

CBP-232 Waterproofing and Anti-Fracture Membrane

1 Product Name

CBP-232 Waterproofing and Anti-Fracture Membrane

2 Manufacturer

Custom Building Products
Technical Services
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3 Product Description

CBP-232 is a ready-to-use, rapid drying, liquid applied elastomeric, waterproofing, and crack prevention membrane that does not require fabric in the field, coves, or corners. It can be used for interior or exterior commercial, industrial, or residential tile and natural stone floor & wall installations. Easily applied with roller, trowel or sprayer producing a continuous water and moisture barrier with outstanding adhesion. Bonds directly to metal and drains of PVC, stainless steel and ABS. Reduces concrete moisture vapor transmission to protect moisture sensitive tile, stone, and other flooring types.

Key Features

- Meets ANSI A118.10 Waterproofing Standards
- Meets Uniform Plumbing Code specifications for use as a shower pan liner. Listed with [IAPMO R & T, File #7620 UPC®](#) and [ICC-ES ESR-1413](#) for shower pan waterproofing membranes
- Meets ANSI A118.12 High Performance $\geq 1/8"$ (≥ 3 mm) for crack isolation membranes
- Rated for Extra Heavy Service Conditions per TCNA/ASTM C627
- Reduces efflorescence from substrates
- Manages concrete moisture vapor emissions up to 8lbs./ 85%RH
- Non-flammable / No solvents
- [GreenGuard Gold Certification # 135952-420](#)
- LEED EQc Low VOC Emitting Materials/MRc5 Regional Materials
- Flood test 6 hours after drying

Uses

- Interior surfaces / exterior concrete and masonry surfaces
- Shower pans, showers, tub surrounds
- Swimming pools, fountains, water features
- Spas and hot tubs
- Industrial, commercial and residential applications
- Commercial /residential kitchens, food processing areas
- Exterior balconies and decks over occupied/unoccupied spaces on concrete
- With Structural Ribbed Self-Supporting Board (SRSB) applications



Suitable Substrates

- Concrete, cement mortar, masonry
- Cement Backerboard
- Post-Tension Concrete*
- Gypsum-based underlayment (min. 2000 psi compressive strength)
- Lightweight Concrete (min. 2000 psi compressive strength)
- Existing ceramic tile and resilient flooring
- Drywall (interior dry areas)
- Coated Glass Mat Water-Resistant Gypsum Backer Board
- APA/CANPLY rated EGP/Exterior Glue Plywood and OSB/Oriented Strand Board (interior, dry areas only for water protection and crack isolation applications)
- Bonds directly to metals*
- Floor heating systems*
- Pipe penetrations/transitions - PVC, ABS, copper, brass and stainless-steel (abrasion required)

* Deflection requirements and material selection can affect success of the tile assembly. Contact Custom Building Products Technical Services for cautions, limitations and recommendations.

Composition of Product

CBP-232 is a liquid-applied elastomeric waterproofing material that cures to form a monolithic membrane.

Limitations to the Product

- Ambient and surface temperatures must be above 40°F (4°C) at the time of installation and for 72 hours after application.
- Tile over membrane within 72 hours in exterior applications to avoid extended exposure to ultraviolet rays. Alternately, tent area or cover with sun blocking sheeting, or a flat application of high performance thinset mortar or apply a one-time additional coat of liquid prior to 72 hrs. to extend timeframe another 72hrs.
- Existing concrete slabs on-ground relative humidity levels to be $\leq 85\%$, MVER ≤ 8 lbs and pH levels ≥ 7 and ≤ 13 *
- Do not apply over wet surfaces or surfaces subject to hydrostatic pressure.
- Use [Crack Buster® Pro Crack Prevention Mat Underlayment](#) relocate tile joints over saw cuts/control joints in concrete slabs. See CEJ171 W detail below or contact Technical Services for detailed instructions to accommodate waterproofing over concrete slab joints*



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- Some glass tile manufacturers do not recommend use of a membrane behind their glass tile products.
- Do not use pre-mixed adhesives over membrane.
- Do not apply over unstable substrate conditions such as laitance, weak or powdery surfaces.
- Do not use over pressure treated wood surfaces or plywood in exterior applications.
- Do not use as a wear surface; the membrane must be covered with tile or other permanent flooring.
- Do not expose membrane to solvent-based materials. Compatible with water-based paints only.
- Not suitable for exterior façade installations

*Contact Technical Services for other conditions not listed and/or additional information.

