PERMABASE® BRAND FLEX® CEMENT BOARD

MANUFACTURER

National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211
(704) 365-7300

Technical Information:
1-800-NATIONAL
(1-800-628-4662)

Fax: 1-800-FAX NGC1
(1-800-329-6421)

Internet Home Page:
nationalgypsum.com
nationalgypsum.com/espanol

09 28 00/NGC BuyLine: 1100

DESCRIPTION

PermaBase® BRAND Flex® Cement Board is a polymer-modified cement board reinforced with an alkali resistant fiber mesh ideal for use around ceilings, beams, columns, arches and archways, walls and anywhere an evenly curved surface is required.

BASIC USES

PermaBase Flex is ideally suited as a substrate for radiused wall construction including: radiused walls, interior and exterior columns, curved shower walls, radius stairways and steps, archways and barrel ceilings.

ADVANTAGES

- 6" (150 mm) minimum radius for 90° corners.
- Bends immediately, easily and evenly.
- The only 1/2" lightweight cement board that bends.
- Can be bent without water saturation or kerf cuts.
- Resists the growth of mold per ASTM D 3273 with a score of 10, the best possible score.
- Easy installation reduces skilled labor costs.
- Easy to cut and install with screws.
- Can be used for interior or exterior applications.
- Impact resistant.
- Creates uniform curved surfaces.
- Unaffected by water or moisture.
- Dimensionally stable.

GREENGUARD CERTIFIED

PermaBase Flex is GREENGUARD Children & Schools℠ Certified for indoor air quality.

LIMITATIONS

- For convex surfaces, PermaBase Flex must be applied with the rough surface and tapered edges exposed.
- For concave surfaces, PermaBase Flex must be applied with the smooth surface exposed.
- PermaBase Flex should not be used for fire-rated assemblies.
- Maximum framing spacing should not exceed 8" o.c. and must be designed to limit deflection to less than L/360 under all live and dead loads.
- Steel framing must be 20 gauge or heavier.
- PermaBase Flex should be used on curved walls and ceilings. For flat walls and ceilings, refer to PermaBase Cement Board.
- PermaBase Flex is vapor permeable and unaffected by water but is not a water barrier. Consult local building code for moisture barrier requirements.
- On exterior installations, a waterproof membrane must be applied behind PermaBase Flex.
- Do not use drywall nails, screws or fiberglass mesh tape.
- Maximum fastener spacing should not exceed 8" o.c. for wall and 6" o.c. for ceiling applications.

COMPOSITION & MATERIALS

Cementitious Backer Unit (CBU): A nailable, screwable backerboard panel which is composed of Portland Cement, aggregates and reinforcements that has a significant ability to remain unaffected by prolonged exposure to moisture.

ACCESSORIES

Joint reinforcement: PermaBase mesh tape must be used on all edges and cuts made to size. Use 2" wide polymer-coated (alkali resistant) mesh tape for interior applications and 4" wide polymer-coated (alkali resistant) mesh tape for exterior applications.

Bonding materials: Treat joint and set facing material, preferably with latex-Portland cement mortar or with dry-set (thin-set) mortar. All mortars should comply with ANSI A118.1 or A118.4 standards. Type I organic adhesive meeting ANSI A-136.1 may be utilized for interior use only.

Fasteners: Galvanized roofing nails, 1-1/2" long with hot dipped galvanized coating for use with wood framing. Nails should meet ASTM F 1667/ type 1 style 20.

PermaBase screws or equivalent, 1-1/4" or 1-5/8" long, for use with wood framing. Type S-12 screws or equivalent, 1-1/4" or 1-5/8" long, for use with 20 gauge. or heavier steel framing.

SIZES

Thickness:	1/2" (12.7 mm)
Width:	4' (1,219 mm)
Lengths:	4' (1,219 mm) 8' (2,438 mm)

(Continued next page)

Job Name _____

Contractor _____ Date _____

Submittal Approvals: (Stamps or Signatures)

RECOMMENDATIONS

INTERIOR APPLICATIONS

General: All framing should comply with local building code requirements and be designed to provide support with a maximum allowable deflection of L/360 under all intended loads. Framing members should be spaced a maximum of 8" o.c.

Tile, thin brick and other facing materials: Installation of tile or similar facing materials should comply with ANSI A-108 standard specifications.

