BONDED®

Mortars • Grouts • Levelers • Patches • Waterproofing • Cleaners

Creating Strong Bonds
in our products & customer relationships

Pro-Line by BONDED®

Pro-Line AllClean

Cleaning Crystals

Packaging: Available in 2 lbs. & 8 lbs Containers

*** Use on Grout, Tile, Masonry**
*** Use Interior or Exterior**
*** V.O.C. 0% by weight before dilution**
*** Easy to use/Fast acting**
*** Removes efflorescence**

♦**Usage:** AllClean is a sulfamic acid crystal that when mixed with water is used for cleaning tile, grout, and masonry surfaces.

♦**Suitable surfaces**:

- Acid-Resistant Glazed Tile
- Quarry Tile
- Unglazed Ceramic Tile
- Porcelain Tile
- Cement Grout & Mortar
- Masonry

♦ Allow newly grouted installation to cure a minimum of 10 days before use.

♦ TEST A SMALL AREA According to application instructions to determine desired results.

♦ **APPLICABLE STANDARDS:** The recommended cleaning solution of the American National Standards Institute (ANSI A108), National Tile Contractors Association A-7, and the Materials and Methods Standards Association Bulletin No. 6. Color — White Fine granules.

♦**Mix:** Mix slowly to avoid inhaling fine particulate matter. Mix 2 pounds of AllClean to 5 gallon of water and mix well being sure all the crystals are dissolved. Water should be room temperature.

♦**Application:** Pre-wet the surface with clean water. Apply the solution to the surface and let stand for 3-5 minutes, and then agitate the surface with a brush. **Do not allow the solution to dry on the surface.** Work small areas. Extract all dirty remains with a wet vacuum system. Multiple applications may be necessary. After extracting the AllClean solution, rinse thoroughly with clean water.

♦**Storage:** One year if kept dry and sealed. Store in original container only. Store in temperatures between 40 °F and 90 °F (4 °C and 32 °C).

♦**Caution:** Do not mix with ammoniate cleaners as harmful fumes may result. Not recommended for use on very porous tile, stone or masonry. Acids, no matter how mild, may etch, lighten or alter the color of tile, cementitious products and natural stone surfaces. Repeated acid washing may damage some surfaces. Do not use AllClean on acid sensitive grout colors: #86 Ocean Blue, and #140 Black Jade. Not recommended for highly porous tile such as Saltillo.

♦**Safety:** May cause eye, skin, or lung injury. CAUTION: Sulfamic acid and its solutions cause eye burns and irritate the nose, throat and skin. Do not get into eyes. Avoid contact with skin and clothing. Minimize exposure by wearing eye goggles and rubber gloves when handling. KEEP OUT OF REACH OF CHILDREN. **Before using, users shall determine the suitability of the product for their intended use. Users assume all risks and liability whatsoever in connection therein.**

♦**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.

♦ Bonded Materials Company ♦
4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

BONDED

rev. Sep-12

Pro-Line AllFlex Lite

Premium Flexible Lightweight Polymer-Modified Mortar

Packaging: Available in 30 lb. bags. Gray/White

*** Flexible-Isolates cracks up to 1/8”**
*** Made with recycled materials**
*** No V.O.C.**
*** Contributes to LEED®**

♦**Usage:** AllFlex Lite is a highly flexible, latex-Portland cement mortar uniquely designed with a blend of dry polymers, Portland cement, plasticizers, and sand. This single-component mortar cures to provide a high flexural strength. AllFlex Lite will reduce tile cracking when used on appropriate substrates that are subjected to limited deflection and vibration. AllFlex Lite may be applied directly over in plane, minor shrinkage cracks up to 1/8” in width with no additional crack-isolation membrane application. AllFlex Lite is designed to bond all types of ceramic and natural stone tile over a variety of substrates. **ANSI A118.1, A118.4, A118.11, A108.5**

♦**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 AllFlex Lite can be used over EGP, drywall (vertical only), and when properly prepared-old cutback adhesive, scarified plastic laminates and vinyl composition flooring.

♦**Preparatory Work:** All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦**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. Not for controlling vertical movement.

♦**Cementitious Substrates:** Clean via mechanical sanding, chipping, scraping or scarifying. 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 absorb water. Dry porous concrete should be dampened prior to tile installation- do not leave 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.

♦**Plywood Substrates:** AllFlex Lite may be used over EGP on floors. Wood flooring when placed on top of conventional floor joist or other system, should maintain a substrate deflection not to exceed L/360th of span and L/720th of span for natural stone and that includes both live and dead loads. A gap of 3/16” must be left between sheets of EGP and all materials they abut to allow for expansion. Do not fill expansion joints with setting material. EGP substrate is acceptable for dry, interior applications only. Floors must comply with TCNA instructions for Floors, Interior: Wood Subfloor.

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

♦**Mix:** AllFlex Lite dry powder should be added to clean, cool, potable water only at the rate of approximately 7 quarts per 30 lb. bag. Mix thoroughly until smooth and paste-like consistency is achieved and let mortar slake for 10 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 3/4”. 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.

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Pro-Line AllFlex Lite

Premium Flexible Lightweight Polymer-Modified Mortar

Packaging: Available in 30 lb. bags. Gray/White

*** Isolates cracks up to 1/8" * Made with recycled materials * No V.O.C. * Contributes to LEED®**

♦**Curing:** Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. Allow minimum of 24-48 hours before grouting or light traffic. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** AllFlex Lite must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Square feet per 30 lb. bag
45 - 50 sq. feet using a 1/2" x 1/2" square notched trowel
65 - 70 sq. feet using a 1/4" x 3/8" square notched trowel
90 - 100 sq. feet using a 1/4" x 1/4" square notched trowel

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

AllFlex Lite Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	AllFlex Lite Values
*Open time @ 70°F -	12-15 Minutes
Adjustability @ 70°F -	50-60 Minutes
Bucket life @ 70°F -	4 Hours
Shear Bond ANSI A118.4 and ANSI A118.11	
Non-Vitreous Tile 28 Days	>800 psi (56 kg/cm2)
Vitreous Tile 28 Days	>600 psi (42 kg/cm2)
Non-Vitreous Tile (over plywood) as tested by the ANSI A118.11 standards 28 Days	>300 psi (21 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

Pro-Line by BONDED®

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.

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BONDED®

rev. Sep-12

Pro-Line AllFlex

Premium Flexible Polymer-Modified Mortar

♦**Packaging:** Available in 50 lb. bags. Gray/White

*** Flexible-Isolates cracks up to 1/16”**
*** No V.O.C.**
***Contributes to LEED®**

♦**Usage:** AllFlex is a flexible, latex-Portland cement mortar uniquely designed with a blend of dry polymers, Portland cement, plasticizers, and sand. This single-component mortar cures to provide a high flexural strength. AllFlex will reduce tile cracking when used on appropriate substrates that are subjected to limited deflection and vibration. AllFlex may be applied directly over in plane, minor shrinkage cracks up to 1/16” in width with no additional crack-isolation membrane application.
AllFlex is designed to bond all types of ceramic and natural stone tile over a variety of substrates.
ANSI A118.1, A118.4, A118.11, A108.5

♦**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 AllFlex can be used over EGP, drywall (vertical only), and when properly prepared-old cutback adhesive, scarified plastic laminates and vinyl composition flooring.

♦**Preparatory Work:** All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦**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. Not for controlling vertical movement.

♦**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 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.

♦**Plywood Substrates:** AllFlex may be used over EGP on floors. Wood flooring when placed on top of conventional floor joist or other system, should maintain a substrate deflection not to exceed L/360th of span and L/720th of span for natural stone and that includes both live and dead loads. A gap of 3/16” must be left between sheets of EGP and all materials they abut to allow for expansion. Do not fill expansion joints with setting material. EGP substrate is acceptable for dry, interior applications only. Floors must comply with TCNA instructions for Floors, Interior: Wood Subfloor.

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

♦**Mix:** AllFlex dry powder should be added to clean, cool, potable water only at the rate of approximately 6 quarts per 50 lb. bag. Mix thoroughly until smooth and paste-like consistency is achieved and let mortar slake for 10 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.

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Pro-Line AllFlex

Premium Flexible Polymer-Modified Mortar

♦**Packaging:** Available in 50 lb. bags. Gray/White

*** Flexible-Isolates cracks up to 1/16" * No V.O.C. * Contributes to LEED®**

♦**Curing:** Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. Allow minimum of 24-48 hours before grouting or light traffic When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** AllFlex must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Square feet per 50 lb. bag
45 - 50 sq. feet using a 1/2" x 1/2" square notched trowel
65 - 70 sq. feet using a 1/4" x 3/8" square notched trowel
90 - 100 sq. feet using a 1/4" x 1/4" square notched trowel

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

AllFlex Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	AllFlex Values
*Open time @ 70°F -	12-15 Minutes
Adjustability @ 70°F -	50-60 Minutes
Bucket life @ 70°F -	9 Hours
Shear Bond ANSI A118.4	
Non-Vitreous Tile 28 Days	>700 psi (49 kg/cm2)
Vitreous Tile 28 Days	>500 psi (35 kg/cm2)
Non-Vitreous Tile (over plywood) as tested by the ANSI A118.11 standards 28 Days	>250 psi (28 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

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If an installation or materials should be changed outside the detailed instructions, please contact our technical support dept .for assistance.

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BONDED®

rev. Sep-12

Pro-Line AllSet RS

Premium Polymer-Modified Rapid Set Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** High Early Bond Strength**
*** Grout in 2-4 hours**
*** No V.O.C.**
*** Contributes to LEED®**

♦**Usage:** AllSet RS allows you to set tile and grout in 2-3 hours and then open to light foot traffic within the same day. AllSet RS is used as a rapid setting bond coat for setting high lug, absorptive, semi-vitreous and vitreous, brick, cement, ceramic, mosaic, natural stone, porcelain, precast terrazzo, and quarry tiles for service in residential and commercial use. It is used in a mortar bed from 3/32" to 3/16" after the tiles have been properly embedded. AllSet RS has excellent water and impact resistance, is water-cleanable, non-flammable, and good for exterior work. **ANSI A118.1, A118.4, A118.11, A108.5**

♦**Suitable substrates**: Properly prepared plumb and true masonry, concrete, cementitious backer units, cured mortar beds, brick, ceramic tile, and stone. Used for both interior and exterior applications. For interior, dry applications AllSet can be used over EGP, drywall (vertical only).

♦**Preparatory Work:** All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦**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.

♦**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 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.

♦**Plywood Substrates:** AllSet RS may be used over EGP on floors. Wood flooring when placed on top of conventional floor joist or other system, should maintain a substrate deflection not to exceed L/360th of span and L/720th of span for natural stone and that includes both live and dead loads. A gap of 3/16" must be left between sheets of EGP and all materials they abut to allow for expansion. Do not fill expansion joints with setting material. EGP substrate is acceptable for dry, interior applications only. Floors must comply with TCNA instructions for Floors, Interior: Wood Subfloor.

