Excellent performance in high moisture environments such as baths, showers, kitchens and laundries.
- Recommended for both wet and non-wet applications.

*Mold and Mildew Resistance:

e²XP Tile Backer 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 Chamber"), e²XP Tile Backer 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 Tile Backer 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

- For interior use only.
- Always apply tile/finishes to the gray acrylic face.
- Joints under tile should be treated with alkali-resistant fiberglass mesh tape set in thin-set mortar or tile adhesive.
- Conventional paper drywall tape, joint compound, drywall nails, and drywall screws should not be used in wet areas.
- Not for use on floor installations. Use PermaBase® BRAND Cement Board for these applications.
- Not recommended for use in shower pans or shower curbs.
- Do not use as a base for nailing and mechanical fastening.
- Should not be exposed to temperatures exceeding 125°F (52°C).
- Continuous exposure to extreme conditions in applications such as saunas, commercial steam rooms, and radiant barriers at fireplaces should be avoided. Use PermaBase® BRAND Cement Board for these applications.
- Do not install a vapor barrier directly behind tiled e²XP Tile Backer. Consult your local building code for vapor barrier requirements.
- Do not apply e²XP Tile Backer directly to concrete or masonry block.

- Fixture/plumbing penetrations and abutments to dissimilar materials must be caulked or sealed.

Accessories

Joint Reinforcement

- Use 2" wide polymer-coated/alkali-resistant mesh tape.
- Embed tape and set tile with thin-set mortar (ANSI A118.1 or A118.4) or organic adhesive (ANSI A136.1).
- For dry non-tile applications, treat joints with drywall tape and setting type joint compound.
- Flexible sealant (ASTM C 920)

Fasteners

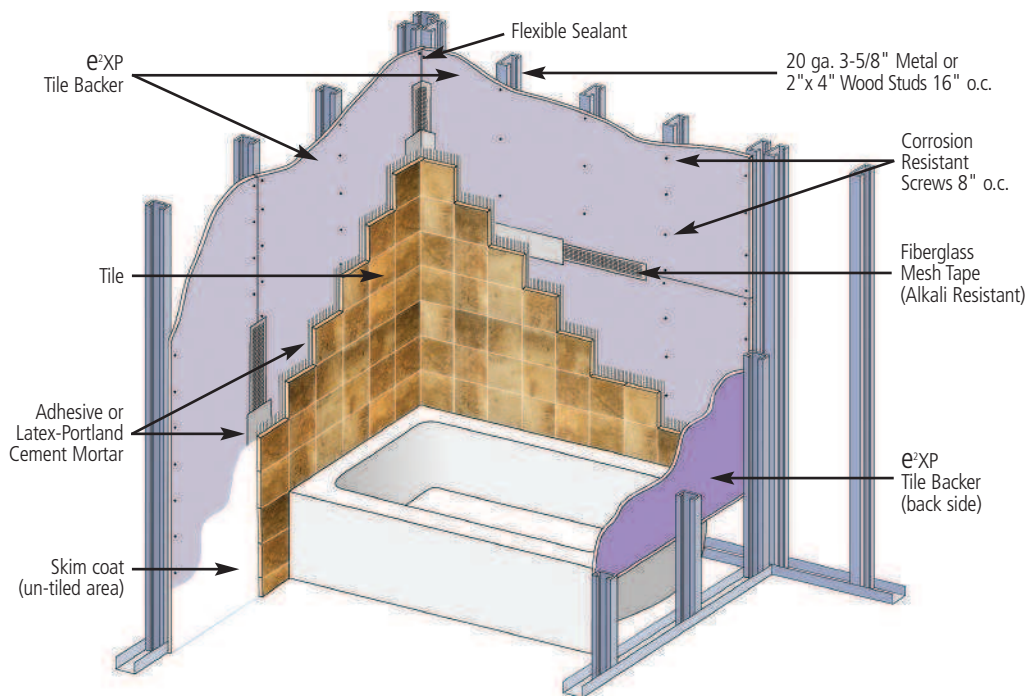
See Fasteners Table.