Control joints: For interior installations, allow a maximum of 30 lineal feet between control joints. A control joint must be installed but not limited to the following locations: where expansion joints occur in the framing or building (discontinue all cross furring members located behind joint); when boards abut dissimilar materials; where framing material changes; at changes of building shape or structural system; at each story separation. Place control joints at corners of window and door openings, or follow specifications of architect. Control joint cavity shall not be filled with coating or other materials.

Walls & Ceilings

Wall framing: Edges of PermaBase Flex parallel to framing should be continuously supported. Provide additional blocking when necessary to permit proper PermaBase Flex attachment.

Do not install PermaBase Flex directly over protrusions from stud plane such as heavy brackets or fastener heads. Studs above a shower floor should be either notched or furred to accommodate the thickness of the waterproof membrane or pan. The surround opening for a tub or precast shower receptor should not be more than 1/4" longer than unit to be installed.

Ceiling framing: The deflection of the complete ceiling assembly due to dead load (including insulation, PermaBase Flex, bonding material and facing material) should not exceed L/360. The dead load applied to the ceiling frame should not exceed 10 psf. Ceiling joist or furring channel should not exceed 8" o.c. Edges of PermaBase Flex parallel to framing should be continuously supported. Provide additional blocking when necessary to permit proper PermaBase Flex attachment.

PermaBase Flex Cement Board: Apply PermaBase Flex with ends and edges closely butted but not forced together. Stagger end joints in successive courses. Drive fasteners into field of cement board first, working toward ends and edges. Space fasteners maximum 8" o.c. for walls, 6" o.c. for ceilings with perimeter fasteners at least 3/8" and less than 5/8" from ends and edges. Ensure PermaBase Flex is tight to framing.

Joint reinforcement: Trowel bonding material to completely fill the tapered recessed board joints and gaps between each panel. On non-tapered joints, apply a 6" wide, approx. 1/16" thick coat of bonding material over entire joint. Immediately embed 2" alkali resistant fiberglass mesh tape fully into applied bonding material and allow to cure. The same bonding material should be applied to corners, control joints, trims or other accessories. Feather bonding material over fasteners to fully conceal.

EXTERIOR APPLICATIONS

General: All framing should comply with local building code requirements and be designed to provide support with a maximum allowable deflection of L/360 under all intended live (including wind) and dead loads.

Control joints: For exterior installations, allow a maximum of 16 lineal feet between control joints. A control joint must be installed but not limited to the following locations: where expansion joints occur in the framing or building (discontinue all cross furring members located behind joint); when boards abut dissimilar materials; where framing material changes; at changes of building shape or structural system; at each story separation. Place control joints at corners of window and door openings, or follow specifications of architect. Control joint cavity shall not be filled with any coating or other materials.

Walls & Ceilings

Wall framing: Studs should be spaced a maximum of 8" o.c. Edges/ends of PermaBase Flex parallel to framing should be continuously supported. Provide additional blocking when necessary to permit proper PermaBase Flex attachment.

Do not install PermaBase Flex directly over protrusions from stud plane such as heavy brackets or fastener heads.

Weather barrier: While PermaBase Flex is unaffected by moisture, a water barrier must be installed to protect the cavity. It should be installed according to the manufacturer's specifications between the PermaBase Flex and the framing members.

Ceiling framing: The deflection of the complete ceiling assembly due to dead load (including insulation, PermaBase Flex, bonding material and facing material) should not exceed L/360. The dead load applied to the ceiling frame should not exceed 10 psf. Ceiling joist or furring channel should not exceed 8" o.c. Edges of PermaBase Flex parallel to framing should be continuously supported. Provide additional blocking when necessary to permit proper PermaBase Flex attachment.

PermaBase Flex Cement Board: Apply PermaBase Flex with ends and edges closely butted but not forced together. Stagger end joints in successive courses. Drive fasteners into field of cement board first, working toward ends and edges. Space fasteners maximum 8" o.c. for walls, 6" o.c. for ceilings with perimeter fasteners at least 3/8" and less than 5/8" from ends and edges. Ensure PermaBase Flex is tight to framing.

Joint reinforcement: Trowel bonding material to completely fill the tapered recessed board joints and gaps between each panel. On non-tapered joints, apply a 6" wide, approx. 1/16" thick coat of bonding material over entire joint. Immediately embed 4" alkali resistant fiberglass mesh tape fully into applied bonding material and allow to cure. The same bonding material should be applied to corners, control joints, trims or other accessories. Feather bonding material over fasteners to fully conceal.

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