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

♦**Mix:** AllSet RS dry powder should be added to clean, cool, potable water only at the rate of approximately 5-6 quarts per 50 lb. bag. Mix thoroughly until smooth and paste-like consistency is achieved. Do not mix more mortar than can be used in 30 minutes. 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 slake, spread immediately. If mixture becomes stiff remix without adding more water or powder. 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 10 minutes.

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BONDED®

Pro Line AllSet RS

Premium Polymer-Modified Rapid Set Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** High Early Bond Strength * Use Interior or Exterior * No V.O.C. * Contributes to LEED®**

♦**Curing:** Protect floor from traffic for 2-3 hours before grouting depending on ambient temperatures. Allow minimum of 6 hours before light traffic. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** AllSet RS must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Square feet per 50 lb. bag
45 - 50 sq. feet using a 1/2" x 1/2" square notched trowel
65 - 70 sq. feet using a 1/4" x 3/8" square notched trowel
90 - 100 sq. feet using a 1/4" x 1/4" square notched trowel

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

AllSet RS Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	AllSet RS Values
*Open time @ 70°F -	10-20 Minutes
Adjustability @ 70°F -	10 Minutes
Bucket life @ 70°F -	30-45 Minutes
Shear Bond ANSI A118.4 and ANSI A118.11	
Non-Vitreous Tile 28 Days	>500 psi (35 kg/cm2)
Vitreous Tile 28 Days	>400 psi (28 kg/cm2)
Non-Vitreous Tile (over plywood) as tested by the ANSI A118.11 standards 28 Days	>250 psi (17 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

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Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

BONDED®

rev. Sep-12

Pro-Line AllSet

Premium Polymer-Modified Dry-Set Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** High Bond Strength**
*** Use Interior or Exterior**
*** No V.O.C.**
*** Contributes to LEED®**

♦**Usage:** AllSet is used as a bond coat for setting high lug, absorptive, semi-vitreous and vitreous, brick, cement, ceramic, mosaic, natural stone, porcelain, precast terrazzo, and quarry tiles for service in residential and commercial use. It is used in a mortar bed from 3/32" to 3/16" after the tiles have been properly embedded. AllSet has excellent water and impact resistance, is water-cleanable, non-flammable, and good for exterior work, and requires no soaking of tiles. AllSet provides a permanent installation with higher bond strength and lower material and labor costs then conventional Portland cement mortar beds. **ANSI A118.1, A118.4, A118.11, A108.5**

♦**Suitable substrates**: Properly prepared plumb and true masonry, concrete, cementitious backer units, cured mortar beds, brick, ceramic tile, and stone. Used for both interior and exterior applications. For interior, dry applications AllSet can be used over EGP, drywall (vertical only), and when properly prepared-old cutback adhesive, scarified plastic laminates and vinyl composition flooring.

♦**Preparatory Work:** All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦**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.

♦**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 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.

♦**Plywood Substrates:** AllSet may be used over EGP on floors. Wood flooring when placed on top of conventional floor joist or other system, should maintain a substrate deflection not to exceed L/360th of span and L/720th of span for natural stone and that includes both live and dead loads. A gap of 3/16" must be left between sheets of EGP and all materials they abut to allow for expansion. Do not fill expansion joints with setting material. EGP substrate is acceptable for dry, interior applications only. Floors must comply with TCNA instructions for Floors, Interior: Wood Subfloor.

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

♦**Mix:** AllSet dry powder should be added to clean, cool, potable water only at the rate of approximately 6 quarts per 50 lb. bag. Mix thoroughly until smooth and paste-like consistency is achieved and let mortar slake for 10 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.

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BONDED®

Pro Line AllSet

Premium Polymer-Modified Dry-Set Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** High Bond Strength * Use Interior or Exterior * No V.O.C. * Contributes to LEED®**

♦**Curing:** Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. Allow minimum of 24-48 hours before grouting or light traffic. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** AllSet must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Square feet per 50 lb. bag
45 - 50 sq. feet using a 1/2" x 1/2" square notched trowel
65 - 70 sq. feet using a 1/4" x 3/8" square notched trowel
90 - 100 sq. feet using a 1/4" x 1/4" square notched trowel

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. KEEP OUT OF REACH OF CHILDREN.

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AllSet Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	AllSet Values
*Open time @ 70°F -	12-15 Minutes
Adjustability @ 70°F -	15-20 Minutes
Bucket life @ 70°F -	8 Hours
Shear Bond ANSI A118.4 and ANSI A118.11	
Non-Vitreous Tile 28 Days	>600 psi (42 kg/cm2)
Vitreous Tile 28 Days	>400 psi (28 kg/cm2)
Non-Vitreous Tile (over plywood) as tested by the ANSI A118.11 standards 28 Days	>250 psi (18 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

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BONDED®

rev. Sep-12

Pro-Line Aqua Seal

Premium Waterproofing & Anti-Fracture Membrane

Packaging: Available in 1, 3.5, 5 Gal. Units

*** Waterproofing & Anti-Fracture**
*** Use Interior or Exterior**
*** No V.O.C.**
*** Contributes to LEED®**

♦Usage: Aqua Seal is a premium, ready to use anti-fracture and waterproofing membrane. Use for a variety of residential and commercial applications both interior and exterior. Aqua Seal can be used in showers (steam), shower pans, tub surrounds, pools, fountains, kitchens, countertops, and more. Floors exposed to heavy water usage, structures designed to hold water permanently and all floor penetrations where water leakage is a concern. Can also be used as a slab-on-grade moisture barrier under resilient flooring, for instructions for use as a slab-on-grade moisture barrier for resilient flooring installations refer to Technical Bulletin # 102. As an anti-fracture material, Aqua Seal can effectively reduce crack transmission in ceramic and stone flooring. **ANSI A118.10, A118.12**

Preparatory Work: All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) 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. Allow cement mortar beds to cure at least 72 hours before covering with Aqua Seal. All wet and/or exterior areas need to have proper sloping to drains. Allow newly prepared concrete a minimum cure of 28 days, finished with steel trowel and complete with fine broom finish.

♦Expansion Joints: Clean joint and install open or closed cell backer rod to proper depth, please refer to EJ171 in the T.C.N.A. Handbook for complete details

♦Pre-Treat Cracks, Cold Joints, Control Joints, and Seams: All substrate cracks, cold joints, control joints, and seams less than 1/8" apply a liberal coat of Aqua Seal approximately 6" wide over the crack, joint or seam making sure that the crack, joint or seam is completely filled with Aqua Seal membrane. Aqua Seal can be applied with a paint brush, paint roller or a 3/16" x 1/4 V-notch trowel. When the first coat has dried to a uniform darker blue color, apply a second liberal coat of Aqua Seal membrane.

♦Pre-Treat coves, corners and Wall/Floor Transitions 1/8": For all coves, corners and wall/floor transitions with a gap of 1/8" or less apply a liberal coat of Aqua Seal at coves, corners, seams, joints and changes in plane approximately 6”wide making sure that the cove, corner or wall/floor transition is completely filled with Aqua Seal. Then apply Aqua Seal with a paint brush, 3/8” paint roller, or a 3/16" x 1/4” V-notch trowel. When the first coat has dried to a uniform darker blue color, apply a second liberal coat of Aqua Seal. On coves, corners and wall/floor transitions greater than 1/8" reinforcing mesh can also be used. Fold 6" wide reinforcing mesh in half and imbed it into the membrane, flashing fabric 3" up walls. Apply second liberal coat of membrane to seal reinforcing mesh.

♦Pre-Treat drains: Drains must be of the clamping ring type, with weep holes. Apply a liberal coat of Aqua Seal around and over the bottom half of the drain-clamping ring, then embed 12” x 12” reinforcing mesh into Aqua Seal membrane, being careful not to cover drainage hole.. When first coat is dry to darker blue color, cover with a second liberal coat of membrane. Install top half of drain clamping ring. Use a silicone caulk around flange where Aqua Seal membrane and upper flange make contact.

♦Waterproofing Application: Allow any pre-treated areas to dry to the touch, then apply a liberal coat of Aqua Seal with brush or roller over substrate including pre-treated areas. Flash membrane up over pre-treated coves and corners, so such areas have two layers of membrane. Let dry to the touch, approximately 1–3 hours at 70°F (21°C) and 50% RH. Apply another liberal coat of Aqua Seal over entire surface to seal membrane. When last coat has dried to the touch, inspect final surface for pinholes, voids, thin spots or other defects. Use additional Aqua Seal to seal defects. Coves, corners, seams, and board joints must be pre-treated as described above. Wet coat thickness is 18-20mils (.018-.020") per coat, use wet film gauge to check thickness. Cured thickness 25-30mils (.025-.030”)

♦Anti-Fracture Application: For crack isolation up to 1/8” Aqua Seal membrane must be applied the width of the diagonal measurement of the tile being used on both sides of the crack. For best results cover entire area under tile being installed. All substrate cracks must be pretreated as described earlier. Wet coat thickness is 18-20mils (.018-.020") per coat, use wet film gauge to check thickness. Cured thickness 25-30mils (.025-.030”)

♦Flood Testing: Allow membrane to cure fully before flood testing, typically 24–48 hours at 70°F (21°C) or above and 50% RH. For temperatures between 45°F (7°C) to 69°F (21°C) allow 72 hours before flood testing. The time prior to flood testing begins when the membrane has dried to its darker blue color. Cold and/or wet conditions will require a longer curing time.

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Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

Pro Line Aqua Seal

Premium Waterproofing & Anti-Fracture Membrane

Packaging: Available in 1, 3.5, 5 Gal. Units

*** Waterproofing & Anti-Fracture * Use Interior or Exterior * No V.O.C. * Contributes to LEED®**

♦Plywood Substrates: For use over EGP (interior dry areas only). Verify that deflection under all live, dead and impact loads of interior plywood floors does not exceed industry standards of L/360 for ceramic tile and brick or L/480 for stone installations where L=span length.

♦Interior Change of Plane - Commercial Installation: Commercial applications of interior change of plane require reinforcing mesh.

♦Cleaning: Clean off any uncured Aqua Seal with clean water only.

♦Installation of Floor Covering: Once Aqua Seal has dried to the touch ceramic tile, stone or brick may be installed by the thin bed method using a Pro-Line Polymer Modified Setting Mortar. Allow Aqua Seal to cure 24 hours at 70°F (21°C) and 50% RH before covering with concrete, thick bed mortar, screeds, toppings, coatings, epoxy adhesives, or terrazzo. For moisture sensitive resilient or wood flooring see Technical Bulletin # 102. Do not use solvent-based or some types of water based adhesives directly on Aqua Seal.

♦Limitations: Do not apply Aqua Seal to wet surface or those surfaces subject to hydrostatic pressure. Do not use over dynamic expansion joints, structural cracks or cracks with vertical differential movement. Aqua Seal should not be used as an adhesive or as a wear surface. Aqua Seal must be covered with a protective surface such as tile. Not to be used as a vapor barrier or directly on exterior wood decks or balconies as waterproof membrane. Steam showers must have vapor barrier installed.

♦Protection: Aqua Seal must be protected from extreme temperatures (below 40ºF) during the first 72 hours after application.