Applications

e²XP Tile Backer is an ideal substrate for interior residential and commercial applications such as:

- Shower and tub enclosures
- Walls/ceilings
- Garden/whirlpool tubs
- Countertops
- Backsplashes
- Utility and laundry rooms
- Locker rooms
- Indoor swimming pools

Tub Detail



Installation

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. Cut outs are made easily with a utility knife or saw. Panel joints must be tight. Gaps and inside corners shall be filled with flexible sealant. Drive fasteners flush with the panel surface, do not countersink.

Walls: Install panels either horizontally or vertically to framing using fasteners every 8" o.c. When applying tile, use minimum 20 gauge steel or wood framing spaced 16" o.c. without blocking, or 24" o.c. with blocking at all joints for 1/2", spaced 24" o.c. for 5/8".

Ceilings: When used as a tile substrate for ceilings, apply panels perpendicular to the supports spaced a maximum of 12" o.c. for 1/2" and 16" o.c. for 5/8". Space fasteners 8" o.c. along all support members.

Countertops: Apply E²XP Tile Backer over a minimum 23/32" exterior grade plywood sub-base using a bed of thin set mortar applied with a 1/4" x 1/4" notched trowel between the plywood and E²XP Tile Backer. Fasten using 1-1/4" corrosion resistant roofing nails or coarse thread bugle head screws spaced no more than 8" o.c. in both directions.

Penetrations: Caulk or seal fixture/plumbing penetrations and abutments to dissimilar materials.

Finishing

Tile application over E²XP Tile Backer

Tile can be set using either thin-set mortar (ANSI A118.1 or A118.4) or organic adhesive (ANSI A136.1). Alkali resistant fiberglass tape shall be imbedded 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 application of grout. Installation guidelines can be found in this brochure and by others such as TCNA Handbook specifications F146-09, F151-09, W245-09, C315-09, B419-09, B420-09 and C513-09.

Non-tile application over E²XP Tile Backer

Dry Non-Tile Applications:

Outside the wet areas of showers and baths, tape joints with drywall tape and embed with setting type joint compound such as ProForm® BRAND Quick Set Setting Compound. Skim the entire surface with a joint compound to create a smooth surface for finishing. Setting compound or all purpose ready mix joint compound may be used for skim coat.

High Humid Area Applications:

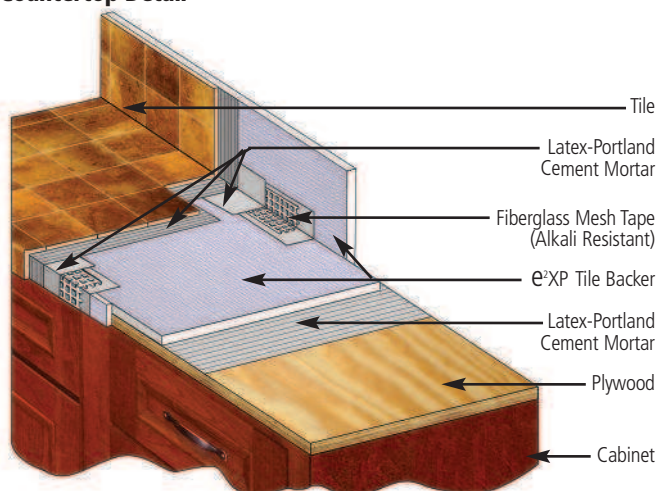
For areas of higher than normal humidity such as swimming pools, process facilities, etc., finish the walls with materials suitable for humid environments such as direct applied finish systems. Caulk all transitions and abutments to dissimilar materials with a flexible caulk. All penetrations, including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