Packaging

- 1-gallon (3.78 L) pail
- 5-gallon (18.9 L) pail

4 Technical Data Applicable Standards

Material Standards

- Exceeds American National Standards Institute/ANSI A118.10 Load Bearing, Bonded, Waterproofing Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation
- Exceeds American National Standards Institute/ANSI A118.12 Crack Isolation Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation
- ASTM C627 Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester
- ASTM D638 Standard Test Method for Tensile Properties of Plastics ASTM E-96 Standard Test Methods for Water Vapor Transmission of Materials/Method E
- Conforms to Wisconsin's performance requirements for "safing material" as established by Comm. 84.30 (6)(f) of the Wisconsin Administrative Code; CA Section 01350 and passes CDPH V1.2-2017.
- Uniform Plumbing Code specifications for use as a shower pan liner. Listed with IAPMO R & T, File #7620 UPC®, ICC-ES ESR-1413

Installation Standards

- American National Standards Institute (ANSI) ANSI A108.01, A108.02, A108.13, A108.17
- Tile Council of North America (TCNA) TCNA Handbook for Ceramic Tile Installation includes methods EJ171 (movement joints), Methods F125 & F125A for crack isolation and crack transference protection
- Meets/exceeds requirements as listed in Specifications Guide 09 30 00 Tile Installation Manual published by the Terrazzo, Tile & Marble Association of Canada/TTMAC Approvals

Approvals

CBP-232 has tested and complies with Uniform Plumbing Code and International Plumbing Code standards for use as a shower pan liner per IAPMO Research and Testing, Inc., File No. 7620. CBP-232 has tested and complies with International Building Code (IBC), International Residential Code (IRC) and International Plumbing Code (IPC) standards for water resistance per ICC Evaluation Service, ESR- 1413. CBP-232 conforms to "safing material" requirements established by the Wisconsin Administrative Code, Chapter Comm 84.30-6f.

Approvals, continued

- GREENGUARD Gold Certificate # 135952-420
- LEED EQc Low VOC Emitting Materials/MRC5 Regional Materials
- ASTM C627 (Robinson) for extra heavy service rating
- Los Angeles Department of Building and Safety - per LAMC 98.0502



Technical Chart

Property	Test Method	Requirement	Typical Results
Fungus Resistance	A118.10 Section 4.1	No Growth	Pass
Seam Strength	A118.10 Section 4.2	> 8 lbs. per 1" >16 lbs. per 2"	>16 lbs. per 2"
Breaking Strength	A118.10 Section 4.3	> 170 psi	484 psi (34kg/cm ²)
Dimensional Stability	A118.10 Section 4.4	+/- 0.7%	0.05%
Waterproofness	A118.10 Section 4.5	No Water Penetration	Pass at 25 mils dry
Shear Bond Strength to Cement Mortar			
Four Week Shear Strength	A118.10 Section 5.5	> 50 psi	267 psi (18.8 kg/cm ²)
Shear Strength After Water Immersion	A118.10 Section 5.4	> 50 psi	89 psi (6.3 kg/cm ²)
System Crack Resistance			
Standard Performance	A118.12 Section 5.4	> 1/16" and < 1/8"	Pass at 30mils dry
High Performance	A118.12 Section 5.4	> 1/8"	Pass at 30mils dry
Point Load	A118.12 Section 5.2	> 1000 lbs.	> 1000 psi
Robinson Test ASTM C627	A118.12 Section 5.3	As Specified	14 Cycles; Extra Heavy
VOC Test Results			
VOC Content	EPA Method 24	SQAQMD Rule 113/CARB SCM 2019 (<100 g/L)	<5 g/L (0% CARB VOC)
VOC Emissions	Complies with CA Section 01350 & CDPH V1.2-2017		Compliant (TVOC= 0.5 mg/m3 or less)



CUSTOM®

CBP-232 Waterproofing and Anti-Fracture Membrane

Environmental Consideration

Custom® Building Products is committed to environmental responsibility in both products produced and in manufacturing practices. Use of this product may contribute to LEED® certification.