♦Coverage: Waterproofing 60 sq.ft per Gallon
Anti-Fracture 100 sq.ft per Gallon

*Coverage's are for estimating proposes only. Actual jobsite coverage's may vary depending on substrate conditions.

♦Storage: One year if kept dry in sealed container.

♦Safety: May cause eye and skin irritation. Do not ingest. In case of contact, flush eyes with clean water for 10 - 15 minutes. If irritation does not stop, please contact a physician. Avoid contact with skin where possible and wash exposed areas promptly with soap and water. KEEP OUT OF REACH OF CHILDREN.

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Aqua Seal Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	Aqua Seal Values
Initial Set @ 70°F -	1-2 Hours
Bucket life @ 70°F -	Indefinite
Seam Strength ANSI 118.10	18 lbs per inch
Breaking Strength ANSI 118.10	480 psi (34 kg/cm2)
Dimensional Stability ANSI 118.10	0.07%
Shear Strength 12 Day Dry Cure ANSI 118.10 100 Day Water Immersion ANSI 118.10	260 psi (18 kg/cm2) 85psi (6 kg/cm2)
Elongation 12 Day Dry Cure ASTM D-638 7 Day Dry Cure/21 Day Wet Cure ASTM D-638	550% 650%

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BONDED®

rev Sep-12

Pro-Line Brilliance Caulk

Sanded and Smooth

Packaging: Available in 10.3 oz cartridges

*** 30 Colors-Sanded or Smooth**
*** Siliconized Acrylic Latex Sanded Caulk**
*** Mildew Resistant**
*** Easy Clean up**

♦USAGE: Brilliance Caulk is an exceptional; one part siliconized acrylic latex caulk designed for the professional and homeowner alike. This easy to use product forms a long lasting, flexible, water tight seal that will resist mold, mildew and cracking on most building materials. True to its name, Brilliance Caulk is available in a myriad of colors to match every major grout manufacturers color available on the market today and in the future. With two textures – sanded and smooth – Brilliance Caulk blends in uncommonly well with any application.

♦BASIC USE: For caulking around sinks, tubs, showers, counter tops, baseboards, windows / glass block and door frames. For use where tile meets tile or dissimilar surfaces such as where countertops meet backsplashes or floors meet the walls. Exceptional adhesive for ceramic tile, glass, stone, wood and marble vanity tops to their bases. To restore cracked or worn grout joints.

♦SURFACE PREPARATION: Surfaces must be structurally sound, stable, clean and free from dust, oil, grease, paint, gypsum patch, flooring adhesive, tar, wax, sealers, curing agents and foreign substances that can reduce or impair adhesion. By mechanical means, remove all traces of paint, loose particles, residue, and cement particles. Vacuum out joints and wipe them clean with a damp rag.

♦APPLICATION: Rubber gloves and proper eye wear are recommended. Do not open cartridges until preparatory work has been completed. Insert cartridge into caulking gun, cut plastic nozzle according to the size of the joint or area of application. Apply Brilliance Caulk in a smooth continuous bead and force into joint or area of application. Maximum joint width and depth should not exceed 1/4". To achieve a smooth and uniform appearance use a sealant spatula or dampened putty knife. Wipe away any excess caulk with a damp sponge immediately before it cures. Exact match to Portland cement grouts may vary due to differences in manufacturing and the nature of Portland cement. Initial cure is reached in 48 to 72 hours depending on temperature and humidity**.** Wait a minimum of 7 days before exposing to intermittent water.

♦CLEAN UP: Clean hands and tools with soap and water**.** Clean up any misapplied sealant with a damp cloth or sponge. Dispose of empty cartridges and saturated sponges according to state and local regulations. Unused portion of Brilliance Caulk should be capped and stored in a cool dry place.

♦APPLICABLE STANDARDS: Conforms to the requirements for elastic joint sealants, ASTM C834. When used in a Tile installation, follow EJ 171 in the TCA handbook for treatment of Construction, Expansion, Control and Isolation joints.

♦TECHNICAL DATA

Base	Siliconized, water based elastomeric acrylic
Colors	23
Application Temp	40º F to 100º F (4º C to 30º C)
Open time	10 to 20 minutes
Set Time	48 hours
Full cure	14 days
Mildew resistant	Good
Shelf life	1 year

♦APPROXIMATE COVERAGE:
1/16 X 1/16 (joint) 48 linear feet (per 10.3 oz cartridge)
1/8 X 1/8 (joint) 25 linear feet (per 10.3 ox cartridge)
3/16 X 3/16 (joint) 17 linear feet (per 10.3 oz cartridge)
1/4 X 1/4 (joint) 13 linear feet (per 10.3 oz cartridge)
NOTE: Coverage's shown are given for estimating purposes only. Actual job-site coverage's may vary depending on the joint size and application procedures.

CAUTION: KEEP OUT OF REACH OF CHILDREN.
IF INGESTED: Seek medical attention.
EYE & SKIN CONTACT: Flush thoroughly with water. If irritation occurs, seek medical attention.

♦LIMITATIONS: Not recommended for constant water exposure. Do not apply when temperatures fall below 40º F (4º C). KEEP FROM FREEZING. May stain porous surfaces such as walls. Masking or shielding of these areas might be necessary. Test in an inconspicuous area if staining is a concern. Maximum joint width and depth should not exceed ¼". Exact match to Portland cement grouts may vary due to differences in manufacturing and the nature of Portland cement.

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rev. Sep-12

Pro-Line Brilliance NS Grout

Premium Non-Sanded Grout up to 1/8”

Packaging: Available in 10 lb. pails

*** 30 Colors**
*** Premium Polymer Portland Cement NS Grout**
*** Anti-Microbial-Resists Mold & Mildew**
*** Contributes to LEED®**

Usage: Brilliance Non-Sanded Grout is a premium one-part, polymer modified Portland cement grout that delivers unmatched performance. No additives are required, just mix with water. Brilliance Non-Sanded Grout offers colorfast pigments blended with high quality latex modifiers, antimicrobial additives, and efflorescence reducers. Brilliance Non-Sanded grout provides superior flexural and bond strength, high compressive strength, excellent color control with minimal efflorescence. Acceptable for joints up to 1/8” in width. Ideal for both residential and commercial applications and designed to withstand the most demanding installations.
ANSI A108.1, A108.4, A108.5, A108.7, A108.10, A118.6, and A118.7

Packaging: Available in 10 lb. pails, please refer to Color Chart for available colors.

Preparatory Work: All debris should be removed from grout joints prior to installation, including excess setting material. This should allow a minimum of 2/3 of the joint to be free and open for grouting material. Dampen all joints and wet the surface prior to placing grout. Joints and surface of tile should be in saturated dry condition with no standing water present. Do not apply grouting material to expansion joints. Ensure a uniform width and depth of all joints.

♦Expansion Joints: Expansion joints shall be installed in accordance with local building codes. See EJ171 in T.C.N.A. handbook for details. Areas where there are expansion joints, control joints and cold joints should never be filled with grouting material.

Mix: Add Brilliance Non-Sanded Grout powder to clean, cool water at an approximate rate of 1 quart per 10 lb. pail. Mix thoroughly until smooth, adjusting consistency with small amounts of water if necessary and let grout slake for 10 minutes, then remix by hand or with a low RPM drill (300rpm or less) so as not to entrap air. Do not add additional water or powder after slaking period. The proper consistency is a soft, paste-like mortar. Do not use grout after initial set in bucket. During use, remix grout occasionally.

Application: Fill joints with grout until flush with surface of tile. Use a hard rubber float to spread grout at a 45˚ angle, this will both fill and compact the joints. Use the same procedure throughout application to achieve a consistent result. Remove excess grout with hard rubber float held at 45˚ angle to assist with cleaning.

Cleaning: Allow grout to achieve initial set before cleaning procedures begin. Once grout has reached initial set and can be indented slightly when pressed, use barely damp sponge or cheesecloth with clean, potable water to clean surface of tile, using a circular motion. Use a minimal amount of water in this process as too much moisture and aggressive scrubbing can negatively affect grout color intensity and consistency. Use a clean, damp towel to buff surface of tile once cleaning has been completed to remove any residual grout.

♦Sealing/Staining: Sealers, waxes, and stains may be used to further enhance the grout by offering richer colors and future prevention of unwanted stains. A period of at least 30 days and complete satisfaction of grout conditions should be allowed before these products are applied. Some sealers may have adverse effects on grout joints, such as softening or discoloration. Try a small test area to be sure.

Caution: Allow a minimum of 10 days before using any chemical cleaners on grout joints. To remove any remaining grout at this point, use a mixture of hot water and TSP (trisodium phosphate). It is not recommended that acid solutions be used. If an acid solution must be used, do not exceed the following ratio:

Pro-Line by Bonded®	AllClean		Water
	2 pounds	to	5 gallons

Be sure to saturate the surface of the tile with cool, clean water prior to cleaning with an acid solution and rinse thoroughly once finished with cool, clean water. Test the solution in a small area prior to cleaning large areas to check for grout discoloration. Do not under any circumstances use an acid solution wash to clean the following grout colors: Indigo #43

♦ Bonded Materials Company ♦
4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com
rev. Sep-12

Pro-Line Brilliance Grout

Premium Non-Sanded Grout up to 1/8”

Packaging: Available in 10 lb. pails

*** 23 Colors * Premium Polymer Portland Cement Grout * Anti-Microbial-Resists Mold & Mildew * Contributes to LEED®**

♦**Curing:** Protect grout from drying out too fast during hot weather conditions. Cover the installation with Kraft paper to slow cure and protect from other trades. Protect Surface from heavy traffic for 72 hours. Protect from freezing for 5-7 days

♦**Limitations:** When used in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure. Pro-Line Brilliance is not affected by prolonged contact with water, but does not necessarily form a waterproof barrier. Chemicals used in the treatment of pools, hot tubs, and ponds can affect cement based grouts over time. Efflorescence is inherent in all Portland Cement based products and is not considered a manufacturing defect.

♦**Coverage as Grout:** per 10 lb. pail

1 x 1 x 1/4 tile at 1/8” joint = 30 sq ft
2 x 2 x 1/4 tile at 1/8” joint = 60 sq ft
4 x 4 x 1/4 tile at 1/8” joint = 120 sq ft
6 x 6 x 1/4 tile at 1/8” joint = 180 sq ft
8 x 8 x 3/8 tile at 1/8” joint = 150 sq ft
10 x 10 x 3/8 tile at 1/8” joint = 180 sq ft
12 x 12 x 3/8 tile at 1/8” joint = 220 sq ft
16 x 16 x 3/8 tile at 1/8” joint = 300 sq ft

*Coverage amounts will vary depending on depth of joint

♦**Storage:** One year if kept dry in sealed containers.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. If any mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed mortar may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

Pro-Line Brilliance Grout Technical Data (based on 70°F [21°C] and 50% relative humidity)

Meets or Exceeds ANSI A118.6		**Values**
Initial Set @ 70°F -		2-3 Hours
Final Set		6-8 Hours
Bucket life @ 70°F -		1-2 Hours
Water Absorption		<5%
Compressive Strength ASTM C-109		>3300 psi (232 kg/cm2)
Shrinkage	7 Days	<0.10%
Tensile Strength	28 Days	>500 psi (35 kg/cm2)
Flexural Strength	7 Days	>470 psi (33 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

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4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
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rev. Sep-12

Pro-Line Brilliance Paver Grout

Premium Sanded Grout 1/2" – 1"

Packaging: Available in 50 lb. bags

*** 35 Colors**
*** Portland Cement Grout for widths up to 1"**
*** High strength and low shrinkage**
*** Contributes to LEED®**

Usage: Brilliance Paver Grout is a premium one-part, Portland cement grout that delivers unmatched performance. Brilliance Paver Grout is a specially designed, high performance colored grout to be used with quarry, slate, pavers, brick, and cement tiles for both interior and exterior use. Only the addition of water is required to produce a dense smooth grout. Pro-Line ProCrylic can be used in place of water to intensify its bond and flexural strength for installations subjected to thermal shock and when grouting tiles for exterior installations. Acceptable for joints up to 1", ideal for both residential and commercial applications and is designed to withstand the most demanding installations.
ANSI A108.1, A108.4, A108.5, A108.7, A108.10, A118.6

Packaging: Available in 50 lb. bags, please refer to Color Chart for available colors.