Safety

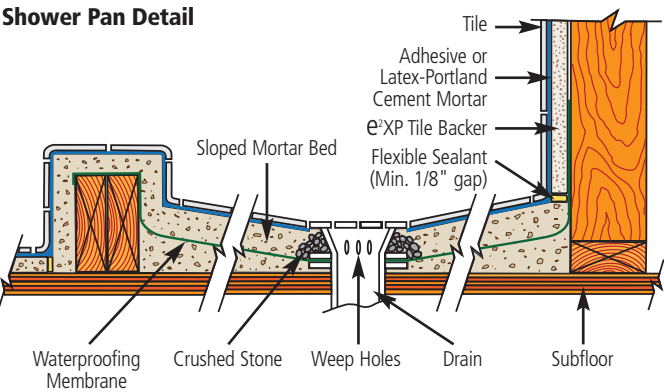
The following standard work practices are recommended: Installers should wear long pants and a long-sleeved loose fitting shirt. Protective gloves and special eye protection (goggles or safety glasses with side shields) should be used. A dust mask should be worn when sanding and additional breathing protection may be needed 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 MSDS for this product, available at nationalgypsum.com before use.

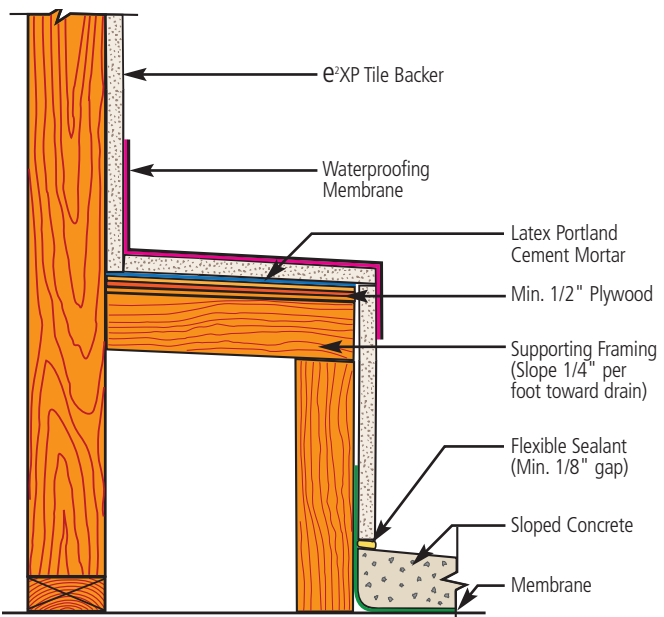
Countertop Detail



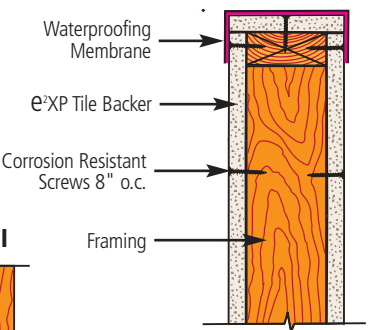
Shower Pan Detail



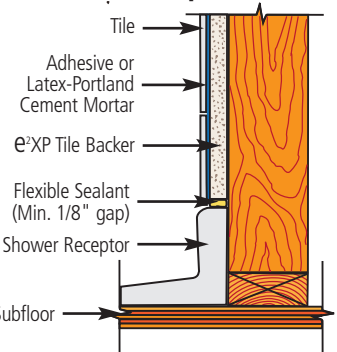
Shower Seat Detail



Knee Wall Detail



Shower Receptor Detail



Technical Data

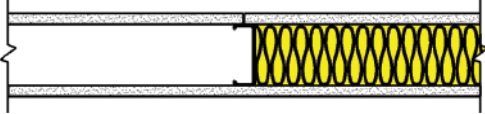
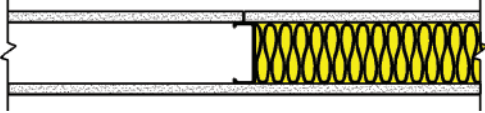
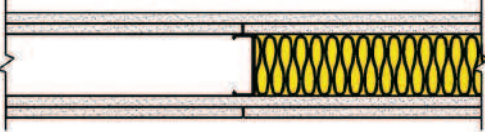
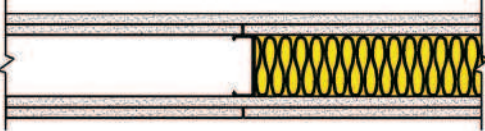

