# **GEM CURE & SEAL 100**

**Technical Information Sheet** | Sept.30.22 | Pg 1/3



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Gem Cure & Seal 100 is a solvent-based, clear acrylic co-polymer curing and sealing compound for freshly placed concrete or existing concrete surfaces. Gem Cure & Seal 100 minimizes moisture loss from evaporation in newly placed concrete to provide maximum strength, hardness, and protection. Reducing water evaporation will result in a stronger, denser, more durable concrete with higher compressive strength and better crack and freeze-thaw resistance.

### USES

- · Curing and sealing compound for freshly placed concrete
- · Sealer for existing concrete
- Dust proofer
- Use on concrete, stone and masonry surfaces

# FEATURES

- 18% Solids

• 100 VOC

- Meet ASTM C-309/ Meet AASHTO M 148
- Allows vapor passage
- Fast drying
  - Reduces alkali/efflorescence attack
- Medium to high gloss Color enhancing
- · Resistant to chemicals
- · Dries clear/ Non-yellowing

# COVERAGE RATES AND PACKAGING

- Available in 1 gal (3.78L) 5 gal (18.92L) & 55 gal (250.04L) containers
- Approx. 300 ft2 (27.87 m2) per gal depending on porosity of the surface.

# STORAGE & SHELF LIFE

- Store in a dry, safe place with containers tightly sealed.
- Shelf life is approximately 36 months.

# **USE & APPLICATION**

#### PRECAUTIONS:

Brickform strongly recommends jobsite samples or mockups with these products. Individuals who will be performing the work should test different sections of the concrete to determine suitability, coverage, coverage rates and final appearance.

- Gem Cure and Seal 100 should be applied when the air temperature is between 45°F (7.3°C) and 85°F (29.5°C). Applying the Cure and Seal at temperatures above 85°F (29.5°C) will cause the solvent to evaporate too quickly and not allow the film to form properly. Inadequate film formation results in bubbling, blushing (whitish haze), flaking, and adhesion failure over time. At temperatures below 45°F (7.3°C) the film may not cure properly resulting in less gloss development, hazing, and a softer, less durable sealer.

 Direct sunlight and windy conditions during application will also affect how the Cure and Seal dries. If the outer surface of the product dries too fast, a film will form that does not allow the solvent below to escape properly. This condition can also cause bubbling and/or hazing. These problems can develop

within minutes or hours of the application of the Gem Cure and Seal. Over-application of the Gem Cure and Seal can result in similar conditions. When applying the Gem Cure and Seal in hot weather, spray the product on in multiple, light applications at a targeted rate of 300 square feet (27.87 m2) per gallon. 2-3 light coats is better than one heavy coat. If possible, apply early or late in the day when temperatures are cooler.

 Apply in thin coats, only on surfaces textured for slip resistance. If applied too heavily or applied to dense surfaces, the sealer may become slippery, especially in areas where water accumulates. Heavy ap-



plication may also result in bubbling and coating imperfections. This product is not recommended for pre-sealed or dense surfaces such as glazed tile, marble or granite, dense brick, dense slate, or terrazzo. Dense, power troweled concrete slabs MUST be properly profiled and cleaned for proper adhesion of this product. Properly prepared surfaces will readily absorb water. Water beading up or remaining on the surface indicates additional preparation and cleaning is required. Do not use this product where hydrostatic pressure is present.

#### **PREPARATION:**

Surface Preparation Guidelines for applying Brickform Cure and Seal to existing slabs. If applying to newly placed concrete, please skip to APPLICATION.

- Surface preparation is the most important process when using any topically applied product available from Brickform, Brickform follows the surface preparation techniques recommended by the International Concrete Repair Institute outlined in its Guideline No. 310.2R Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays. This Guideline is available at icri.org and Brickform highly recommends obtaining a copy and thoroughly familiarizing yourself with the various processes for accurately preparing concrete slabs.
- Unless noted in earlier sections of this Technical Information Sheet (TIS), the slab must be fully cured for this product to perform properly. Generally speaking, newly poured slabs must be at least 28 days old. The curing conditions including temperature and humidity have a dramatic effect on how fast or slow the slab cures. Cooler conditions will slow the curing process and these factors must be considered when determining whether a slab has adequately cured for the installation of this product.
- Surface preparation requirements are different for every slab and the installer must determine what process is appropriate for the slab they are working on.

- Prevents mildew and fungi

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The recommended surface profile for Brickform sealers is a CSP 1 or CSP2 as defined by the Guideline 03732 mentioned above. The application area must be profiled and then thoroughly cleaned. All grease, oil, stains, stain residues, rust, sealers, waxes and the like must be completely removed prior to application of the product. Mechanical removal of these may prove aesthetically displeasing. There are a number of stain and wax removers and enzymatic cleaners available either commercially or via the internet that work well in these situations.

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- The use of Brickform E-Etch, a mild etching and cleaning solution, followed by Brickform's NeutraClean and clean water rinses may be appropriate for the slab. Please refer to the TIS for these Brickform products for proper use. See also the Brickform E-Etch video online at www.brickform.com.
- Acid etching with Muriatic (Hydrochloric) Acid solutions may be appropriate for slabs that require more aggressive etching and cleaning. Solutions as light as 1:20 (acid:water) to as heavy as 1:1 may be necessary depending on the slab finish. When acid washing, it is very important to protect surrounding areas from damage. Plant and animal life, certain finishes on houses, metals, and the like can all be negatively impacted if acid solutions are not used responsibly. Be sure and wear proper personal protective equipment when acid washing. Always pre-wet slabs that are to be acid washed and always neutralize the slab with Brickform's Neutra Clean following the acid wash. Do not allow acid solutions to dry on the slab as dried residues will prevent the sealer from bonding. See www.brickform.com for a video on How to Acid Wash Concrete.
- Other mechanical techniques such as grinding, scarifying, shotblasting or sandblasting may be necessary to prepare the slab. See www.brickform.com for other surface preparation techniques using mechanical methods. Old sealers and cure and seal products must be removed as well. Brickform's Strip-It is an alternative to mechanical methods for their removal. Please review the TIS for Strip-It prior to using this product.
- When using pressure washers to clean slabs, use equipment with a minimum of 3000 psi at 4 gallons per minute. Rotary floor scrubbers with black or red pads are effective for cleaning flat floors. When using rotary floor scrubbers on stamped slabs, nylon bristle brush attachments are necessary to reach imprinted areas effectively
- Once the slab has been profiled, all contaminants and potential bond breakers removed, and thoroughly cleaned, allow the slab to complete dry prior to application of the product.

#### **APPLICATION:**

Be sure to protect surrounding area from overspray. Gem Cure and Seal should be applied to fresh concrete immediately after final finish and all surface water has completely evaporated, the surface can be damp but not wet or with puddles. Apply with a quality pump sprayer or nap roller as soon as the slab can be walked on without marring the surface. Apply uniformly at approximately 300 square feet per gallon in thin coats, maintain a wet edge, avoid heavy spray and puddling. Immediately back roll excess material with a nap roller before the product dries. If additional coats are desired, allow the Cure and Seal to become tack free prior to applying. It is recommended that foot traffic remain off the finished sealed surface for 24 hours. For heavy traffic, allow 72 hours for curing.

#### Integrally Colored Concrete :

When using Gem Cure and Seal over integrally colored concrete, it is imperative to wait until all the water has evaporated from the surface. This may delay curing for a short period of time however, applying Cure and Seal to these slabs with excessive moisture at the surface may cause discoloration, splotchy areas, blushing and uneven color.

#### **Existing Concrete :**

When applying Gem Cure and Seal to existing concrete, allow the slab to completely dry after profiling and cleaning the slab. Apply the sealer with a sprayer following the same application rates as listed above.

# MAINTENANCE

The sealed surface should be inspected periodically for areas of thin or traffic-worn sealer. Brickform recommends the reapplication of Gem Cure & Seal as needed. If traces of efflorescence are present, this should first be eliminated with a gentle cleaner such as Brickform E-Etch. Brickform recommends the application of Premium Acrylic Floor Finish as a sacrificial coating on interior surfaces. Reapply as needed, according to the appropriate Technical Information Sheet. Be sure to follow The Technical Information Sheets for all Brickform Products.

## **RECOMMENDED TOOLS & CLEAN UP**

- Swissmex Solvent Pump Sprayer
- Brickform Precision Tip
- Nap Roller & brush

#### **CLEAN UP:**

Clean tools and equipment with A-1 Solvent, Xylene or acetone.

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## COMPLEMENTARY PRODUCTS

- · E-Etch- Cleaning and etching agent, efflorescence removal
- Neutra Clean Cleaning and neutralizing agent
- Traction Grip
- Matte Magic
- Tinta Seal

# SAFETY & PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN. Before using or handling, read the Safety Data Sheet and Warranty. DO NOT TAKE INTERNALLY. Do not breathe vapors or mist. Use only with adequate ventilation and use a respirator when levels are above applicable limits. Avoid contact with skin and eyes. Close container after each use. Use good hygiene when handling this product and wash and bathe after each use. Be sure to wash clothing after each use

# WARRANTY

This product is not intended for public use and is intended for use by licensed contractors and installers, experienced and trained in the use of these products. It is warranted to be of uniform quality, within manufacturing tolerances. The manufacturer has no control over the use of this product, therefore, no warranty, expressed or implied, is or can be made either as to the effects or results of such use. In any case, the manufacturer's obligations shall be limited to refunding the purchase price or replacing material proven defective. The end user shall be responsible for determining product's suitability and assumes all risks and liability.

Gem Cure and Seal 100 VOC

Item Number: GCS-10025

For more information go to: solomoncolors.com or brickform.com