Preparatory Work: All debris should be removed from grout joints prior to installation, including excess setting material. This should allow a minimum of 2/3 of the joint to be free and open for grouting material. Dampen all joints and wet the surface prior to placing grout. Joints and surface of tile should be in saturated dry condition with no standing water present. Do not apply grouting material to expansion joints. Ensure a uniform width and depth of all joints.

♦Expansion Joints: Expansion joints shall be installed in accordance with local building codes. See EJ171 in T.C.N.A. handbook for details. Areas where there are expansion joints, control joints and cold joints should never be filled with grouting material.

Mix: Add Brilliance Paver Grout powder to clean, cool water at an approximate rate of 3-4 quarts per 50 lb. bag. Mix thoroughly until smooth, adjusting consistency with small amounts of water if necessary and let grout slake for 10 minutes, then remix by hand or with a low RPM drill (300rpm or less) so as not to entrap air. Do not add additional water or powder after slaking period. The proper consistency is a soft, paste-like mortar. Do not use grout after initial set in bucket. During use, remix grout occasionally.

***Caution:** When using contrasting colors to the tile a grout release agent may be necessary as unglazed pavers are very porous. Follow grout release manufacturer's directions for application and removal.
***Note:** Efflorescence is inherent in all Portland Cement based products and is not considered a manufacturing defect.

Application: Fill joints with grout until flush with surface of tile. Use a hard rubber float to spread grout at a 45˚ angle, this will both fill and compact the joints. Use the same procedure throughout application to achieve a consistent result. Remove excess grout with hard rubber float held at 45˚ angle to assist with cleaning.

Cleaning: Allow grout to achieve initial set before cleaning procedures begin. Once grout has reached initial set and can be indented slightly when pressed, use barely damp sponge or cheesecloth with clean, potable water to clean surface of tile, using a circular motion. Use a minimal amount of water in this process as too much moisture and aggressive scrubbing can negatively affect grout color intensity and consistency. Use a clean, damp towel to buff surface of tile once cleaning has been completed to remove any residual grout.

♦Sealing/Staining: Sealers, waxes, and stains maybe used to further enhance the grout by offering richer colors and future prevention of unwanted stains. A period of at least 30 days and complete satisfaction of grout conditions should be allowed before these products are applied. Some sealers may have adverse effects on grout joints, such as softening or discoloration. Try a small test area to be sure.

Caution: Allow a minimum of 10 days before using any chemical cleaners on grout joints. To remove any remaining grout at this point, use a mixture of hot water and TSP (trisodium phosphate). It is not recommended that acid solutions be used. If an acid solution must be used, do not exceed the following ratio:

	AllClean		Water
Pro-Line by Bonded®	2 pounds	to	5 gallons

Be sure to saturate the surface of the tile with cool, clean water prior to cleaning with an acid solution and rinse thoroughly once finished with cool, clean water. Test the solution in a small area prior to cleaning large areas to check for grout discoloration.

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Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

Pro-Line Brilliance Paver Grout

Premium Sanded Grout 1/2” – 1”

Packaging: Available in 50 lb. bags

*** 16 Colors * Portland Cement Grout for widths up to 1” * High strength and low shrinkage * Contributes to LEED®**

♦**Curing:** Protect grout from drying out too fast during hot weather conditions. Cover the installation with Kraft paper to slow cure and protect from other trades. Protect surface from heavy traffic for 72 hours. Protect from freezing for 5-7 days

♦**Limitations:** When used in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure. Pro-Line Brilliance is not affected by prolonged contact with water, but does not necessarily form a waterproof barrier. Chemicals used in the treatment of pools, hot tubs, and ponds can affect cement based grouts over time. Efflorescence is inherent in all Portland Cement based products and is not considered a manufacturing defect.

♦**Coverage as Grout:** per 50 lb. bag

12 x 12 x 1/2” tile at 1/2” joint = 75 sq ft

*Coverage amounts will vary depending on depth of joint

♦**Storage:** One year if kept dry in sealed containers.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. If any mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed mortar may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. KEEP OUT OF REACH OF CHILDREN.

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Pro-Line Brilliance Paver Grout Technical Data (based on 70°F [21°C] and 50% relative humidity)	
Meets or Exceeds ANSI A118.6	**Values**
Initial Set @ 70°F -	2-3 Hours
Final Set	4-6 Hours
Bucket life @ 70°F -	1-2 Hours
Water Absorption	<6%
Compressive Strength ASTM C-109	>3800 psi (267 kg/cm2)

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Pro-Line Brilliance Grout

Premium Sanded Grout 1/8" – 1/2"

Packaging: Available in 25 lb. bags

*** 30 Colors**
*** Premium Polymer Portland Cement Grout**
*** Anti-Microbial-Resists Mold & Mildew**
*** Contributes to LEED®**

Usage: Brilliance Sanded Grout is a premium one-part, polymer modified Portland cement grout that delivers unmatched performance. No additives are required, just mix with water. Brilliance Sanded Grout offers colorfast pigments blended with high quality latex modifiers, antimicrobial additives, and efflorescence reducers. Brilliance sanded grout provides superior flexural and bond strength, high compressive strength, excellent color control with minimal efflorescence. Acceptable for joints 1/8" up to 1/2", Ideal for both residential and commercial applications and designed to withstand the most demanding installations.
ANSI A108.1, A108.4, A108.5, A108.7, A108.10, A118.6, and A118.7

Packaging: Available in 25 lb. bags, please refer to Color Chart for available colors.

Preparatory Work: All debris should be removed from grout joints prior to installation, including excess setting material. This should allow a minimum of 2/3 of the joint to be free and open for grouting material. Dampen all joints and wet the surface prior to placing grout. Joints and surface of tile should be in saturated dry condition with no standing water present. Do not apply grouting material to expansion joints. Ensure a uniform width and depth of all joints.

♦Expansion Joints: Expansion joints shall be installed in accordance with local building codes. See EJ171 in T.C.N.A. handbook for details. Areas where there are expansion joints, control joints and cold joints should never be filled with grouting material.

Mix: Add Brilliance Sanded Grout powder to clean, cool water at an approximate rate of 2-3 quarts per 25 lb. bag. Mix thoroughly until smooth, adjusting consistency with small amounts of water if necessary and let grout slake for 10 minutes, then remix by hand or with a low RPM drill (300rpm or less) so as not to entrap air. Do not add additional water or powder after slaking period. The proper consistency is a soft, paste-like mortar. Do not use grout after initial set in bucket. During use, remix grout occasionally.

Application: Fill joints with grout until flush with surface of tile. Use a hard rubber float to spread grout at a 45˚ angle, this will both fill and compact the joints. Use the same procedure throughout application to achieve a consistent result. Remove excess grout with hard rubber float held at 45˚ angle to assist with cleaning.

Cleaning: Allow grout to achieve initial set before cleaning procedures begin. Once grout has reached initial set and can be indented slightly when pressed, use barely damp sponge or cheesecloth with clean, potable water to clean surface of tile, using a circular motion. Use a minimal amount of water in this process as too much moisture and aggressive scrubbing can negatively affect grout color intensity and consistency. Use a clean, damp towel to buff surface of tile once cleaning has been completed to remove any residual grout.

♦Sealing/Staining: Sealers, waxes, and stains maybe used to further enhance the grout by offering richer colors and future prevention of unwanted stains. A period of at least 30 days and complete satisfaction of grout conditions should be allowed before these products are applied. Some sealers may have adverse effects on grout joints, such as softening or discoloration. Try a small test area to be sure.

Caution: Allow a minimum of 10 days before using any chemical cleaners on grout joints. To remove any remaining grout at this point, use a mixture of hot water and TSP (trisodium phosphate). It is not recommended that acid solutions be used. If an acid solution must be used, do not exceed the following ratio:

Pro-Line by Bonded®	AllClean		Water
	2 pounds	to	5 gallons

Be sure to saturate the surface of the tile with cool, clean water prior to cleaning with an acid solution and rinse thoroughly once finished with cool, clean water. Test the solution in a small area prior to cleaning large areas to check for grout discoloration. Do not under any circumstances use an acid solution wash to clean the following grout colors: Indigo #43

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4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com
rev. Sep-12

Pro-Line Brilliance Grout

Premium Sanded Grout 1/8” – 1/2”

Packaging: Available in 25 lb. bags

*** 30 Colors * Premium Polymer Portland Cement Grout * Anti-Microbial-Resists Mold & Mildew * Contributes to LEED®**

♦**Curing:** Protect grout from drying out too fast during hot weather conditions. Cover the installation with Kraft paper to slow cure and protect from other trades. Protect Surface from heavy traffic for 72 hours. Protect from freezing for 5-7 days

♦**Limitations:** When used in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure. Pro-Line Brilliance is not affected by prolonged contact with water, but does not necessarily form a waterproof barrier. Chemicals used in the treatment of pools, hot tubs, and ponds can affect cement based grouts over time. Efflorescence is inherent in all Portland Cement based products and is not considered a manufacturing defect.

♦**Coverage as Grout:** per 25 lb. bag

1 x 1 x 1/8” tile at 1/8” joint = 110 sq ft
2 x 2 x 1/8” tile at 1/8” joint = 220 sq ft
4 x 4 x 1/4” tile at 1/4” joint = 100 sq ft
6 x 6 x 1/4” tile at 1/4” joint = 150 sq ft
8 x 8 x 3/8” tile at 1/4” joint = 125 sq ft
10 x 10 x 3/8” tile at 1/4” joint = 160 sq ft
12 x 12 x 3/8” tile at 1/4” joint = 200 sq ft
16 x 16 x 3/8” tile at 1/4” joint = 275 sq ft

*Coverage amounts will vary depending on depth of joint

♦**Storage:** One year if kept dry in sealed containers.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. If any mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed mortar may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

Pro-Line Brilliance Grout Technical Data (based on 70°F [21°C] and 50% relative humidity)	
Meets or Exceeds ANSI A118.6 and A118.7	**Values**
Initial Set @ 70°F -	2-3 Hours
Final Set	6-8 Hours
Bucket life @ 70°F -	1-2 Hours
Water Absorption	<4%
Compressive Strength ASTM C-109	>4500 psi (316 kg/cm2)
Linear Shrinkage 7 Days	<0.0650%
Tensile Strength 28 Days	>500 psi (35 kg/cm2)
Flexural Strength	>1250 psi (88 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

Pro-Line by BONDED®

. 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.