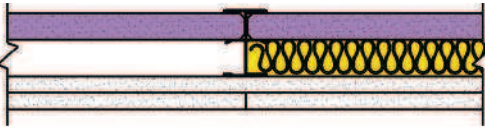
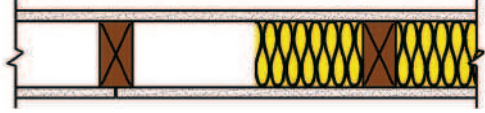
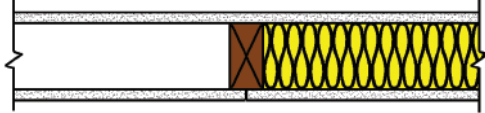
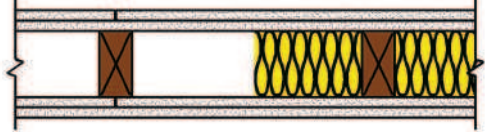
PHYSICAL PROPERTIES		
	1/2" e²XP Tile Backer Regular	5/8" e²XP Tile Backer Fire-Shield – Type X
Nominal Thickness	1/2" (12.7 mm)	5/8" (15.9 mm)
Standard Width	4' (1219 mm)	4' (1219 mm)
Standard Length	8' (2438 mm)	8' (2438 mm)
Nominal Weight, lbs/sf (kg/m²)	2.0 (9.8)	2.5 (12.2)
Edges	Square	Square
Surface Burning Characteristics Flame Spread/Smoke Developed (E 84)	0/0	0/0
Non-combustible Core (E 136)	Yes	Yes
Mold Resistance Score (D 3273)	10	10
Water Absorption, % of weight (C 473)	≤5	≤5
Bending Radius	12'	16'

APPLICABLE STANDARDS AND REFERENCES	
ANSI A118.1 – Dry-Set Portland Cement Mortar	
ANSI A118.4 – Latex-Portland Cement Mortar	
ANSI A136.1 – Organic Adhesives for Installation of Ceramic Tile	
ASTM C 473 – Standard Test Methods for Physical Testing of Gypsum Panel Products.	
ASTM C 920 – Flexible sealant complying with Standard Specification for Elastomeric Joint Sealants, ASTM C 920, Type S, Grade NS, Class 25.	
ASTM C 1178 – Standard Specification for Coated Glass Mat Water-Resistant Gypsum Backing Panel	
ASTM D 3273 – Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber	
ASTM D 6329 – Standard Guide for Developing Methodology for Evaluating the Ability of Indoor Materials to Support Microbial Growth Using Static Environmental Chambers (12-week test)	
ASTM E 84 – Standard Test Method for Surface Burning Characteristics of Building Materials	
ASTM E 136 – Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C	
GA-214 Gypsum Association – Recommended Levels of Gypsum Board Finish	
TCNA – Tile Council of North America, Handbook for Ceramic Tile Installation	

FASTENERS – WALLS AND CEILINGS		
	1/2" e²XP Tile Backer	5/8" e²XP Tile Backer
Wood Framing	1-1/2" min. galvanized roofing nail	1-3/4" 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.

