

BORDER BOND™	CONCRETE AND PLASTER ADHESIVE
DESCRIPTION	<p>BORDER BOND bonding agent is a high solids content, water dispersion of bonding polymers, compounded specifically for modifying Portland cement, plastic and stucco compositions. It is a milky white, non-yellowing liquid, ready for use as an interface or intramix bonding agent. When properly mixed and applied, BORDER BOND forms a bond between new-to-old concrete that is typically stronger than the concrete.</p> <p>Cement mortars modified with BORDER BOND are hard, tough and durable. It offers superior tensile, flexural and impact strengths. Also, mortars and concrete modified with BORDER BOND typically show greater adhesion.</p> <p>BORDER BOND-modified concrete is unaffected by ultraviolet light and will not yellow.</p>
USES	<p>BORDER BOND's most common uses are for patching and resurfacing, spray and fill coats, repairing precast building panels and beams, industrial flooring, and highway and bridge deck repairs.</p> <p>BORDER BOND is ideal for interior or exterior bonding, topping, leveling, patching and dressing of concrete and masonry. As a bonding agent, it improves the adhesion of pneumatically hand-applied concrete or mortar. BORDER BOND modified mortars provide excellent adhesion to a variety of surfaces, including concrete and masonry. The result is a more attractive, durable, uniform and weatherproof concrete finish, which costs far less than polishing or rubbing.</p> <p>BORDER BOND is also ideal for use as an interface or intramix bonding agent in bonding slurries, topping mixtures, finishing and mortar mixes.</p>
COVERAGE	Approximately 200 sq. ft./gal. (4.91 sq. m./L) straight.
FEATURES/BENEFITS	<ul style="list-style-type: none"> • Forms an excellent bond to concrete. • Functions equally effectively for interior or exterior repairs between new-to-old concrete. • Offers superior flexural, adhesive and impact strengths, plus excellent abrasion resistance. • Provides a hard, durable, weather-resistant finish at far less cost than polishing or rubbing. • Will not after-yellow. • Will not stain or discolor concrete. • May be used as is, or dilute as needed. • Reduces permeability. • Reduces chloride intrusion.
SPECIFICATIONS	<ul style="list-style-type: none"> • ASTM C 1059, Type 1 (Re-emulsifiable) • Approved by the Ministry of Transportation, Quebec

PACKAGING	<ul style="list-style-type: none"> • 1 gallon (3.79 L) units (four per carton) • 5 gallon (18.93 L) pails • 55 gallon (208.20 L) drums
APPLICATION	<p>Surface Preparation All surfaces must be structurally sound, clean and free of grease, oil, dust, dirt, curing and release compounds and other foreign contaminants. All loose and unsound concrete must be removed. Pre-soak all surfaces with water to a saturated, surface dry (SSD) condition, prior to applying BORDER BOND bonding agent must be thoroughly worked and scrubbed onto the prepared concrete surface in order to realize maximum bonding efficiency. The cementitious material must be applied while the product is still tacky.</p> <p>Mixing Specific mixing proportions for these various BORDER BOND mixes are listed on the container. All cautions, mixing and application information and directions furnished on container labels should be read and followed. For normal mixing, dry blend the Portland cement and sand. Mix the product and water together, add the cement-sand mix, and then mechanically blend the complete mix thoroughly. The quantity of water should be determined by trial mix, where only 50% of the water is first added to the product before adding to the sand-cement mix. After thorough preliminary mixing, add increments of additional water until the desired consistency is obtained.</p> <p>Application Mixes by Volume</p> <p><u>1. Bonding Slurry:</u> 1 part BORDER BOND 2.5 parts Portland cement 2.5 parts fine sand (ASTM C 144) Water: Enough for a thick, creamy consistency (approximately 1 part).</p> <p>One-gallon unit of BORDER BOND used to mix a bonding slurry will yield approximately 0.47 cu. ft. (0.013 cu. m.), enough to cover an area of 90.24 sq. ft. (8.45 sq. m.) at 1/16" (1.59 mm) thickness or 45 sq. ft. at 1/8" (3.18 mm) thickness. Apply with a stiff bristle brush; be sure to work bonding slurry into existing concrete pores.</p> <p><u>2. Topping and Shallow Patching Mix:</u> 1 part BORDER BOND 5 parts Portland cement 15 parts fine sand (ASTM C 404, Size #2) Water: Enough for trowelable consistency (approximately 2 parts).</p> <p>A representative test area should always be applied if BORDER BOND is to be used with a pigment to ensure proper color, shading and resistance to efflorescence.</p> <p><u>3. Mortar Mix:</u> 1 part BORDER BOND 5 parts Portland cement 15 parts fine sand (ASTM C 404, Size #2) Water: Enough for desired consistency (approximately 1 ½ to 2 parts).</p>

APPLICATION

One gallon of BORDER BOND used in a topping or mortar mix will yield approximately 1.8 cu. ft. (.05 cu. m.) to cover an area of 86 sq. ft. (7.99 sq. m.) at ¼" (6.35 mm) thickness. Topping or mortar mix should be applied while the BORDER BOND bonding slurry is still soft and plastic.