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BONDED®

rev. Sep-12

Pro-Line Brilliance Grout Stain

Durable Urethane Acrylic Formula

Packaging: 30 Colors Available in 8 oz. bottles

*** Durable Urethane Acrylic Formula**
*** Seals and Protects**
*** Rejuvenates old grout**

♦**USAGE:** Brilliance Grout Stain is a user friendly, low cost way to give tiles a new look without replacing the tile or re-grouting. With it's easy to use urethane acrylic formula a long lasting stain is attained to rejuvenate and seal sanded and non sanded grout joints. Brilliance Grout Stain provides a "natural" uniform color that is highly resistant to wear, sunlight, water and extreme temperatures. Change or renew the color of grout. Seals and protects grout from stains* and moisture. Extremely durable, with expected wear of up to 15 years. Water based, applies and cleans easily. Use interior or exterior.

♦**SURFACE PREPARATION:** Grout joint must be tested for previously applied sealers by applying a few drops of water to the joint. If water beads, a sealer is present and must be removed before application.
(Contact Sealer Mfg. for correct sealer remover.)
Existing grout joints must be clean, dry and free of dirt and grease. Any neutral based cleaner will work to achieve this (scrub brush may be necessary). To ensure desired results a small test area is advised, follow installation instructions and allow a minimum 2 hours cure time. The stain should be easily removed from the tile, but bonded permanently to the grout joint. If stain is easily removed from the grout joint, allow longer curing time.

♦**APPLICATION:** • Rubber gloves and proper eye wear are recommended. Finish preparatory work before opening container. SHAKE WELL BEFORE USING! Allow at least 7 days curing time for new grout installations before staining. If more than 1 bottle of a single color is to be used, mix the material together in a large container to ensure uniformity in color. Then pour a small amount into a dish or container. Using a bristle or sponge brush, dip into stain and apply coats to the grout using a back and forth motion. Thin, even coats should be applied, limiting the amount of stain that gets on the tile.

Allow stain to dry at least 20 minutes, but not more than 30 minutes (time will vary depending on ambient temperature). After Brilliance Grout Stain has dried on the joint, dampen the area with water and let stand 5 minutes before removing excess grout stain from the surface of the tile using a white nylon scrub pad. (It is recommended to start out by staining only 4 to 6 sq. ft. at a time to get a feel for the stain.) If you are going from a dark to a lighter color, 2 or more applications (coats) of stain may be necessary. Follow the above instructions but, allow a minimum of 2 hours drying time between coats.
Ready for surface traffic in 24 hours. Keep area dry for at least 48 hours. Avoid direct scrubbing on grout joints for 20 days to allow stain to reach maximum durability.

♦**NOTE**: use caution when cleaning tiles that may scratch or become damaged from scrubbing. Test for potential tile damage in an inconspicuous area prior to use.

♦**CLEAN UP:** Clean applicator tools with water after each use. Dispose of empty bottles according to state and local regulations. Unused portion of Brilliance Grout Stain should be capped and stored in a cool dry place.

♦**ROUTINE MAINTENANCE:** For routine cleaning of grout, use neutral based cleaners.

♦**APPROXIMATE COVERAGE:** 16 oz. Bottle
4" X 4" tile ¼" joint 70 square feet
12" X 12" tile ¼" joint 125 square feet
18" X 18" tile ¼" joint 165 square feet
•**NOTE:** Coverage's shown are given for estimating purposes only. Actual job-site coverage's may vary depending on the joint size and application procedures.

♦**CAUTION:** KEEP OUT OF REACH OF CHILDREN
IF INGESTED: Seek medical attention.
EYE & SKIN CONTACT: Flush thoroughly with water. If irritation occurs, seek medical attention.

♦ **LIMITATIONS:** Not recommended for use under water. Use in temperatures between 45º F and 90º F (4º C and 30º C). Porous tiles may require sealing to ensure that the stain is not absorbed into the tile. Do not use solvent based cleaners to clean stained grout joints. In exterior applications, fading may occur. Exact match to Portland cement grouts may vary due to differences in manufacturing and the nature of Portland cement. Keep from freezing.
* Contact Bonded for stain resistance test results.

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Pro-Line by BONDED

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If an installation or materials should be changed outside the detailed instructions, please contact our technical support dept .for assistance.

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BONDED

rev. Sep-12

Pro-Line Deck Mud

Portland Cement Mortar Bed 1¼”-2”

Packaging: Available in 75 lb. bags -Gray

*** Traditional Floor Mud**
*** Use Interior or Exterior**
*** No V.O.C.**
*** Contributes to LEED®**

♦**Usage:** Deck Mud is designed for both interior and exterior use for direct bond to concrete slabs; or to be used with cleavage or waterproof membranes and reinforced with coated wire mesh or galvanized, treated metal lath. Deck Mud is not affected by prolonged contact with water. Use in areas with depressed slabs or use to plumb and square surfaces installed by other trades. Deck Mud used in conjunction with a membrane can eliminate the damaging effects of hydrostatic pressure for on grade slabs. Creates a dense substrate on which to apply ceramic tile or stone. **ANSI A108.1A**

♦**Suitable Substrates**: Masonry, concrete, wood floors, countertops: or used over cleavage or waterproof membranes and reinforced with wire mesh or metal lath. Used for both interior and exterior applications.

♦**Preparatory Work:** All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.1, A108.4, A108.5, A108.6. 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.

♦**Application:** Cementitious substrates surfaces must be clean of any foreign materials before covering. Saturate clean, smooth concrete surface with water immediately prior to placing Deck Mud. The surface shall be free of standing water. Before placing the Deck Mud, spread a thin continuous layer of pure Portland cement paste on the surface or dust a thin layer of dry Portland cement on the concrete and wet it. Broom the pure Portland cement slurry or the wetted Portland cement dust to completely coat the surface with a thin uniform coating. Immediately apply Deck Mud over the pure cement coating. Firmly tamp and screed the Deck Mud. The thickness should be a minimum of 1 1/4 inch.

♦**Showers:** A minimum of 1 1/4 inch thick Deck Mud is required for shower receptors. Showers require a suitable waterproof membrane and reinforcement. Consult local building codes, ordinances and trade practices.

♦**Plywood Substrates:** For wood floors and counter tops, place a cleavage membrane such as 15 lb. roofing felt, or 4 mil Polyethylene film. Reinforce with metal lath. Place reinforcing and Deck Mud over the membrane, lap reinforcing at least one full mesh and support so that reinforcing shall be approximately in the middle of the Deck Mud. Reinforcing shall not butt against vertical surfaces. Tamp firmly and screed the Deck Mud level with proper slope to drain. Deck Mud shall be 1 1/4 inch thick nominal.

♦**Mix:** Deck Mud should be mixed in a clean mortar box using clean, cool, potable water or Pro-Line ProCrylic at the appropriate rate of 1 1/2-1 3/4 gallons of water per 75 lb. bag. Smaller amounts may be mixed in a 5 gallon pail using an electric drill at a low RPM (300 or less). Use of Acrylic admixture increases bond strength and hardness and is recommended for demanding applications including exterior applications.
*Note: Shrinkage can happen causing cracks in tile or stone if installed on mortar bed in less than 72 hours.

♦**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.

♦**Curing:** Under normal job conditions 24 hours at 70°F (21°C), but longer mortar bed cures up to 10 days are desirable.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** Deck Mud must not be applied over unsound structures. Some above grade, metal studs, and wooden structures may require additional structural support prior to placement due to the weight of this product. Consult an architect or structural engineer for these cases. This product is not affected by prolonged water contact but it does not form a water-proof barrier.

♦ Bonded Materials Company ♦
4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

Pro Line Deck Mud

Portland Cement Mortar Bed 1¼”-2”

Packaging: Available in 75 lb. bags Gray

*** Traditional Floor Mud * Use Interior or Exterior * No V.O.C. * Contributes to LEED®**

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Approximately 7.5 square feet per 75 lb. bag at 1-1/4” thickness.

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

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Data Sheets are subject to change without notice. For latest revision, check our website at www.bondedmaterials.com..
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BONDED®

rev. Sep-12

Pro-Line FloorSet Modified

Polymer-Modified Dry-Set Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** Polymer Modified**
*** Use Interior or Exterior**
*** No V.O.C.**
*** Contributes to LEED®**

♦Usage: FloorSet Modified is an economical polymer-modified dry-set mortar designed for the bonding of all types of tiles. It may be used for either walls or floors and is perfect for both interior and exterior applications. FloorSet Modified is a blend of Portland cement, sand and special dry latex additives that significantly improve bond strength and freeze-thaw stability performance characteristics. **ANSI A118.1, A118.4, A108.5**

♦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 FloorSet Modified can be used over drywall (vertical only). With the addition of Pro-Line Pro Latex liquid additive FloorSet Modified will also bond to EGP (interior only) and meet **ANSI A118.11**.

♦Preparatory Work: All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦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.

♦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.

♦Plywood Substrates: With the addition of Pro-Line Pro Latex liquid additive FloorSet Modified will also bond to EGP wood flooring (interior only) when placed on top of conventional floor joist or other system, should maintain a substrate deflection not to exceed L/360th of span and L/720th of span for natural stone and that includes both live and dead loads. A gap of 3/16" must be left between sheets of EGP and all materials they abut to allow for expansion. Do not fill expansion joints with setting material. EGP substrate is acceptable for dry, interior applications only. Floors must comply with TCNA instructions for Floors, Interior: Wood Subfloor.

♦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. Must use ProLatex additive in place of water.

♦Mix: FloorSet Modified dry powder should be added to clean, cool, potable water only at the rate of approximately 6 quarts per 50 lb. bag. Mix thoroughly until smooth and paste-like consistency is achieved and let mortar slake for 10 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.