Fire-Rated Assemblies

UL LISTED eXP TILE BACKER PARTITIONS – STEEL FRAMING		
Fire Rating	UL Design No.	Description
1 hr. Load Bearing	U425	 5/8" eXP Tile Backer applied vertically or horizontally to each side of 3-1/2" steel studs 24" o.c. Joints staggered on opposite side.
1 hr.	U465/V438	 5/8" eXP Tile Backer applied vertically or horizontally to each side of 3-5/8" steel studs 24" o.c. Vertical joints staggered on opposite side.
2 hr. Load Bearing	U425	 Face layer of 5/8" eXP Tile Backer applied vertically or horizontally over base layer 5/8" Fire-Shield applied vertically or horizontally to each side of 3-1/2" steel studs 24" o.c. Joints staggered each layer and side.
2 hr.	U411/V438	 Face layer of 5/8" eXP Tile Backer applied vertically or horizontally over base layer 5/8" Fire-Shield applied vertically or horizontally to each side of 2-1/2" steel studs 24" o.c. Joints staggered each layer and side.
1 hr.	U499	 1" Shaftliner installed between 2-1/2" steel I-studs, C-H studs, or C-T studs 24" o.c. 5/8" eXP Tile Backer applied horizontally or vertically to studs.
2 hr.	U497	 1" Shaftliner installed between 2-1/2" steel I-studs, C-H studs, or C-T studs 24" o.c. Face layer of 5/8" eXP Tile Backer applied vertically over base layer 5/8" Fire-Shield applied vertically to studs on side opposite shaftliner panel. Joints staggered between layers.
UL LISTED eXP TILE BACKER PARTITIONS – WOOD FRAMING		
Fire Rating	UL Design No.	Description
1 hr.	U305	 5/8" eXP Tile Backer applied vertically or horizontally to each side of 2x4 wood studs 16" o.c. Vertical joints staggered on opposite side.
1 hr.	U309	 5/8" eXP Tile Backer applied vertically or horizontally to each side of 2x4 wood studs 24" o.c. Vertical joints staggered on opposite side.
2 hr.	U301	 Face layer of 5/8" eXP Tile Backer applied vertically or horizontally over base layer 5/8" Fire-Shield applied vertically or horizontally to each side of 2x4 wood studs 16" o.c. Joints staggered each layer and side.

Notes: When applying tile use minimum 20 gauge steel framing. Tile not required to achieve fire rating.

UL Listed Assemblies

The 5/8" eXP Fire-Shield Tile Backer is classified as Type X for use in the following UL listings: G501, G503, G520, G531, L501, L508, L591, N501, N502, N505, N602, S728, S736, U017, U032, U040, U204, U207, U301, U302, U305, U309, U326, U329, U330, U332, U337, U338, U339, U341, U342, U344, U351, U354, U355, U356, U357, U358, U360, U364, U369, U371, U373, U379, U392, U396, U405, U411, U418, U420, U421, U425,

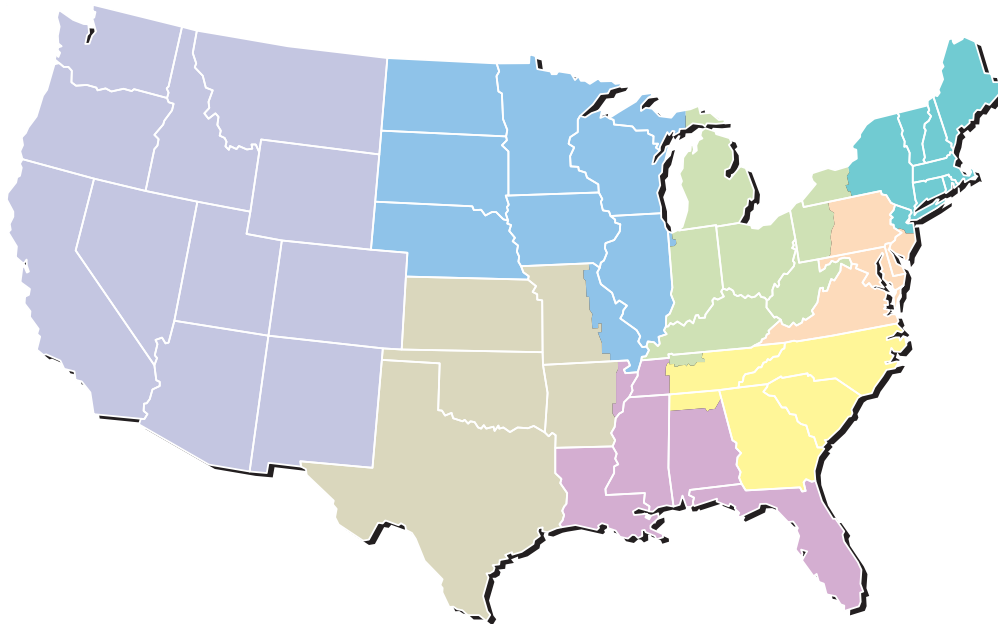
U434, U436, U439, U442, U449, U450, U460, U465, U466, U467, U473, U475, U487, U494, U495, U497, U498, U499, U502, U504, U505, U506, U510, U512, U524, U525, U531, U617, U623, U626, U633, U646, U647, U648, U651, U652, U926, V408, V417, V419, V420, V421, V425, V430, V432, V433, V434, V435, V438, V449, V450, V452, V483, V484, V486, V488, V497, X508, X510, X516, X517, X525, X526, X527, X528, X602, X604.

