

# RedGard® SpeedCoat® Waterproofing Membrane

## 1 Product Name

RedGard® SpeedCoat® Waterproofing Membrane

## 2 Manufacturer

Custom Building Products  
 Technical Services  
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## 3 Product Description

RedGard® SpeedCoat® is a ready-to-use, rapid drying, liquid applied elastomeric, waterproofing, and crack prevention membrane. It can be used for interior or exterior commercial, industrial, or residential tile and natural stone floor & wall installations. Easily applied with roller, producing a continuous water barrier with outstanding adhesion. Bonds directly to metal and drains of PVC, stainless steel and ABS.

RedGard® SpeedCoat® features cross linking moisture cure technology that produces exceptionally fast curing times (as quick as one hour per coat). Allows flood testing and installation a shower system in one day, unlike typical membranes. Its moisture-cure technology allows it to cure effectively even in cool, damp conditions. Combine with CUSTOM's SpeedSlope® Rapid Setting Sloping Mortar, ProLite Rapid-Setting Mortar and Prism Grout for a fast track system

### Key Features

- Exceptionally fast cure time – each coat cures in one hour
- Works effectively even in hot/humid and cool/damp environments
- Install over young concrete and fresh mortar beds
- Meets ANSI A118.10 Waterproofing Standards
- Meets Uniform Plumbing Code specifications for use as a shower pan liner. Listed with [IAPMO R & T, File #4244 UPC®](#), [ICC-ES ESR-1413](#) for shower pan waterproofing membranes
- Meets ANSI A118.12 High Performance  $\geq 1/8"$  ( $\geq 3$  mm) for crack isolation membranes when used with Custom® 9240 Waterproofing and Anti-Fracture Fabric
- Rated for Extra Heavy Service Conditions per TCNA/ASTM C627
- Coverage for one gallon of RedGard SpeedCoat is the same as 3.5 gallons of traditional waterproofing membranes
- Flood test immediately after drying

### Uses

- Interior surfaces / exterior concrete and masonry surfaces
- Shower pans, showers, tub surrounds
- Swimming pools, fountains, water features
- 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

RedGard® SpeedCoat® is a liquid-applied reactive polymer with inorganic fillers and pigments

### 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.
- 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\*
- 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.



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

## Packaging

- 1-gallon (3.78 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
- 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

RedGard® SpeedCoat® 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. 4244. RedGard® SpeedCoat® 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 ASTM C627 (Robinson) for extra heavy service rating.



Waterproofness	A118.10 Section 4.5	No Water Penetration	Pass at 8.5 mils dry
Shear Bond Strength to Cement Mortar			
Four Week Shear Strength	A118.10 Section 5.5	> 50 psi	198 psi (13.9kg/cm <sup>2</sup> )
Shear Strength After Water Immersion	A118.10 Section 5.4	> 50 psi	80 psi (5.7 kg/ cm <sup>2</sup> )
System Performance			
Point Load	A118.12 Section 5.2	> 1000 lbs.	> 1000 psi
Robinson Test	A118.12 Section 5.3	As Specified	14 Cycles; Extra Heavy

### 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.

VOC Content:  
Less than 85 g/L

VOC Emissions:  
Complies with CA Section 01350 and CDPH V1.2-2017.

## 5 Instructions

**Always wear proper protective equipment when handling the product, including IMPERVIOUS GLOVES, such as nitrile, safety glasses, and a NIOSH approved respirator.**

**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 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

## 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./" width	20 lbs./2" (9.1 kg/5 cm) width
Breaking Strength	A118.10 Section 4.3	> 170 psi	640 psi (45 kg/cm <sup>2</sup> )
Dimensional Stability	A118.10 Section 4.4	+/- 0.7%	0.01%

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## Bonding to Lightweight Cement and Gypsum Surfaces