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Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

rev. Sep-12

Pro Line FloorSet Modified

Polymer-Modified Dry-Set Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** Polymer Modified * Use Interior or Exterior * No V.O.C. * Contributes to LEED®**

♦**Curing:** Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. Allow minimum of 24-48 hours before grouting or light traffic. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** FloorSet Modified must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Square feet per 50 lb. bag
45 - 50 sq. feet using a 1/2" x 1/2" square notched trowel
65 - 70 sq. feet using a 1/4" x 3/8" square notched trowel
90 - 100 sq. feet using a 1/4" x 1/4" square notched trowel

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

FloorSet Modified Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	FloorSet Modified Values
*Open time @ 70°F -	12-15 Minutes
Adjustability @ 70°F -	12-15 Minutes
Bucket life @ 70°F -	8 Hours
Shear Bond ANSI A118.4	
Non-Vitreous Tile 28 Days	>500 psi (35 kg/cm2)
Vitreous Tile 28 Days	>300 psi (21 kg/cm2)
Non-Vitreous Tile (over plywood) as tested by the ANSI A118.11 standards 28 Days *When used w/Pro Latex Additive	>250 psi (18 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

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BONDED®

rev. Sep-12

Pro-Line FloorSet RS

Portland Cement Rapid Set Mortar

Packaging: Available in 25 lb. bags. Gray/White

*** Grout in 2-3 hours**
*** Use Interior or Exterior**
*** No V.O.C.**
*** Contributes to LEED®**

♦Usage: FloorSet RS allows you to set tile and grout in 2-3 hours and then open to light foot traffic within the same day. FloorSet RS is a rapid setting mortar with good bonding ability for basic tile setting jobs. FloorSet RS is designed for both interior and exterior use. Approved for walls, floors, and countertops. FloorSet RS can be used to set absorptive, semi-vitreous ceramic and Saltillo clay tiles. **ANSI A118.1, A108.5.** With the addition of Pro-Line ProLatex liquid additive FloorSet RS meets **ANSI A118.4**

♦Suitable Substrates: Properly prepared plumb and true masonry, concrete, cementitious backer units, cured Portland cement mortar beds, brick, and water-resistant wall board. For interior, dry applications FloorSet can be used over drywall (vertical only).

♦Preparatory Work: All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦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.

♦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 wood, plywood, 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: With the addition of Pro-Line ProLatex liquid additive FloorSet RS can be used over tile or stone. 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: FloorSet RS dry powder should be added to clean, cool, potable water or ProLatex liquid additive at the rate of approximately 3 quarts per 25 lb. bag. Mix thoroughly until smooth and paste-like consistency is achieved. Do not mix more mortar than can be used in 30 minutes. 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 slake, spread immediately. Do not add water or additional powder after mixing. 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 10 minutes.

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BONDED®

rev. Sep-12

Pro-Line FloorSet RS

Portland Cement Rapid Set Mortar

Packaging: Available in 25 lb. bags. Gray/White

*** Grout in 2-3 hours * Use Interior or Exterior * No V.O.C. * Contributes to LEED®**

♦Curing: Protect floor from traffic for 2-3 hours before grouting depending on ambient temperatures. Allow minimum of 6 hours before light traffic. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦Cleaning: Clean off any uncured mortar with clean water only.

♦Limitations: FloorSet RS must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦Protection: Protect from freezing for 5-7 days

♦Coverage: Square feet per 25 lb. bag
20 - 25 sq. feet using a 1/2" x 1/2" square notched trowel
30 - 35 sq. feet using a 1/4" x 3/8" square notched trowel
40 - 45 sq. feet using a 1/4" x 1/4" square notched trowel

♦Storage: One year if kept dry in sealed bags.

♦Safety: May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

FloorSet RS Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test		FloorSet RS Values
*Open time @ 70°F -		10-20 Minutes
Adjustability @ 70°F -		10 Minutes
Bucket life @ 70°F -		30-45 Minutes
Shear Bond ANSI A118.1		
Non-Vitreous Tile	28 Days	>450 psi (32 kg/cm2)
Vitreous Tile	28 Days	>300 psi (21 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

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rev. Sep-12

Pro-Line FloorSet

Portland Cement Dry-Set Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** Use for Basic Tile Setting Jobs**
*** Use Interior or Exterior**
*** No V.O.C.**
*** Contributes to LEED®**

♦Usage: FloorSet is a dry-set mortar with good bonding ability for basic tile setting jobs. FloorSet is designed for both interior and exterior use. Approved for walls, floors, and countertops. FloorSet can be used to set absorptive, semi-vitreous ceramic and Saltillo clay tiles. Meets **ANSI A118.1, A108.5,** with the addition of Pro-Line ProLatex liquid additive FloorSet meets **ANSI A118.4, ANSI A118.11**

♦Suitable Substrates: Properly prepared plumb and true masonry, concrete, cementitious backer units, cured Portland cement mortar beds, brick, and water-resistant wall board. For interior, dry applications FloorSet can be used over drywall (vertical only).

♦Preparatory Work: All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦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.

♦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 wood, plywood, 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: With the addition of Pro-Line ProLatex liquid additive FloorSet can be used over tile or stone. 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: FloorSet dry powder should be added to clean, cool, potable water or Pro-Line ProLatex liquid additive at the rate of approximately 5 quarts per 50 lb. bag. Mix thoroughly until smooth and paste-like consistency is achieved and let mortar slake for 10 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 15 minutes.

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rev. Sep-12

Pro-Line FloorSet

Portland Cement Dry-Set Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** Use for Basic Tile Setting Jobs * Use Interior or Exterior * No V.O.C. * Contributes to LEED®**

♦**Curing:** Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. Allow minimum of 24-48 hours before grouting or light traffic. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** FloorSet must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Square feet per 50 lb. bag
45 - 50 sq. feet using a 1/2" x 1/2" square notched trowel
60 - 70 sq. feet using a 1/4" x 3/8" square notched trowel
80 - 90 sq. feet using a 1/4" x 1/4" square notched trowel

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

FloorSet Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test		FloorSet Values
*Open time @ 70°F -		8 Minutes
Adjustability @ 70°F -		10-12 Minutes
Bucket life @ 70°F -		4 Hours
Shear Bond ANSI A118.1		
Non-Vitreous Tile	28 Days	>450 psi (32 kg/cm2)
Vitreous Tile	28 Days	>250 psi (21 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

Pro-Line by BONDED®

. 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 www.bondedmaterials.com

BONDED®

rev. Sep-12

Pro-Line Glass Bond L

Liquid Additive for Colored Setting Mortar

Packaging: Available in 1 gallon units

*** Specifically Designed for Glass Tile**
*** Makes Custom Colored Setting Mortar**
*** Use Interior or Exterior**
*** Contributes to LEED®**

♦**Usage:** Glass Bond L is a unique latex additive that is specially designed for use with Pro-Line Brilliance colored sanded grout. When Glass Bond L and Pro-Line Brilliance colored sanded grout are combined, they create a custom colored setting material designed specifically for glass tile installation. While designed for glass tile units Glass Bond L can also be used for semi-vitreous and vitreous tile such as porcelain, ceramic, and mosaic units for both interior and exterior applications. Glass Bond L provides a superior bond and is ideal for use in demanding conditions. **ANSI A108.5, A118.1, A118.4**

♦**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 Glass Bond L can be used over drywall (vertical only).

♦**Preparatory Work:** All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦**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.

♦**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.

♦**Plywood Substrates:** ***Note: Glass Tile may not be suitable over any type of wood or plywood substrate. See T.C.N.A and glass tile manufacture for recommendations.**

♦**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:** Add Brilliance colored sanded grout to Glass Bond L liquid at the approximate rate of 3 quarts per 25 lbs. of grout. Do Not Add Water. Mix thoroughly until smooth and paste-like consistency is achieved and let mortar slake for 10 minutes, then remix. If a mechanical mixer is used, it must be mixed at a low RPM (300rpm or less) so as not to entrap air in the mortar. Do not add additional liquid or 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. Do not use as a grout.

♦**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 other possible limitations.**

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Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

Pro Line Glass Bond L

Liquid Additive for Colored Setting Mortar

Packaging: Available in 1 gallon units

*** Specifically Designed for Glass Tile * Makes Custom Colored Setting Mortar * Use Interior or Exterior ***

♦**Curing:** Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. Allow minimum of 24-48 hours before grouting or light traffic. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure. Glass tiles with coatings on the back require curing a minimum of 21-28 days before being submerged in water.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** When grout is mixed with Glass Bond L do not use as a grout, use Brilliance grout mixed only with water or ProCrylic additive in tile joints. Glass Bond L must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Square feet per 25 lb. bag of grout/liquid
20 - 25 sq. feet using a 1/2" x 1/2" square notched trowel
30 – 35 sq. feet using a 1/4" x 3/8" square notched trowel
35 - 40 sq. feet using a 1/4" x 1/4" square notched trowel

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

Glass Bond L Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	Glass Bond L Values
*Open time @ 70°F -	25 Minutes
Adjustability @ 70°F -	25-30 Minutes
Bucket life @ 70°F -	4-6 Hours
Shear Bond ANSI A118.4	
Non-Vitreous Tile 28 Days	>800 psi (56 kg/cm2)
Impervious Mosaic Tile 28 Days	>650 psi (46 kg/cm2)
Water Immersion 7 Days	>450 psi (32 kg/cm2)
Freeze Thaw 28 Days	>350 psi (25 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

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.

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rev. Sep-12

Pro-Line Glass Bond P

Polymer-Modified Bright White Mortar

Packaging: Available in 25 lb. bags

*** Specifically Designed for Glass Tile**
*** Use Interior or Exterior**
*** No V.O.C.**
*** Contributes to LEED®**

♦Usage: Glass Bond P is a unique, latex-Portland cement mortar specifically designed for use with glass tiles. This optically bright white formula will add a distinguished look to any glass tile installation. While designed for glass tile units Glass Bond P can also be used for semi-vitreous and vitreous tile such as porcelain, ceramic, and mosaic units for both interior and exterior applications. Glass Bond P provides a superior bond and is ideal for use in demanding conditions. **ANSI A108.5, A118.1, A118.4, A118.11**

♦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 Glass Bond P can be used over drywall (vertical only).

♦Preparatory Work: All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦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.

♦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.

♦Plywood Substrates: EGP wood flooring (interior only) when placed on top of conventional floor joist or other system, should maintain a substrate deflection not to exceed L/360th of span and L/720th of span for natural stone and that includes both live and dead loads. A gap of 3/16" must be left between sheets of EGP and all materials they abut to allow for expansion. Do not fill expansion joints with setting material. EGP substrate is acceptable for dry, interior applications only. Floors must comply with TCNA instructions for Floors, Interior: Wood Subfloor.
***Note: Glass Tile may not be suitable over any type of wood or plywood substrate. See T.C.N.A and glass tile manufacture for recommendations.**

♦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: Glass Bond P dry powder should be added to clean, cool, potable water only at the rate of approximately 3 quarts per 25 lb. bag. Mix thoroughly until smooth and paste-like consistency is achieved and let mortar slake for 10 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 other possible limitations.**

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Pro Line Glass Bond P

Polymer-Modified Bright White Mortar

Packaging: Available in 25 lb. bags.

*** Specifically Designed for Glass Tile * Use Interior or Exterior * No V.O.C. * Contributes to LEED®**

♦**Curing:** Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. Allow minimum of 24-48 hours before grouting or light traffic. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure. Glass tiles with coatings on the back require curing a minimum of 21-28 days before being submerged in water.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** Glass Bond P must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Square feet per 25 lb. bag
20 - 25 sq. feet using a 1/2" x 1/2" square notched trowel
30 – 35 sq. feet using a 1/4" x 3/8" square notched trowel
35 - 40 sq. feet using a 1/4" x 1/4" square notched trowel

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

Glass Bond P Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	Glass Bond P Values
*Open time @ 70°F -	25 Minutes
Adjustability @ 70°F -	25-30 Minutes
Bucket life @ 70°F -	4-6 Hours
Shear Bond ANSI A118.4	
Non-Vitreous Tile 28 Days	>800 psi (56 kg/cm2)
Impervious Mosaic Tile 28 Days	>650 psi (46 kg/cm2)
Water Immersion/Freeze Thaw 7/28 Days	>500 psi (35 kg/cm2)
Non-Vitreous Tile (over plywood) as tested by the ANSI A118.11 standards 28 Days	>250 psi (18 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

Pro-Line by BONDED®

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If an installation or materials should be changed outside the detailed instructions, please contact our technical support dept .for assistance.