Fire Resistance Ratings

Fire resistance ratings represent the results of tests on assemblies made up of specific materials and 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. The UL core designation for 5/8" eXP Tile Backer is FSW-6.

CUSTOMER SERVICE SALES AREAS



Atlantic Area

Phone: (800) 237-9167
Fax: (877) 252-0430

Central Area

Phone: (800) 252-1065
Fax: (866) 232-0440

Gulf Area

Phone: (800) 343-4893
Fax: (866) 482-8940

Midwest Area

Phone: (800) 323-1447
Fax: (866) 692-8590

Northeast Area

Phone: (800) 253-3161
Fax: (866) 632-1480

Southeast Area

Phone: (800) 548-9394
Fax: (866) 732-1990

Southwest Area

Phone: (800) 548-9396
Fax: (866) 792-7520

Western Area

Phone: (800) 824-4227
Fax: (800) 438-6266

National Accounts

Phone: (800) 440-1230
Fax: (866) 622-3590

Manufactured Housing

Phone: (800) 455-3185
Fax: (800) 639-1714

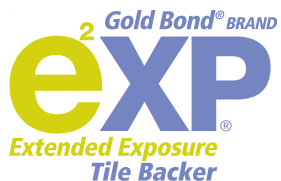
LIMITED WARRANTY AND REMEDIES

Products manufactured and sold by National Gypsum are warranted by National Gypsum to its customers to be free from defects in materials and workmanship at the time of shipment. Additional or different express limited warranties, limitations and exclusions may apply to specific National Gypsum products. Current warranty information on such products for both commercial and residential applications is available at **nationalgypsum.com**. THIS EXPRESS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO SUCH PRODUCTS, AND IS IN LIEU OF AND EXCLUDES ALL OTHER EXPRESS ORAL OR WRITTEN WARRANTIES AND ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

National Gypsum will not be liable for any incidental, indirect or consequential losses, damages or expenses. The customer's exclusive remedy for any type of claim or action for defective products will be limited to the replacement of the products (in the form originally shipped) or, at National Gypsum's option, to a payment or credit not greater than the original purchase price of the products.

National Gypsum will not be liable for products claimed to be defective where the defect resulted from causes not within National Gypsum's control, or which arose or occurred after shipment, including but not limited to accidents, misuse, mishandling, improper installation, contamination or adulteration by other materials or goods, or abnormal conditions of temperature, moisture, dirt or corrosive matter.

Any claim that products sold by National Gypsum were defective or otherwise did not conform to the contract of sale is waived unless the customer submits it in writing to National Gypsum within thirty (30) days from the date the customer discovered or should have discovered the defect or nonconformance. No legal action or proceeding complaining of goods sold by National Gypsum may be brought by the customer more than one year after the date the customer discovered or should have discovered the defect or problem of which it complains.



For the latest technical and product information, go to: purplechoice.info



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