

**DESCRIPTION:** TOP 'N BOND is a self-bonding, pre-blended Portland cement-based patching material for thin section repairs to existing concrete surfaces.

**USES:** TOP 'N BOND is recommended for repairing or resurfacing concrete slabs, driveways, sidewalks, steps or any worn, chipped or spalled concrete surfaces.

**ADVANTAGES:** TOP 'N BOND exhibits superior bond to concrete surfaces compared to regular topping mixes. It featheredges easily, does not shrink and develops superior one-day and long-term strength. TOP 'N BOND may be mixed to either a trowelable consistency for patching or a flowable consistency for thin section brush coating.

**PROCEDURES:** <u>PREPARATION</u>: All surfaces to be in contact with TOP 'N BOND must be entirely free of oil, grease or other foreign substances. Slick or sealed surfaces must be roughened. Large cracks or cavities should be filled with a stiff mixture of TOP 'N BOND prior to resurfacing. The work area should be sound with all loose concrete removed. The area to be resurfaced must be dampened with water, taking care to remove any standing water prior to application. Areas deeper than 1.3cm(1/2'') should be built up in 1.3cm(1/2'') lifts of trowelable TOP 'N BOND. Each lift should be allowed to cure for 24hrs prior to subsequent applications.

<u>MIXING</u>: Empty the contents of the bag into a mixer or clean wheelbarrow and mix the dry contents thoroughly. Set aside a small quantity of dry material for use if the mix becomes too wet. Make a depression in the middle of the dry mix and add up to 2.8liters (2.9 US quarts) of water for a trowelable consistency or 4.0liters (4.1 US quarts) for a brush-coat consistency. Adding too much water will reduce strength and bond.

<u>PLACING</u>: Using a trowel, apply enough pressure to force the mix into the existing concrete. Trowel over the patched area to bring to the desired grade. Excessive trowelling should not be done when there is free water on the surface and should not be done to the extent that free water will be brought to the surface. When the surface has become quite hard, it should be given a second and third trowelling to produce a very hard, dense finish. For brush-coat resurfacing, use a soft-bristle push broom to spread the TOP 'N BOND evenly. Finish by lightly brooming the surface. A brush coat is usually applied to lightly damaged areas or to provide a uniform finish over a series of patches.

<u>CURING</u>: Once the patch has reached initial set (hard to the touch, approximately 5-7 hours after mixing), the patch should be covered with wet cloth or burlap. The surface should be kept continuously wet for 24 hours, and then covered with polyethylene film or waterproof paper for an additional 48 hours. Ambient conditions (hot or cold, dry or humid, calm or windy) dictate the choice of a satisfactory curing method. Rapid water evaporation or drying may cause surface crazing, cracking and curling. Rapid drying can be prevented by shading the freshly placed patch from direct sunlight or brisk winds. It is preferable not to place TOP 'N BOND in hot weather. TOP 'N BOND will achieve final set in 6-10 hours and is suitable for foot traffic in 24 hours and vehicle traffic in 48 hours.

**TECHNICAL DATA:** The data outlined below is representative of typical values achievable under controlled laboratory conditions. Results obtained in the field may vary from those stated.

PROPERTIES	TEST METHOD	TROWELABLE	BRUSH COAT
Flow :	ASTM C 1107	110±5 %	30 seconds
Density : kg/m <sup>3</sup> (Pcf)	ASTM C185	2202 (137)	209 (129)
Working time:		1 hour	1 hour
Compressive Strength : MPa (psi)			
1d		10 (1450)	7 (1015)
7d	ASTM C 1107	34 (5000)	30 (4350)
28d		38 (5500)	2059 (129)
Tensile Strength : MPa (psi)			
7d	ASTM C952	0.5 (60)	N/A

**YIELD:** One 18kg (40 lb.) sack at a brush coat consistency covers approximately 1.6 square meters (18 sqft) at 0.6cm (1/4'') thick.

**LIMITATIONS:** Adhering to recommended water additions is very important. Exceeding the maximum recommended water content per sack will result in inferior physical properties.

TOP 'N BOND is not suitable for use when:

- $\Rightarrow$  covering wood or asphalt
- $\Rightarrow$  repairing structural defects
- $\Rightarrow$  repairing frozen or frost-filled surfaces
- $\Rightarrow$  working in temperatures below 5°C

TOP 'N BOND is not a "fast-setting" product. For fast-set patching use BASALITE FAST PATCH. TOP 'N BOND must be kept in dry storage. Liability for damages or defective goods shall be limited to the refund of the purchase price or product replacement.

**PACKAGING:** TOP 'N BOND is packaged in 18 kg (40 lb.) triple-lined paper bags, and tubs sized 2kg (5lb), 5kg(11lb) and 10kg (22lb). All Basalite Dry Mix can be custom-packaged to suit specific project requirements.

**SAFETY PRECAUTIONS:** TOP 'N BOND contains Portland cement and other carefully selected additives. Normal safety wear such as rubber gloves, dust mask and safety glasses, used to handle conventional cement-based products, should be worn. Safety Data Sheets are available at www.basalite.ca.

