



SB 2451 Lithium Concrete and Masonry Consolident

SB 2451 is a penetrating lithium silicate treatment for stabilizing and consolidating most porous brick, natural stone, unglazed terra cotta, cast stone and architectural concrete. Masonry that has been previously damaged by abrasive cleaning methods, masonry suffering from erosion and surfaces that have begun to lose their surface integrity for various reasons are often saved by the use of a treatment like SB 2451.

The SB 2451 reacts with the masonry matrix to recreate lost binders and minerals to improve the density, strength, and structural integrity of the masonry substrate. Unlike products based on sodium and potassium silicates, the lithium silicate in SB 2451 does not require the presence of free calcium hydroxide in the matrix to bind to the substrate and become insoluble. No potentially expansive gel is formed. Porosity is reduced but the surface is not sealed against water vapor transport. Depending on the nature of the original surface and the amount of SB 2451 used, the newly treated surface should have less water absorption and reduced deterioration from acid rain attack. Unlike older technology consolidents, SB 2451 is water based and does not suffer the odor, flammability and VOC problems associated with those products. In general SB 2451 can penetrate more deeply than the solvent borne products which lead to better bonding of the highly consolidated surface layers with the interior structure of the masonry. This avoids the creation of stress points below the surface where highly consolidated and non-consolidated layers meet thus reducing freeze/thaw induced spalling. Full strength and water resistance of the consolident is generally achieved in about a week however the masonry can be returned to service as soon as the surface is dried.

Preparation

As SB 2451 acts like a sealer or binder to the masonry, it will seal in dirt and stains, so the time to do cosmetic cleaning and improvements is before treatment. Clean all surfaces that will receive treatment with the appropriate ShoreBest restoration cleaner. Penetration and properties improvement are better on masonry that is free of dirt and organic contaminants.

Provide protection for non-masonry surfaces (especially glass), foliage, vehicle and pedestrian traffic. Protect all surrounding areas and structures from possible damage, which might occur from spillage, drift or over spray during usage.

All projects should start with a test application to a properly cleaned and thoroughly dry surface to determine the suitability of the treatment and acceptable application method. Using the method to be used on the project, apply an area of 10 square feet to calculate coverage rate per gallon and to determine if there will be any unacceptable change in the appearance of the surface. Low-pressure spray application, using the wet on wet method, is the preferred method of application. Unlike most masonry cleaning projects the intent with SB 2451 treatment is to have as much material penetrate the substrate and be absorbed as possible. When possible, the test area should be left to age for 10 or more days to check for possible adverse reactions such as unacceptable darkening of the surface.

Dilution and Coverage

Dilution: Product used undiluted -- test application recommended

Coverage: Dependent upon substrate and other conditions

Application

All masonry surfaces must be dry and free of any agent or agents that will prevent penetration of the fluid. The best results are obtained when surface and ambient temperatures are between 40 and 95 degrees F. Avoid application on windy days to avoid rapid evaporation.

Apply a soaking spray to clean, dry masonry. If working in the sun on a hot day, a light spray of water to cool the surface before application may be appropriate. Work in sections small enough so that repeat applications can be done before the surface dries out from the previous application. Do not allow the product to pond in low areas. Roll or brush out to avoid potential white spots. Depending on the porosity of the substrate and degree of improvement desired, usually three applications are specified. Before the last application is dry it is generally desirable to lightly spray or mist the treated area with clean water to drive the treatment deeper into the masonry. This is particularly important in hot dry weather when premature drying of the product can lead to hardening of the surface and reducing the amount of product that can be absorbed. Within reason, the longer the surface is kept wet, the better the overall results. Post treatment rainfall will not harm the product. In some cases, brush application may be acceptable.

DO NOT ALTER THE PRODUCT -- SB 2451 is to be applied as received from the factory. If the fluid comes in contact with glass or other non-masonry surfaces, remove immediately with water and/or a mild alkaline cleaner and dry with a rag. Dried product is difficult to remove.



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Technical Data

Appearance: Clear Liquid	pH: 11
Biodegradable: Yes	Rinsing: Complete
Flash Point: None	Solubility: 100%
Foaming: NA	Stability: Good
Odor: None	Wetting Ability: Excellent

Safety

Causes mild skin irritation



WARNING

Refer to product SDS or product label for hazard statements, precautionary statements and safety information

Warranty

Shore Corporation warrants that this product conforms to the chemical composition described in the Product Label. SHORE CORPORATION EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Shore Corporation shall not be responsible for any direct or consequential damages sustained as a result of the use of this product. Further, Shore Corporation shall not be liable for personal injuries, property damage or any other damages as a result of the use of this product, the sole responsibility of Shore Corporation under the within WARRANTY being the replacement of any nonconforming product. Acceptance and use of this product absolves Shore Corporation from any other such liability whatsoever and from whatever source. The within WARRANTY may not be modified or extended by Shore Corporation representatives or distributors, neither of which are empowered to make any product representation inconsistent with the terms hereof.

Contact

Trained representatives are available to assist with project assistance and product recommendations. Call **412/471-3330**.