4. Finish Mix: (For non-traffic surfaces)

1 part BORDER BOND

5 parts Portland cement

15 parts fine sand (ASTM C 404, Size #2)

Water: Enough for stiff, brushable consistency (approximately 4 parts).

5. Concrete Admixture:

Add two gallons of BORDER BOND per cubic yard of ready-mix or on-site batched concrete. Do not wet cure concrete modified with BORDER BOND.

BORDER BOND as a Concrete Admixture:

Dilute BORDER BOND with a portion of the normal water requirement before adding to the blended Portland cement aggregate mixture. Use one gallon (3.79 L) minimum and two gallons (7.57 L) maximum of BORDER BOND for every 94 pound (42.64 kg) bag of cement. For ready mix, use one quart (.94 L) per 90 pound (40.82 kg) bag. The following is a typical mix design:

Portland Cement 94 lb. (42.64 kg)

Sand 2 ½ cubic feet (0.7 m³ (18.75 gal.)) (70.98 L)

Gravel 2 cubic feet (.06 m³)

BORDER BOND 3 gal. (11.36 L)

Water Dilute with portion of water requirement as required

BORDER BOND as a Plaster Adhesive and Admixture: The old masonry surface should be cleaned of all grease, oil and foreign matter, with detergent or solvents. Detergents must be flushed away with clean water. A completely dried coating of adhesive must be re-coated with BORDER BOND before applying plaster.

Apply new concrete, plaster or mortar when BORDER BOND is tacky – at least 20 minutes, but less than two hours after application. To reinforce and improve the physical properties of the plaster mix, 12 gallons (45.43 L) of diluted BORDER BOND emulsion [1/2 to 1 gallon (1.89 to 3.79 L)] of BORDER BOND diluted to 12 gallons (45.43 L) with water and 200 pounds (90.72 kg) of plaster are mixed and applied as usual.

BORDER BOND as a Primer-Sealer: To seal drywall, fresh plaster or concrete, dilute two parts of BORDER BOND with one part water. Apply evenly with roller, brush or spray. Allow 45 minutes or more drying time before applying water-thinnable paint. If oil paint is used, allow BORDER BOND to dry thoroughly, several hours preferably.

PRECAUTIONS

Keep from freezing. Approximate work life is 30-40 minutes at 70° F. Use care in finishing thin overlays. Wood float when possible. Steel troweling should be limited to a minimum number of passes 10-15 minutes after placement. When BORDER BOND is used in a bonding grout and the patch topping is plain concrete, use a membrane curing compound. If the patch or topping contains BORDER BOND as an admixture, wet curing is not recommended. BORDER BOND bonding slurry or topping mix should be mixed thoroughly to remove lumps. Avoid air entrapment. Clean tools with water immediately. Follow all cautions on container labels. Do not add to premixed grouts. Specifier and user shall determine suitability of product for specific applications and assume all responsibilities in connection therewith. BORDER BOND has an effective shelf life of six months from the date of manufacture.

Note: Increased amounts of various fillers, extenders or additives in the concrete mix can result in the concrete having a higher than normal porosity and some very porous hot spots. Coverage ratios must be adjusted to compensate for resulting penetration and additional coverage coats required to provide proper surface treatment. Read and follow application information and precautions. Refer to material safety data sheet for complete health and safety information.

Border Construction Specialties warrants that, at the time and place we make shipment, our materials will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF

LAW, COURSE OF DEALING, CUSTOM OF TRADE OR OTHERWISE. As the exclusive remedy for breach of this Warranty, we will replace defective materials, provided, however, that the buyer examine the materials we received and promptly notify us in writing of any defect before the materials are used or incorporated into a structure. Three (3) months after Border Construction Specialties has shipped the materials, all our Warranty and other duties with respect to the quality of the materials delivered shall conclusively be presumed to have been satisfied, all liability therefore terminates, and no action for breach of any such duties may thereafter be commenced. Border Construction Specialties shall in no event be liable for consequential damages. Unless otherwise agreed to in writing, no warranty is made with respect to materials not manufactured by Border Construction Specialties. We cannot warranty or in any way guarantee any particular method of use or application for the performance materials under any particular condition. Neither this Warranty nor our liability may be extended or amended by our salesmen, distributors or representatives, or by our distributor's representatives, or by any sales information or drawings