BRICKFORM Gem-Seal is a high-gloss, UV-resistant, lacquer-based, crystal-clear sealer. A light coating of BRICKFORM Gem-Seal will protect and enhance colored and textured concrete. Use BRICKFORM Gem-Seal on porous concrete to form a shield against stains and mildew.

**PRODUCT DESCRIPTION** • BRICKFORM Gem-Seal is a premium-quality non-yellowing, super-tough acrylic film that is easy to clean and maintain. BRICKFORM Gem-Seal protects with a high-gloss shine that penetrates the surface to retard efflorescence and resist oil, grease and food stains. BRICKFORM Gem-Seal virtually eliminates concrete dusting and is tough enough to withstand the extremes of areas subject to freeze-thaw.

**USES** • BRICKFORM Gem-Seal can be used on interior or exterior concrete-type surfaces. BRICKFORM Gem-Seal can be used as a base-coat for interior applications where a compatible, commercial floor wax is planned as part of a maintenance program. Use on colored or uncolored, stamped or exposed aggregate concrete.

**PACKAGING** • BRICKFORM Gem-Seal is available in one-gallon (3.785 L) and five-gallon (18.925 L) containers and twenty-five-gallon (946.375 L) drums.

**COVERAGE** • BRICKFORM Gem-Seal will cover approximately 250 to 350 square feet per gallon (6.13 - 7.36 m² / L) depending upon porosity of the surface.

**STORAGE** • Store in a dry, cool place and protect from freezing temperatures and moisture. Shelf life is approximately 36 months.

**CAUTIONS** • Contains aromatic hydrocarbons. KEEP OUT OF REACH OF CHILDREN. Before using or handling, read the Material 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.

**WARNING** • NOT RECOMMENDED for dense surfaces. 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. If in doubt, test the surface by sprinkling with water. If water beads up on the surface, additional cleaning and profiling must be done. Do not use where hydrostatic pressure is possible.

**LIMITATIONS** • BRICKFORM strongly recommends the use of a Moisture Vapor Evaporation Rate test in accordance with ASTM F1869. Results should not exceed 5 pounds per 1000 square feet per 24 hours based on the recommended test period. Relative humidity tests are strongly recommended as well when used in accordance with ASTM F2170. Results should not exceed 75%.

**FEATURES** • Non-Yellowing, Crystal Clear • Dries To A Wet-Look Finish • Interior/Exterior Use • Enhances Color • 19% Solids Content

Excessive moisture vapor evaporation rates can soften overlay materials and sealers, cause premature wear, discoloration and/or lead to a complete loss of bond from the concrete slab. Overlays and sealers should always be installed over pH neutral concrete substrates.

**PREPARATION** • Surface Preparation Guidelines for all Brickform Sealers

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. 03732 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. 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.

The use of Brickform E-Etch, a mild etching and cleaning solution, followed by Brickform's Neutra-Clean 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 Muratic (Hydrochloric) Acid solutions may be appropriate for slabs that require more aggressive etching and cleaning. Solutions as light as 1:4 (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.

The application area must be completely clean and free of grease, oils, dirt, rust, waxes, and organic stains. 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.

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.

NOTE: Brickform strongly recommends jobsite samples or mock ups 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.

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 trowelled 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.

APPLICATION • Apply in temperatures between 55º and 80ºF (12.8ºC and 26.7ºC). Always test a small area of surface to verify protection and appearance. Use BRICKFORM Gem-Seal full strength. DO NOT THIN. Apply from 2-3 light, even coats with a low-pressure airless sprayer or pump up sprayer resistant to acetone. CAUTION: if using the roller to apply sealer, be careful to apply in thin coats, maintain a wet edge, and do not back-brush. Allow 1-3 hours between coats or until the surface is dry to the touch. Avoid using in direct sunlight, especially on hot, windy days. Apply during the cooler part of the day when the surface is shaded. Do not apply on rainy or foggy days. Excess moisture will not allow the sealer to dry properly. Use only in well ventilated areas. It is recommended that foot traffic remain off the finished sealed surface for 24 hours. For heavy traffic, allow 72 hours for curing. HELPFUL HINT: Use toluene or lacquer thinner for easy cleanup.

Note: When installing GS100 over GS400, apply in multiple, thin applications with a sprayer to achieve 100% coverage.

Important! Do NOT apply GS100 over GS400 when the slab is hot. Apply in the morning hours when the slab is cool.

MAINTENANCE • The sealed surface should be inspected periodically for areas of thin or traffic-worn sealer. Brickform recommends the application of Dura-Wax as a sacrificial coating on interior surfaces. Reapply as needed, according to the appropriate Technical Information Sheet. If traces of efflorescence are present, this should first be eliminated with a gentle cleaner such as BRICKFORM E-Etch™, according to the BRICKFORM E-Etch Technical Information Sheet.

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.

PLAN SPECIFICATION
BRICKFORM® Gem-Seal™ Suggested Short Form Specification:
All concrete flatwork designated as being sealed in the plans and specifications shall be sealed with 2-3 light even coats of BRICKFORM Gem-Seal™, at the rate of approximately 250 to 300 square feet per gallon (6.13 - 7.36 m² / L), manufactured by BRICKFORM 800-483-9628, Rancho Cucamonga, CA, 909-484-3398. BRICKFORM Gem-Seal shall be applied in accordance with the BRICKFORM Gem-Seal Technical Information Sheet.

ORDER SPECIFICATIONS
Product
Gem-Seal 400/100 VOC
Shipping Weight Container Size
10.0 Lbs (4.54 kg) 1-Gallon (3.785 L)
40.0 Lbs (18 kg) 5-Gallons (18.925 L)
450.0 Lbs (202.5 kg) 55-Gallons (208.175 L)

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