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BONDED®

rev. Sep-12

Pro-Line LevelBond™ Primer

Premium Self-Leveling Primer

Packaging: Available in 1 & 5 Gallon Units

*** Primer for Pro-Line LevelBond™**
*** Improves Bond Strength**
*** Light blue for ease of identification when applying**
*** Contributes to LEED®**

♦**Usage:** Pro-Line LevelBond™ Primer is a high quality bonding agent for self-leveling underlayments. Pro-Line LevelBond™ Primer reduces water absorption, provides increased adhesion to old concrete and other substrates. Use as a substrate primer on approved interior installations prior to the application of Pro-Line LevelBond™ Self Leveling Underlayment.

♦**General Preparatory Work:** All surfaces must be dry, structurally sound and not subject to extreme temperatures (below 50°F or above 100°F) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. Surfaces 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. Always install several test areas to ensure compatibility, bond strength and performance of the complete flooring system.

♦**Mix: Shake or stir well before use.** Dilute 1 part of LevelBond™ Primer with 3 parts clean, potable water. Extremely absorbent concrete may require multiple coats, first coat diluted at a 1:3 ratio, then apply second or multiple coats at same ratio as necessary. Stir using low speed mixer at 300 rpm. Do not over mix.

♦**Application:** All substrates shall be primed with LevelBond™ Primer prior to application of LevelBond™. Apply diluted 1:3 primer to clean substrates evenly using brush or broom. Do not use paint rollers, mops or spray equipment. Do not leave any bare spots. Remove puddles and excess primer.

♦**Curing:** Allow LevelBond™ Primer to dry a minimum of 2 hours at 72° (22°C) (to a slight tack) before applying Pro-Line LevelBond™ Underlayment. Lower temperatures and or humid conditions could extend drying time. Maximum open time before applying Pro-Line LevelBond™ Underlayment or between coats is 18 hours.

♦**Concrete:** Substrate should be cured a full 28 days minimum. Concrete surfaces must be mechanically profiled and prepared by shot blasting, sandblasting, water-jetting, scarifying, diamond-grinding or other engineer approved methods (reference ICRI CSP 3 or greater standards for acceptable profile height). Test concrete using a calcium chloride kit (ASTM F1869). For MVER exceeding 5 lbs. per 1000 sq ft contact Bonded Materials Technical Services Department. Repair any spalled, unsound concrete and clean off any remaining dust. Concrete must have tensile strength of 175 psi or more.

♦**Exterior Grade Plywood:** EGP must be installed properly to provide a rigid and secure substrate. A gap of 3/16" to 1/4" must be left between sheets of EGP. Fill gaps with a polymer-modified mortar. Apply LevelBond™ Primer after having diluted with clean, potable water at a ratio of 1:2. Apply an even coat using a brush or broom. After LevelBond™ Primer has dried a minimum of 2 hours, (to a slight tack) then use galvanized or corrosion-proof nails or staples to place approved galvanized metal or plastic lath to floor. Mix 1 quart LevelBond™ Primer with 4 quarts clean, potable water and add to a 50 lb. bag LevelBond, mix as normal. Pour a minimum of 1/4" mixture over the surface following the application instructions below.

♦**Marble, Terrazzo, Ceramic Tile:** Existing surfaces of marble, terrazzo, and ceramic tile must be well bonded to the existing substrate, thoroughly cleaned and mechanically scarified prior to placing LevelBond™ Primer.

♦**Cleaning:** Clean off any uncured Primer with clean water only.

♦**Limitations:** Do not apply to form thick or heavy layers on substrates. Not recommended for continual exposure to water. Protect from freezing.

♦**Coverage:** Approx. 550-750 square feet when diluted

♦**PHYSICAL PROPERTIES:**
Appearance: milky blue liquid.
Weight/gallon: 8.9 lbs. (4.03 kg)

♦**Storage:** One year when kept in sealed containers.

♦**Safety:** May cause eye and skin irritation. Do not ingest. In case of contact, flush eyes with clean water for 10 - 15 minutes. If irritation does not stop, please contact a physician. Avoid contact with skin where possible and wash exposed areas promptly with soap and water. KEEP OUT OF REACH OF CHILDREN.

♦**Warranty**: Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. See Bonded Materials complete product warranty details at www.bondedmaterials.com or call our Technical Services Department.

♦ Bonded Materials Company ♦
4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

Pro-Line LevelBond™

Premium Self-Leveling Underlayment

Packaging: Available in 50 lb. bags Gray

*** For leveling and smoothing interior floors**
*** Pours up to 2”**
*** No V.O.C.**
*** Contributes to LEED®**

♦**Usage:** LevelBond™ is a premium self-leveling underlayment composed of Portland cement and unique chemical additions that when mixed with water creates a free-flowing mortar. LevelBond will find its own level when poured and is designed to create a smooth, level surface for placement of floor coverings. LevelBond™ is for interior use over concrete, exterior grade plywood (EGP), marble, terrazzo and ceramic tile as long as they have first been primed with LevelBond™ Primer.

♦**General Preparatory Work:** All surfaces must be dry, structurally sound and not subject to extreme temperatures (below 50°F or above 100°F) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. Surfaces 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. Always install several test areas to ensure compatibility, bond strength and performance of the complete flooring system.

♦**Concrete:** Substrate should be cured a full 28 days minimum. Concrete surfaces must be mechanically profiled and prepared by shot blasting, sandblasting, water-jetting, scarifying, diamond-grinding or other engineer approved methods (reference ICRI CSP 3 or greater standards for acceptable profile height). Test concrete using a calcium chloride kit (ASTM F1869). For MVER exceeding 5 lbs. per 1000 sq ft contact Bonded Materials Technical Services Department. Repair any spalled, unsound concrete and clean off any remaining dust. Concrete must have tensile strength of 175 psi or more. Apply LevelBond™ Primer after having diluted with clean, potable water at a ratio of 1:1. Apply an even coat using a brush or broom. Allow LevelBond™ Primer to dry a minimum of 2 hours, (to a slight tack) before applying LevelBond™.

♦**Exterior Grade Plywood:** EGP must be installed properly to provide a rigid and secure substrate. A gap of 3/16” to 1/4” must be left between sheets of EGP. Fill gaps with a polymer-modified mortar. Apply LevelBond™ Primer after having diluted with clean, potable water at a ratio of 1:1. Apply an even coat using a brush or broom. After LevelBond™ Primer has dried a minimum of 2 hours, (to a slight tack) then use galvanized or corrosion-proof nails or staples to place approved 3.4 galvanized diamond metal lath to floor. Mix 1 quart LevelBond™ Primer with 4 quarts clean, potable water and add to a 50 lb. bag LevelBond, mix as normal. Pour a minimum of 1/4” mixture over the surface following the application instructions below.

♦**Marble, Terrazzo, Ceramic Tile:** Existing surfaces of marble, terrazzo, and ceramic tile must be well bonded to the existing substrate, thoroughly cleaned and mechanically scarified prior to placing LevelBond™ Primer. Place primer as outlined in the EGP method, metal lath is not required.

♦**Expansion Joints:** Expansion joints shall be installed in accordance with local building codes. Expansion joints, control joints and cold joints should never be bridged with LevelBond. See EJ171 in T.C.N.A. Handbook for details.

♦**Mix 2 bags of LevelBond™ at a time:** Add approximately 6 quarts per 50 lb. bag into a mixing drum for EACH 50 lb bag, then add the LevelBond™ powder while mixing at full speed with a paddle mixer attached to a heavy duty ½” drill (min. 650 rpm). Mix thoroughly for a minimum of 3-4 minutes while lump free, adding no additional water (Do not over water; overwatering may cause cracking and delaminating). Underlayment has a flow time of 10 minutes at 75°F (24°C), no troweling needed. The proper mortar consistency is free-flowing and free of all lumps. Do not use mortar after initial set in bucket.

♦**Application:** All substrates shall be primed with LevelBond™ Primer prior to application of LevelBond™. Pour LevelBond™ in desired location and disperse with a mortar spreader. If walking in fresh underlayment, spiked shoes are recommended. If a featheredge is desired, a finish blade may be used. LevelBond™ can be applied up to 2“thick and has an approximate flow time of 10 minutes. Application is foot-traffic ready in approximately 2 - 4 hours, depending on ambient temperatures.

♦**Curing:** Minimum cure is obtained in 12-24 hours depending on ambient temperatures. Strength improves significantly within initial 28 days as with concrete. Foot traffic is acceptable within 2-4 hours and floor coverings may be installed after 12 hours for ceramic or stone tile and after 24 hours for other floor coverings. When used in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dried prior to water exposure.

♦**Limitations:** Interior use only. LevelBond must not be used over gypsum based surfaces, old adhesive residue, paint, particle board, epoxy, or urethane floor coverings, plastic, or vinyl. LevelBond is designed for interior use only and should not be applied to any substrate until said substrate has been primed with LevelBond Primer. Do not use over substrates subject to hydrostatic pressure.

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Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

Pro Line LevelBond™

Premium Self-Leveling Underlayment

Packaging: Available in 50 lb. bags. Gray

*** Pours up to 2" * No V.O.C. * Contributes to LEED®**

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** 50 Sq Ft @ 1/8" per 50 lb. bag
25 Sq Ft @ 1/4" per 50 lb. bag

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. LevelBond™ contains Portland cement, if any cement or cement mixtures get into the eye, flush immediately and repeatedly with water, and then consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

LevelBond Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test			LevelBond Values
Flow Time			10 Minutes
Initial Set @ 70°F -			approx. 35 Minutes
Final Set @ 70°F -			approx. 2.0 Hours
Drying Time before applying Floor Covering			12-24 Hours
Compressive Strength	ASTM C-109	28 Days	>4900 psi (345 kg/cm2)
Flexural Strength	ASTM C-348	28 Days	>1400 psi (98 kg/cm2)
Tensile Strength	ASTM C-190	28 Days	>435 (31 kg/cm2)
Bond Strength	ASTM D-3931	28 Days	>425 (30 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

♦ Bonded Materials Company ♦
4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

rev. Sep-12

Pro-Line Medium Bed Modified

Polymer-Modified Medium Bed Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** Polymer Modified-Build up to 3/4"**
*** Reduces Lippage**
*** No V.O.C.**
*** Contributes to LEED®**

♦Usage: Medium Bed Modified fully supports heavy tiles and stone, reducing lippage problems and the need for leveling or pre-floating rough surfaces. Medium Bed Modified can be built up to 3/4" (19mm) without shrinkage or extended set times. It may be used for either walls or floors and is perfect for both interior and exterior applications. Medium Bed Modified is a blend of Portland cement, sand and special dry latex additives that significantly improve bond strength and freeze-thaw stability performance characteristics. **ANSI A118.1, A118.4, A108.5**

♦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 Medium Bed Modified can be used over drywall (vertical only). With the addition of Pro-Line Pro Latex liquid additive Medium Bed Modified will also bond to EGP (interior only) and meet **ANSI A118.11**.

♦Preparatory Work: All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦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.

♦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 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.

♦Plywood Substrates: With the addition of Pro-Line Pro Latex liquid additive Medium Bed Modified will also bond to EGP wood flooring (interior only) when placed on top of conventional floor joist or other system, should maintain a substrate deflection not to exceed L/360th of span and L/720th of span for natural stone and that includes both live and dead loads. A gap of 3/16" must be left between sheets of EGP and all materials they abut to allow for expansion. Do not fill expansion joints with setting material. EGP substrate is acceptable for dry, interior applications only. Floors must comply with TCNA instructions for Floors, Interior: Wood Subfloor.

♦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: Medium Bed Modified dry powder should be added to clean, cool, potable water or Pro-Line ProLatex at the rate of approximately 6 quarts per 50 lb. bag. Mix thoroughly until smooth and paste-like consistency is achieved and let mortar slake for 10 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 3/4". 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.

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rev. Sep-12

Pro Line Medium Bed Modified

Polymer-Modified Medium Bed Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** Polymer Modified-Build up to 3/4" * Reduces Lippage * No V.O.C. * Contributes to LEED®**

♦Curing: Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. Allow minimum of 24-48 hours before grouting or light traffic. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦Cleaning: Clean off any uncured mortar with clean water only.

♦Limitations: Medium Bed Modified must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦Protection: Protect from freezing for 5-7 days

♦Coverage: Square feet per 50 lb. bag
25 - 30 sq. feet using a 3/4" x 3/4" U- notched trowel
40 - 50 sq. feet using a 1/2" x 1/2" square notched trowel
65 - 70 sq. feet using a 1/4" x 3/8" square notched trowel

♦Storage: One year if kept dry in sealed bags.

♦Safety: May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

Medium Bed Modified Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	Medium Bed Modified Values
*Open time @ 70°F -	12-15 Minutes
Adjustability @ 70°F -	12-15 Minutes
Bucket life @ 70°F -	8 Hours
Shear Bond ANSI A118.4	
Non-Vitreous Tile 28 Days	>500 psi (35 kg/cm2)
Vitreous Tile 28 Days	>300 psi (21 kg/cm2)
Non-Vitreous Tile (over plywood) as tested by the ANSI A118.11 standards 28 Days *With the addition of Pro Latex additive	>250 psi (18 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

Pro-Line by BONDED®

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.

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BONDED®

rev. Sep-12

Pro-Line Medium Bed NM

NON-Modified Medium Bed Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** Non-Modified-Build up to 3/4”**
*** Reduces Lippage**
*** No V.O.C.**
*** Contributes to LEED®**

♦Usage: Medium Bed NM fully supports heavy tiles and stone, reducing lippage problems and the need for leveling or pre-floating rough surfaces. Medium Bed NM can be built up to 3/4” (19mm) without shrinkage or extended set times. It may be used for either walls or floors. Medium Bed NM can be used over uncoupling membranes that require a Non-Modified setting mortar. Medium Bed NM when mixed with ProCrylic or ProLatex additives in place of water meets or exceeds ANSI A118.4 requirements. **ANSI A118.1, A108.5**

♦Suitable Substrates: Properly prepared plumb and true masonry, concrete, cementitious backer units, cured Portland cement mortar beds. Medium Bed NM when mixed with ProCrylic or ProLatex additives in place of water can be used over properly prepared ceramic tile, and stone, for both interior and exterior applications. For interior, dry applications Medium Bed Modified can be used over drywall (vertical only).

♦Preparatory Work: All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦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.

♦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 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.

♦Plywood Substrates: With the addition of Pro-Line Pro Latex liquid additive Medium Bed NM will also bond to EGP wood flooring (interior only) when placed on top of conventional floor joist or other system, should maintain a substrate deflection not to exceed L/360th of span and L/720th of span for natural stone and that includes both live and dead loads. A gap of 3/16” must be left between sheets of EGP and all materials they abut to allow for expansion. Do not fill expansion joints with setting material. EGP substrate is acceptable for dry, interior applications only. Floors must comply with TCNA instructions for Floors, Interior: Wood Subfloor.

♦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. Medium Bed NM must be mixed with ProLatex in place of water.

♦Mix: Medium Bed NM dry powder should be added to clean, cool, potable water or Pro-Line ProLatex at the rate of approximately 6 quarts per 50 lb. bag. Mix thoroughly until smooth and paste-like consistency is achieved and let mortar slake for 10 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 3/4”. 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.

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Pro Line Medium Bed NM

NON-Modified Medium Bed Mortar

Packaging: Available in 50 lb. bags. Gray/White

***NON-Modified-Build up to 3/4" * Reduces Lippage * No V.O.C. * Contributes to LEED®**

♦**Curing:** Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. Allow minimum of 24-48 hours before grouting or light traffic. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** Medium Bed NM must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Square feet per 50 lb. bag
25 - 30 sq. feet using a 3/4" x 3/4" U- notched trowel
40 - 50 sq. feet using a 1/2" x 1/2" square notched trowel
65 - 70 sq. feet using a 1/4" x 3/8" square notched trowel

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

Medium Bed NM Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	Medium Bed Modified Values
*Open time @ 70°F -	12-15 Minutes
Adjustability @ 70°F -	12-15 Minutes
Bucket life @ 70°F -	8 Hours
Shear Bond ANSI A118.1	
Non-Vitreous Tile 28 Days	>425 psi (35 kg/cm2)
Vitreous Tile 28 Days	>525 psi (21 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

♦ Bonded Materials Company ♦
4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

Pro-Line Medium Bed Premium

Polymer-Modified Medium Bed Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** Premium Polymer Modified-Build up to 3/4”**
*** Reduces Lippage**
*** No V.O.C.**
*** Contributes to LEED®**

♦Usage: Medium Bed Premium fully supports heavy tiles and stone, reducing lippage problems and the need for leveling or pre-floating rough surfaces. Medium Bed Premium can be built up to 3/4” (19mm) without shrinkage or extended set times. With significant non-sag properties and unparalleled impact resistance, both floor and wall installations can be completed with just one application. It may be used for either walls or floors and is perfect for both interior and exterior applications. Medium Bed Premium is a blend of Portland cement, sand and special dry latex additives that significantly improve bond strength and freeze-thaw stability performance characteristics. **ANSI A118.4, ANSI A118.11, A108.5**

♦Suitable Substrates: Properly prepared plumb and true masonry, concrete, cementitious backer units, cured Portland cement mortar beds, brick, ceramic tile, and stone. For interior, dry applications Medium Bed Premium can be used over EGP, drywall (vertical only), and when properly prepared-old cutback adhesive, scarified plastic laminates and vinyl composition flooring.

♦Preparatory Work: All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦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.

♦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 tile installation- do not leave 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.

♦Plywood Substrates: Medium Bed Premium will also bond to EGP wood flooring (interior only) when placed on top of conventional floor joist or other system, should maintain a substrate deflection not to exceed L/360th of span and L/720th of span for natural stone and that includes both live and dead loads. A gap of 3/16” must be left between sheets of EGP and all materials they abut to allow for expansion. Do not fill expansion joints with setting material. EGP substrate is acceptable for dry, interior applications only. Floors must comply with TCNA instructions for Floors, Interior: Wood Subfloor.

♦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: Medium Bed Premium dry powder should be added to clean, cool, potable water only at the rate of approximately 6 quarts per 50 lb. bag. Use less water for better non-sag properties. Mix thoroughly until smooth and paste-like consistency is achieved and let mortar slake for 10 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 3/4”. 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.

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rev. Sep-12

Pro Line Medium Bed Premium

Polymer-Modified Medium Bed Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** Premium Polymer Modified-Build up to 3/4" * Reduces Lippage * No V.O.C. * Contributes to LEED®**

♦**Curing:** Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. Allow minimum of 24-48 hours before grouting or light traffic. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** Medium Bed Premium must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Square feet per 50 lb. bag
25 - 30 sq. feet using a 3/4" x 3/4" U- notched trowel
40 - 50 sq. feet using a 1/2" x 1/2" square notched trowel
65 - 70 sq. feet using a 1/4" x 3/8" square notched trowel

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. KEEP OUT OF REACH OF CHILDREN.

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Medium Bed Premium Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	Medium Bed Premium Values
*Open time @ 70°F -	12-15 Minutes
Adjustability @ 70°F -	12-15 Minutes
Bucket life @ 70°F -	8 Hours
Shear Bond ANSI A118.4	
Non-Vitreous Tile 28 Days	>650 psi (46 kg/cm2)
Vitreous Tile 28 Days	>350 psi (25 kg/cm2)
Non-Vitreous Tile (over plywood) as tested by the ANSI A118.11 standards 28 Days	>300 psi (21 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

Pro-Line by BONDED®

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If an installation or materials should be changed outside the detailed instructions, please contact our technical support dept .for assistance.

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BONDED®

rev. Sep-12

Pro-Line MultiTile-Professional Grade

Polymer-Modified Dry-Set Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** Increased Polymer content** (over standard grade)
*** Use Interior or Exterior**
*** No V.O.C.**
*** Contributes to LEED®**

♦Usage: MultiTile is a polymer-modified dry-set mortar designed for the bonding of all types of tiles. It may be used for either walls or floors and is perfect for both interior and exterior applications. MultiTile is a blend of Portland cement, sand and special dry latex additives that significantly improve bond strength and freeze-thaw stability performance characteristics. **ANSI A118.1, A118.4, A108.5**

♦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 MultiTile can be used over drywall (vertical only). With the addition of Pro-Line Pro Latex liquid additive MultiTile will also bond to EGP (interior only) and meet **ANSI A118.11**.

♦Preparatory Work: All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦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.

♦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.

♦Plywood Substrates: With the addition of Pro-Line Pro Latex liquid additive MultiTile will also bond to EGP wood flooring (interior only) when placed on top of conventional floor joist or other system, should maintain a substrate deflection not to exceed L/360th of span and L/720th of span for natural stone and that includes both live and dead loads. A gap of 3/16" must be left between sheets of EGP and all materials they abut to allow for expansion. Do not fill expansion joints with setting material. EGP substrate is acceptable for dry, interior applications only. Floors must comply with TCNA instructions for Floors, Interior: Wood Subfloor.

♦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. *MultiTile powder must be mixed with Pro-Line Pro Latex liquid additive.

♦Mix: MultiTile dry powder should be added to clean, cool, potable water or Pro-Line ProLatex at the rate of approximately 6 quarts per 50 lb. bag. Mix thoroughly until smooth and paste-like consistency is achieved and let mortar slake for 10 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.

♦ Bonded Materials Company ♦
4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

Pro-Line MultiTile-Professional Grade

Polymer-Modified Dry-Set Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** Polymer Modified * Use Interior or Exterior * No V.O.C. * