Pro-Line ProBond

* Significantly improves bond and compressive strength and provides higher resistance to thermal shock.

* Use Interior or Exterior

Usage: Pro-Line ProBond can be used as a bonding adhesive as well as an admixture to improve adhesive qualities, moisture retention, flexibility, toughness and chemical resistance. When used as a bonding adhesive, Pro-Line ProBond will bond new mortar, plaster and concrete to existing concrete, block, tile, brick, marble, stone, wallboard, metal, glass and most painted surfaces. As an admixture, Pro-Line ProBond may be substituted for a portion of the water content in mortar, plaster or concrete to improve most all the physical properties of these Portland cement mixes. Modified mixes will also resist cracking and chemical degradation due to chloride exposure.

Suitable Substrates: Properly prepared plumb and true masonry, concrete, cementitious backer units, cured Portland cement mortar beds, brick, ceramic tile, and stone. Used for both interior and exterior applications. For interior, dry applications Pro-Line ProBond can be used over drywall (vertical only).

◆Concrete and Masonry Work Surfaces: Remove all deteriorated concrete and mortar particles and other matter detrimental to proper adhesion. Mechanically scarify work surfaces to obtain an aggregate fractured surface condition with minimum profile of ±1/16 inch. Wash debris from work surfaces with plenty of clean water. Prepared work surface should be in saturated surface dry condition with no standing water.

Preparatory Work: All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40°F or above 100°F) during installation. Surface must be free of all grease, oil, dirt, dust, curing compounds, sealers, coatings, efflorescence, old adhesive residues, gypsum based underlayments and any other foreign matter. Painted or glossy surfaces must be sanded, stripped, and free of all contaminants.

Cementitious Substrates: Clean via mechanical sanding, scraping, or chipping. Surface may also be cleaned with muriatic acid if thoroughly flushed and neutralized. Smooth, steel troweled concrete surfaces must be mechanically scarified to ensure a good bond. Concrete should be able to absorb water. Dry porous concrete should be dampened prior to ceramic tile installation- do not leave puddles or standing water on surfaces. Non-Cementitious Substrates: Surfaces such as stripwood, old plaster or painted surfaces that provide bonding problems should be covered with a cleavage membrane topped with a 3/8" to 3/4" reinforced mortar bed for walls and a 1 1/4" reinforced mortar bed for floors.

Ceramic Tile Substrate: Existing tile substrate must be properly bonded. Surface must be prepared in accordance with cementitious substrates; surface is required to be mechanically scarified prior to installation to ensure a proper bond.

Mix as Bonding Adhesive: Mix or stir Pro-Line ProBond immediately before use to a uniform consistency then apply at full strength.

Application as Bonding Adhesive: Using Pro-Line ProBond full strength, brush, roll or spray a bonding coat of adhesive to the work surface at a rate of approximately 200-250 sq.ft./gallon. Apply Portland cement mortar or concrete directly to the Pro-Line ProBond and cure as required. For maximum bond strength, apply cement base material to the adhesive while glue line is still tacky; this is from 20 minutes to one hour after application. Do not use Pro-Line ProBond in areas that are continually exposed to water, such as swimming pools.

Mix as Admixture: Mix or stir the material immediately before use to a uniform consistency and substitute a portion of mix water with Pro-Line ProBond as follows:

- For pointing mortars and patching materials: 1 part Pro-Line ProBond to 3 parts clean water.
- For tile and stone setting mortars: 1 part Pro-Line ProBond to 1 part water.

◆Curing for Construction Mortars: Wet cure with water or wet burlap for the first 24 hours and then air cure for 3 days. Resurfaced areas may be opened to foot traffic after 24 hours, light traffic in 2 - 4 days and heavy traffic in 5 - 7 days.

•Cleaning: Mortars modified with Pro-Line ProBond will adhere to most materials. Care should be taken to wash wet mortar off all tools and mixing equipment before it sets.



Data Sheets are subject to change without notice. For latest revision, check our website at www.bondedmaterials.com. . If an installation or materials should be changed outside the detailed instructions, please contact our technical support dept .for assistance. ♦ Bonded Materials Company ♦ 4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031 Ph. 623-873-0001 Toll Free 877-726-6333 <u>www.bondedmaterials.com</u>



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Application as Admixture in Mortars:

For pointing mortars and patching materials: To properly prepared work surfaces, scrub mortar modified with Pro-Line ProBond into the substrate using stiff bristled brush or broom. Place additional mortar over the scrub coat, strike off, trowel and finish at once. Over-finishing and troweling should be avoided. Areas subjected to high temperature and wind require extra care to minimize rapid drying and moisture loss.

For tile and stone setting mortars: Mix Pro-Line ProBond 1:1 with clean, cool, potable water only, then add setting mortar powder at a rate of approximately 5-6 quarts diluted admixture per 50 lbs.. Mix thoroughly until smooth and paste-like consistency is achieved and let mortar slake for 5 minutes, then remix. If a mechanical mixer is used, it must be mixed at a low RPM (300 or less) so as not to entrap air in the mortar. Do not add water or additional powder after slaking period. The proper mortar consistency is such that when applied with a notched trowel to the substrate, the ridges formed in the mortar will not flow or slump. Do not use mortar after initial set in bucket. During use, remix mortar occasionally.

Application: Spread mortar with flat side of trowel to key into substrate; then, apply additional mortar to a depth sufficient to be notched with a suitable trowel that will leave only enough mortar to give 100% contact with back of tile and a subsequent mortar bed of 3/32" to 3/16". With high lug tiles, "back buttering" may be required to ensure 100% coverage to back of tiles. During the setting of tile, it is advisable to occasionally remove a tile to be sure mortar has not skinned over and sufficient transfer is being made. It is also required that tiles be embedded to obtain good transfer of mortar to tile and for proper alignment. Do not adjust tiles in mortar after they have been set past 20 minutes. *Note: There are no uniform standards for glass tile application, please follow tile manufacturer's directions when choosing the proper setting material and any possible limitations.

◆Tile: Remove any tile release agent (usually a whitish powder), dust, or other contaminates found on the tile or stone back. This may be done by scrubbing with a nylon brush and water.

Expansion Joints: Expansion joints shall be installed in accordance with local building codes. See EJ171 in T.C.N.A. handbook for details. Expansion joints, control joints and cold joints should never be bridged with setting material. ◆Limitations: The minimum recommended application temperature is 45°F; temperature must remain at or above 45°F for at least 48 hours. High humidity and excessive moisture will retard curing time. Do not use in enclosed areas where air circulation is limited. Prolonged freezing may damage contents. Material may be used after freezing if it is allowed to thaw at room temperature and can be stirred to an even, smooth consistency. DO NOT USE PRO-BOND IN AREAS THAT ARE CONTINUALLY EXPOSED TO WATER, SUCH AS SWIMMING POOLS.

◆Safety: Avoid inhalation of vapors, use in well ventilated areas. Avoid contact with eyes or skin In case of contact with eyes, flush with water and call physician immediately; for skin contact, wash with warm soapy water. If material is swallowed, call physician immediately. KEEP OUT OF REACH OF CHILDREN.

Warranty: Bonded Materials Company ("Bonded Materials") warrants to the original consumer purchaser that its product shall be free from defects in material and workmanship under normal and proper usage for a period of one year following the date of original purchase. Bonded Materials sole liability under this warranty shall be limited to the replacement of the product. The statements, recommendations, and technical information provided are furnished without warranty, representation, inducement or license of any kind; except that it is accurate to the best of our knowledge, or obtained from sources believed by us to be accurate. Bonded Materials makes no warranty for a particular purpose with respect to product sold herein, except quality of components shall be in accordance with Bonded Materials standards. It is expressly understood and agreed that the buyer's sole and exclusive remedy shall be replacement of defective products. Handling and actual use of product are beyond the control of Bonded Materials, therefore, no warranty is made, expressed or implied, as to the results obtained from use of the product or against any claims for infringement of patents resulting from the use of the product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty will not extend to any product which has been modified in any way or which has not been used in accordance with Bonded Materials printed instructions. Bonded Materials makes no other warranties either expressed or implied. This warranty gives you specific legal rights, and you may have other rights that vary from state to state.

ProBond Technical Data (based on 70°F [21°C] and 50% relative humidity)	
Test	ProBond Values
Tensile Strength ASTM C-190	>800 psi (56 kg/cm2)
Compressive Strength ASTM C-109	>4550 psi (320 kg/cm2)
Flexural Strength ASTM C-348	>1100 psi (77 kg/cm2)
Shear Bond ASTM D-3931	>1000 psi (70 kg/cm2)



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