5 Instructions

WEAR IMPERVIOUS GLOVES, such as nitrile, and eye protection when handling product.

Refer to: [Technical Bulletin 108](#) - TB108 GENERAL REQUIREMENTS FOR INSTALLING FINISHES USING PRODUCTS MANUFACTURED BY CUSTOM BUILDING PRODUCTS

All surfaces must be structurally sound, clean, dry and free from contaminants such as grease, oil, dirt, dust, curing compounds, waxes, sealers, efflorescence, or any other foreign matter. Any existing flooring to be covered with membrane must be well bonded. All substrates should support anticipated live and dead loads in design/performance and meet all international, local, regional, or provincial code requirements.

Exterior and wet areas must have proper sloping to drains without divots that would affect drainage.

Concrete and Masonry Surfaces

Concrete must be structurally sound, fully cured and have an effective underslab vapor retarder/barrier. Contaminates such as form releases, curing compounds and laitance is to be removed. Cracks wider than 1/8" (3mm) may be structural and are to be assessed before proceeding. Dormant cracks should be treated in accordance with TCNA F125 or TCNA F125A methods

Bonding to Lightweight Cement and Gypsum Surfaces

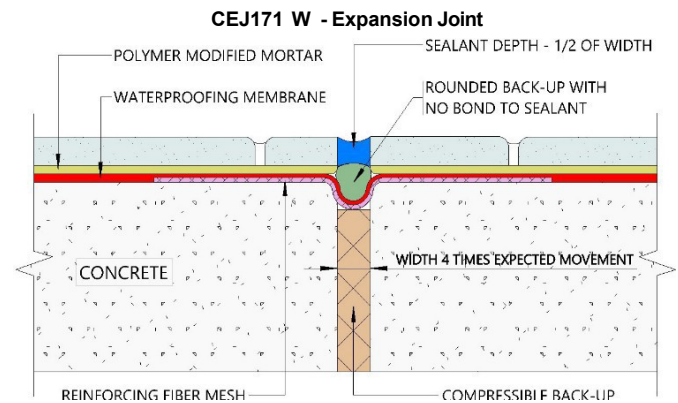
Lightweight or gypsum-based materials must obtain a minimum of 2000 psi (13.8 MPa) compressive strength at the recommended cure time. The underlayment must be sufficiently dry and properly cured to the manufacturer's specifications for permanent, non-moisture permeable coverings. Surfaces to be covered must be clean, structurally sound and subject to deflection not to exceed the current ANSI standards. Expansion joints must be installed in accordance with local building codes and ANSI/TCNA guidelines.

Prime all surfaces to receive CBP-232® with properly applied manufacturer's sealer or with a primer coat of CBP-232® In a clean pail, mix 1-part CBP-232® diluted with 4 parts clean, cool water at low speed (≤300rpm). Apply the diluted mixture using a clean, fine head bristle broom to scrub in the primer solution at a rate of 300 ft/gallon (7.5 M/L). Keep the surface of the substrate wet for at 3-5 minutes during application to ensure adequate and even distribution / penetration of primer coat. Allow primer coat to dry, then apply at least one coat of "undiluted" CBP-232® before adhering tile, floor patch or other flooring material applications. See Coverage Section for square foot rates by application.

Movement Joint Placement

All tile assemblies, including those using Porcelain tiles, expand and contract with temperature changes and/or exposure to moisture and are subject to movement by the underlying structure due to live and dead loads. For these reasons, do not bridge joints with tile when they are designed to experience movement. Carry these types of joints from the substrate through the tile in locations, widths and frequency recommended by the Tile Council of North America (TCNA) or Terrazzo, Tile & Marble Association of Canada (TTMAC). Follow ASTM C1193 guidelines using CUSTOM® [Commercial 100% Silicone Sealant](#) or other suitable sealant applying the sealant as flush as possible with the tile edges.