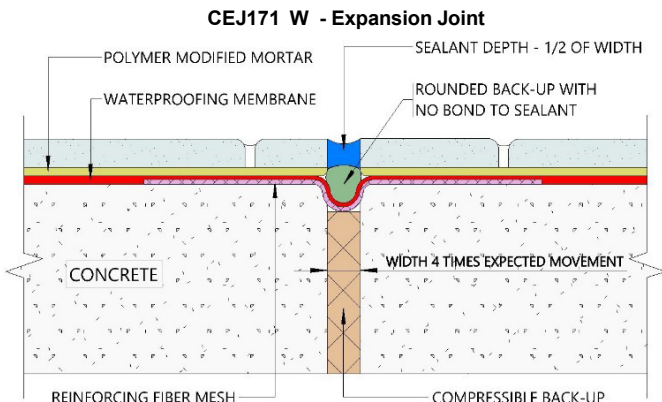
Lightweight or gypsum-based materials must obtain a minimum of 2000 psi (13.8 MPa) compressive strength at the recommended cure time. The underlayment must be sufficiently dry and properly cured to the manufacturer's specifications for permanent, non-moisture permeable coverings. Surfaces to be covered 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.

## 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.

RedGard® SpeedCoat® 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.



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, Mortar Bed, 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](#))

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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](#))

## Application of Product

For all applications, use a thinsset mortar or suitable patch to fill cracks to 1/8" (3 mm) before applying RedGard® SpeedCoat® liquid. Fill spaces around pipes and penetrations with sealant or patch. Apply liquid onto ABS or PVC pipes or use sealant after liquid dries to seal connection between membrane and abutting material and complete waterproofing. In high temperatures, windy conditions and when applying over very porous substrates, lightly dampen the surface. To improve coverage, trowel mortar beds tight on the surface and patch rough surfaces in concrete.

## RedGard® SpeedCoat® as a Waterproof Membrane

Apply SpeedCoat and embed [CUSTOM® Waterproofing Reinforcing Tape](#) at changes of plane and to treat other spaces in walls, ceilings or floors. Alternately, use CUSTOM 100% Silicone Sealant in place of fabric. Apply SpeedCoat membrane over silicone when it has become tacky.

**SMOOTH SURFACES:** Stir product by hand before using. Do not dilute. Apply RedGard® SpeedCoat using a 1/4" (6mm) smooth textured synthetic roller or flat steel trowel over the entire area to be treated. Apply two coats at 6 mils each over a 110 ft<sup>2</sup> area for proper coverage of an IAPMO shower pan creating a continuous, even film with overlapping strokes. Inspect the film for integrity and fill any voids or pinholes with additional material.

**ROUGH TEXTURED SURFACES** will result in a reduced coverage rate. To meet IAPMO requirements for shower pans, use a steel trowel or a 1/2" nap (12mm) roller and apply two coats at 6 mils forming a continuous, even film at a rate of 130 sq ft per gallon for each coat.

Inspect the film for integrity and fill any voids or pinholes with additional material. To achieve maximum coverage, smooth the surface with [SpeedFinish™ Patching & Finishing Compound](#) prior to applying membrane.

## REDGARD® SpeedCoat® Drain Treatment

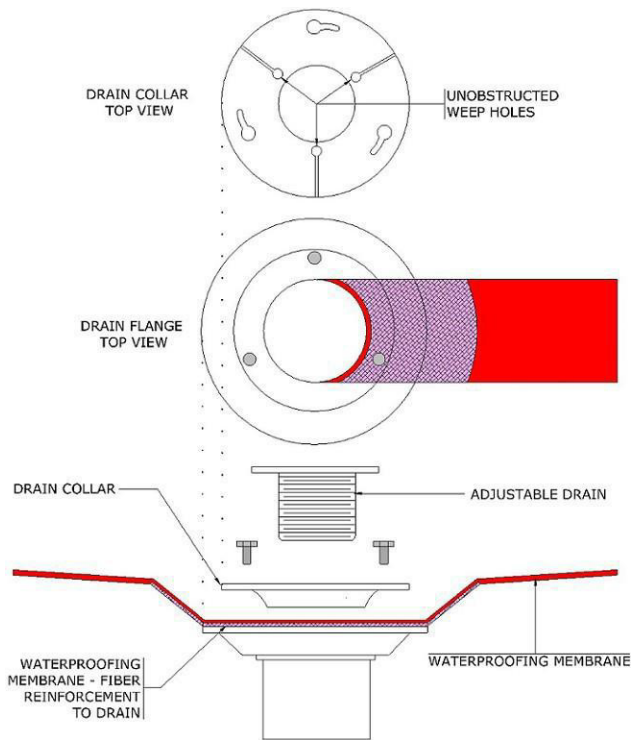
Drains are to be securely fastened to prevent movement. Prior to applying liquid, substrate is to be properly sloped toward drain flange. Remove any contaminants on drain flange that might inhibit bonding and protect threaded bolt holes with tape or inserting bolts before applying liquid.

Cut and fit pieces of reinforcing fabric (approximately 3" long.) to contour and encompass drain flange. Apply a coat of liquid overlapping transition from substrate or mortar bed to drain flange using a brush. Embed reinforcing fabric into liquid then overlap saturated fabric and use the brush to keep it flat. Continue applying liquid to adjacent areas designated to be waterproofed. Allow first application of RedGard® SpeedCoat® to dry, then recoat all areas to create a monolithic membrane. After final coat is dry, clamp collar to membrane and tighten.

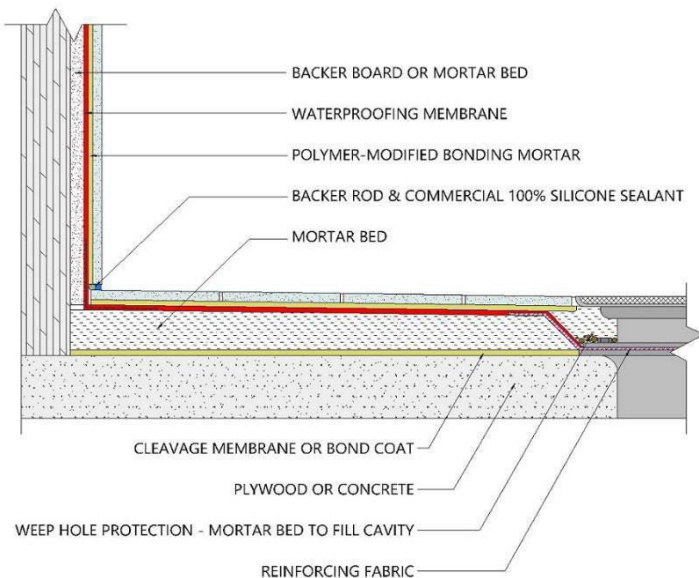


# RedGard® SpeedCoat® Waterproofing Membrane

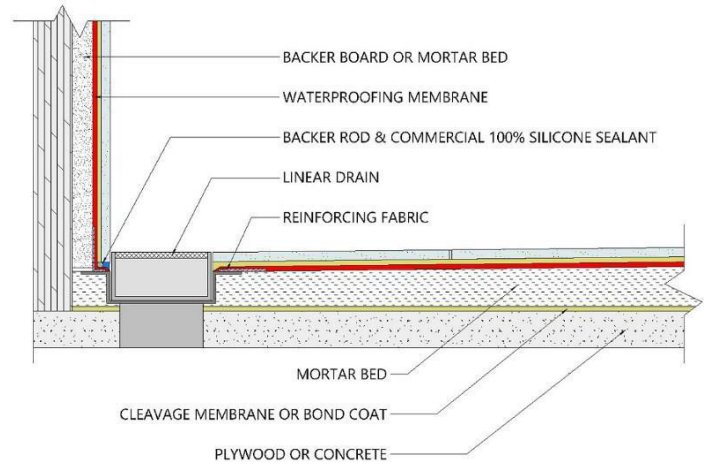
REDGARD® SpeedCoat® Circular Drain Assembly Detail



REDGARD® SpeedCoat®, Mortar Bed & Circular Drain (CB421)



REDGARD® SpeedCoat®, Mortar Bed & Linear Drain



## REDGARD® SpeedCoat® as an Anti-Fracture Membrane

**Note:** Custom® 9240 Waterproofing and Anti-Fracture Fabric is required when using RedGard® SpeedCoat® to manage crack transference through tiles and as an anti-fracture membrane.

Pre-cut fabric for coves and field. Plan to overlap fabric 2" at all seams. Apply liquid with a 3/8" (9.5 mm) rough textured roller to an area within reach to embed fabric. Embed fabric and assure that fabric is saturated using roller and additional liquid as needed. Allow liquid to dry – typically 1-2 hours then recoat. Membrane is ready for use when final coat is dry.

## Curing of Product

Each coat of RedGard® SpeedCoat® is dry to the touch in typically 1hr. Product does NOT change colors as it dries. After the second coat is applied and cured, the application area can be flood tested, typically 1 hr. later. RedGard® SpeedCoat® is a moisture cured product. Lightly mist if needed in areas of very low humidity to shorten dry times.

## Protection

If tile or stone will not be set immediately after curing, protect the application from traffic damage. Care should be taken to prevent the application from becoming soiled or punctured during and after 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. Use epoxy adhesive meeting ANSI A118.3 for moisture sensitive tiles or where chemical resistance is required.

## Cleaning of Equipment

Clean tools and hands with isopropyl alcohol (i.e. rubbing alcohol) before the material dries.


# RedGard® SpeedCoat® Waterproofing Membrane

## Health Precautions

**IMPORTANT: Read carefully before using. WEAR IMPERVIOUSGLOVES, such as nitrile, and eye protection.**

WARNING: COMBUSTIBLE. EYE & SKIN IRRITANT. May be harmful if swallowed. Do not use near heat, sparks or flames. 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: Silanes and 2-butoxyethanol. Before handling read Safety Data Sheet at [www.custombuildingproducts.com](http://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 and methanol which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## 6 Availability

Location	Item Code	Size	Color	Package
USA	RGSC1-2	1 gallon (3.78 L)	Red	Red Pail
Canada	CRGSC1-2	1 gallon (3.78 L)	Red	Red Pail

## 7 Product Warranty

Obtain the applicable **LIMITED PRODUCT WARRANTY** at [www.custombuildingproducts.com/product-warranty](http://www.custombuildingproducts.com/product-warranty) or send a written request to Custom Building Products, Inc., Five Concourse Parkway, Atlanta, GA 30328, USA.

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When RedGard® SpeedCoat® is used as a part of a qualifying full installation system of CUSTOM products, the installation can qualify for up to a lifetime 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](http://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](http://custombuildingproducts.com).

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## Coverage

*Application Type	Number of Coats	Approximate Coverage Rate
IAPMO Shower Pan Waterproofing over CUSTOM SpeedSlope® - Rapid Setting Sloping Mortar; or over WonderBoard® Lite Backerboard and other smooth concrete	2	110 sq. ft./gal (10.2 sq meters/ 3.8 liters)
IAPMO Shower Pan Waterproofing over Portland Cement Mortar Beds	2	65 sq. ft./gal (6 sq meters / 3.8 liters)
General Waterproofing over CUSTOM SpeedSlope® - Rapid Setting Sloping Mortar; over WonderBoard® Lite Backerboard and other smooth surfaces	1	220 sq. ft./gal (20.4 sq meters / 3.8 liters)
General Waterproofing over rough concrete or standard Portland cement mortar beds	1	130 sq ft / gallon (12 sq meters / 3.8 liters)

\*Note that monolithic coats are required for waterproofing, and two coats are required for IAPMO shower pan applications on floors, coves and curbs. Chart for estimating purposes. Coverage may vary based on installation practices and jobsite conditions.