CBP-232 can be used to waterproof movement joints using proper methods incorporating suitable sealant and other industry approved expansion joint materials as illustrated below. Assure that movement joints are free of debris and mortar and install using the appropriate specified method.



Use [Custom Waterproofing and Anti-Fracture Reinforcing Fabric](#)

See CUSTOM® details at links below or on our website for reference:

- CEJ 171 W - Expansion Joint ([PDF](#)) ([DWG](#))
- CEJ 171 AW - Construction Joint ([PDF](#)) ([DWG](#))
- CEJ 171 BW - Contraction Joint ([PDF](#)) ([DWG](#))
- CEJ 171 CW - Expansion Joint ([PDF](#)) ([DWG](#))
- CEJ 171 DW - Isolation -Expansion Joint ([PDF](#)) ([DWG](#))
- CEJ 171 EW - Expansion Joint, Cement Mortar, Bonded ([PDF](#)) ([DWG](#))
- CEJ 171 FW - Generic Movement Joint ([PDF](#)) ([DWG](#))
- CEJ 171 GW - Perimeter Joint ([PDF](#)) ([DWG](#))
- CEJ 171 HW - Expansion Joint, C Mortar, Cleavage Membrane ([PDF](#)) ([DWG](#))
- CEJ 171 IW - Perimeter Joint ([PDF](#)) ([DWG](#))
- CEJ 171 IW - Perimeter Movement Joints ([PDF](#)) ([DWG](#))
- CEJ 171 KW - Movement Joint in Tile and Backerboard ([PDF](#)) ([DWG](#))
- CEJ 171 LW - Generic Movement Joint with Backerboard ([PDF](#)) ([DWG](#))
- CEJ 171 GCW - Generic Movement Joint Concrete/Masonry Wall ([PDF](#)) ([DWG](#))
- CEJ 171 ECW - Expansion Joint – Concrete or Masonry Wall ([PDF](#)) ([DWG](#))
- CEJ 171 NMW - Movement Joint – Reinforced Mortar Bed ([PDF](#)) ([DWG](#))
- CEJ 171 BMW - Movement Joint – Bonded Mortar Bed ([PDF](#)) ([DWG](#))
- CEJ 171 SJBW – Steam Shower/Room Slip Joint– CBU ([PDF](#)) ([DWG](#))
- CEJ 171 SJMW – Steam Shower/Room Slip Joint–Mortar Bed ([PDF](#)) ([DWG](#))
- CEJ 171 WPM - Waterproofing Movement Joint Details – All Combined ([PDF](#))

CBP-232 Waterproofing and Anti-Fracture Membrane

Application of Product

For all applications, use CBP-232, a thinset mortar or suitable patch to fill cracks to 1/8" (3 mm) before applying CBP-232 liquid. In high temperatures, windy conditions and when applying over very porous substrates, lightly dampen the surface or use a diluted mixture of CBP-232 as a primer coat prior to the normal application. In a separate container, dilute 1-part CBP-232 with 4 parts water and mix until well blended. Use either a paint brush, a 3/8" (10 mm) rough-textured, synthetic roller or airless sprayer to apply the primer coat to the entire area to be waterproofed. The membrane appearance is light purple when wet and dries to a dark purple color. It typically takes 2-3 hours to turn completely dark purple. After the first coat turns dark purple, inspect the film for integrity and fill any voids or pinholes with additional material and apply second coat. CBP-232 as a Waterproof Membrane

Coat corners and intersections of the floors and walls, extending >2" (5 cm) on either side with CBP-232 liquid using either a paint brush, a 3/8" (10 mm) rough-textured, synthetic roller or a 3/16"-1/4" (56 mm) V-notch trowel. For extra seam protection, embed [CUSTOM® Waterproofing and Anti-Fracture Reinforcing Fabric](#) into the liquid for changes of plane and over gaps 1/8" (>3mm). Allow these areas to dry before re-applying.

For general waterproofing, apply CBP-232 at a rate of 110 sq. ft. per gallon in each coat. NOTE: A minimum of two coats is required when using a roller or brush to assure that continuous coverage is achieved. If using a roller, apply a continuous, even film with overlapping strokes.

Apply the second coat at right angles to the first coat for best results. When using a trowel, spread the liquid with the trowel held at a >30° angle, and then flatten the ridges. Over a solid wall surface, a minimum 15 mils thickness is required above a tub surround or shower floor cove. The membrane appearance is light purple when wet and dries to a dark purple color. It typically takes 2-3 hours to turn completely dark purple. After the first coat turns dark purple, inspect the film for integrity and fill any voids or pinholes with additional material and apply second coat.

To meet the waterproofing requirements of ANSI A118.10 and IAMPO, two coats should be applied at a rate of 80 sq. ft. per gallon each coat. In all cases, the wet film thickness of any coat should not exceed 40 mils.

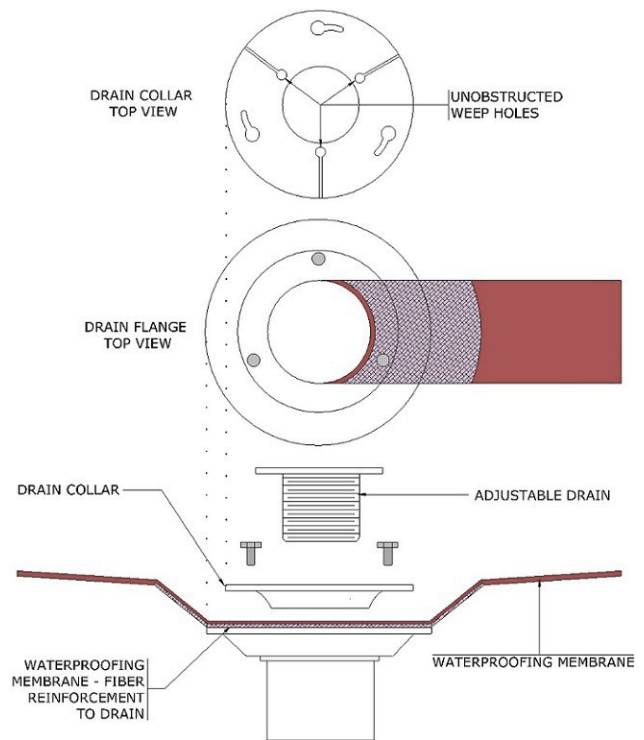
An airless sprayer may be used for the waterproofing application. The sprayer must produce between 1900 - 2300 psi, with a flow rate of 1.0 - 1.5 GPM and must have a tip orifice size of 0.025 - 0.029. See [CUSTOM Technical Bulletin TB35](#) for instructions.

CBP-232 Drain Treatment

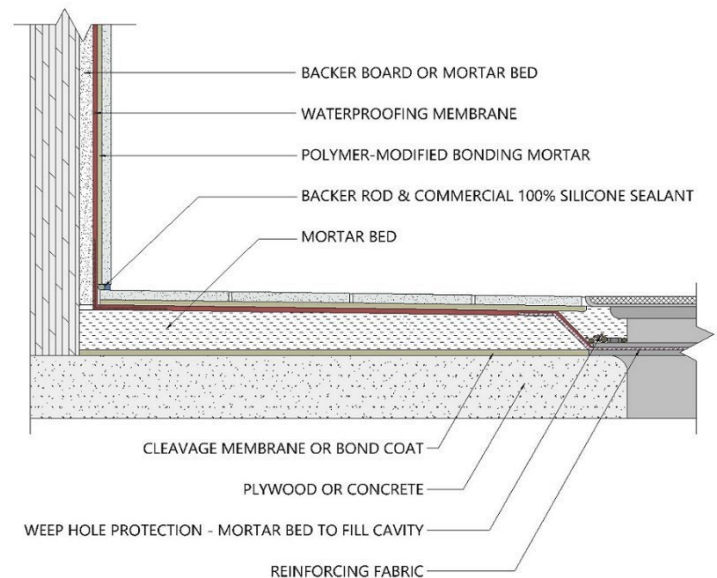
Drains are to be securely fastened to prevent movement. Prior to applying CBP-232, substrate is to be properly sloped toward drain flange. Remove any contaminants on drain flange that might inhibit bonding and protect threaded bolt holes with tape or inserting bolts before applying liquid. Cut and fit pieces of [CUSTOM® Waterproofing and Anti-Fracture Reinforcing Fabric](#) (approximately 3" long.) to contour and encompass drain flange. Apply a coat of CBP-232 overlapping transition from substrate or mortar bed to drain flange using a brush. Embed reinforcing fabric into CBP-232 liquid.

Overlap saturated fabric and use the brush to keep it flat. Continue applying CBP-232 to adjacent areas designated to be waterproofed. Allow first application of CBP-232 to dry, then recoat all areas to create a monolithic membrane. After final coat is dry, clamp collar to membrane and tighten.

CBP-232 Circular Drain Assembly Detail

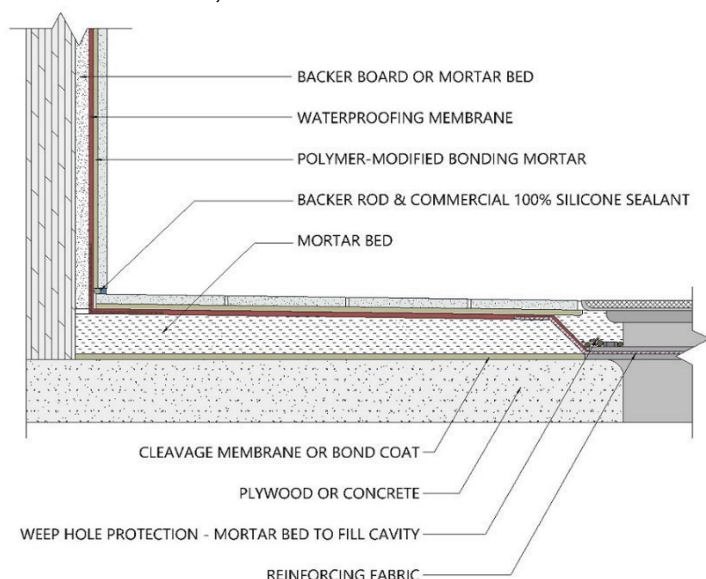


CBP-232, Mortar Bed & Circular Drain (CB421)



CBP-232 Waterproofing and Anti-Fracture Membrane

CBP-232, Mortar Bed & Linear Drain



CBP as an Anti-Fracture Membrane

CBP-232 can be applied using either a V-notched trowel, a 3/8" (9.5 mm) rough textured roller, or a bristle brush. Fill non-structural cracks using either CBP-232, thinset mortar or patch. Then apply CBP-232 liquid at least 6" beyond any tile that will be bridging the crack. When using a notched trowel, immediately use the flat side and flatten the ridges to form a continuous, even coat of material.

For continuous general crack isolation, cover the entire substrate with one coat of CBP-232 applied at a rate of 100 sq. ft. per gallon.

To meet specification requirements for ANSI A118.12, apply two coats of CBP-232 at a rate of 50 sq. ft. per gallon per coat.

NOTE: Cracks $\geq 1/8"$ or displaying differential movement may be due to structural movement and should be assessed and/or treated by an appropriate structural engineer or consultant.

Curing of Product

CBP-232 is dry when it turns dark purple, with no visible light purple color. Typically, drying time is 2-3 hours for each coat. After the second coat is applied and both coats are fully dry, the application area can be flood tested. Drying time can be extended to as much as 12 hours in conditions of very low surface and/or ambient temperatures and when applying in high humidity.

Protection

Maintain ambient and surface temperatures above 40°F (4°C) at time of installation and for 72 hours after application. Care should be taken to prevent the membrane from becoming contaminated by bond inhibiting materials, solvents or being punctured after application.

Cover CBP-232 with tile, an additional coat of liquid, a flat application of mortar or UV blocking sheeting if not to be tiled within 72 hours when exposed to sunlight. Protect CBP-232 from water intrusion that could occur behind or beneath the applied membrane if drip edges and/or flashing is not in place at the time of application.

Tile and Stone Installation

Install tile or stone with a Custom® Building Products polymer-modified mortar that meets ANSI A118.4 or A118.15 standards based on application requirements.

Cleaning of Equipment

Clean tools and hands with water before the material dries. Clean all spray equipment immediately after use.

Health Precautions

IMPORTANT: Read carefully before using. WEAR IMPERVIOUS GLOVES, such as nitrile, and eye protection.

WARNING: EYE & SKIN IRRITANT. May be harmful if swallowed. Do not mix with other chemical products. Avoid contact with eyes and prolonged contact with skin. Do not breathe in vapors. Do not take internally. Immediately wash contaminated body and clothing thoroughly. Use in well-ventilated areas. Wear a NIOSH compliant vapor respirator, especially in poorly ventilated areas.

If eye or skin contact occurs:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If inhaled: Remove person to fresh air and keep comfortable for breathing. If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately seek medical advice or attention if symptoms are significant or persist. In Emergency: 1-800-535-5053.

Contains: Styrene-butadiene polymer, limestone, and ammonium hydroxide. Before handling read Safety Data Sheet at www.custombuildingproducts.com.

KEEP OUT OF REACH OF CHILDREN



WARNING: This product can expose you to chemicals including crystalline silica, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov



CUSTOM®

CBP-232 Waterproofing and Anti-Fracture Membrane

6 Availability & Cost

Location	Item Code	Size	Color	Package
USA	WPONE1-2	1 gallon (3.78 L)	Light Purple	Pail
USA	WPONE5	5 gallon (18.9 L)	Light Purple	Pail

7 Product Warranty

Obtain the applicable **LIMITED PRODUCT WARRANTY** at www.custombuildingproducts.com/product-warranty or send a written request to Custom Building Products, Inc., Five Concourse Parkway, Atlanta, GA 30328, USA. Manufactured under the authority of Custom Building Products, Inc. ©2023 Quikrete International, Inc.

When CBP-232 Waterproofing and Anti-Fracture Membrane is used as a part of a qualifying full installation system of CUSTOM products, the installation can qualify for up to a 15 year system warranty. CUSTOM will repair and/or replace, at its discretion, the affected area of the system. For more information, find details and limitations to this warranty at custombuildingproducts.com.

8 Product Maintenance

Properly installed product requires no special maintenance. Do not use as a wear surface.

9 Handling & Storage

Protect from freezing. Store in a cool, dry area.

10 Technical Services Information

For technical assistance, contact Custom technical services at 800-272- 8786 or visit custombuildingproducts.com.

CBP-232 Waterproofing and Anti-Fracture Membrane

Coverage

Size	Coverage
CBP-232 as Anti-Fracture Membrane:	
1 Gallon (3.78 L)	100 sq. ft. (9.3 M2)
5 Gallon (13.2 L)	500 sq. ft. (46.5 M2)
CBP-232 as Anti-Fracture Membrane meeting ANSI A118.12	
1 Gallon (3.78 L)	25 sq. ft. (2.3 M2)
5 Gallon (13.2 L)	125 sq. ft. (11.6 M2)
CBP-232 as Waterproof Membrane:	
1 Gallon (3.78 L)	55 sq. ft. (5.1 M2)
5 Gallon (13.2 L)	275 sq. ft. (25.5 M2)
CBP-232 as IAPMO Pan Liner meeting ANSI A118.10:	
1 Gallon (3.78 L)	40 sq. ft. (3.7 M2)
5 Gallon (13.2 L)	200 sq. ft. (18.6 M2)

Chart for estimating purposes. Coverage may vary based on installation practices and jobsite conditions.

Related CUSTOM® Products

[CUSTOM® Waterproofing and Anti-Fracture Reinforcing Fabric](#)

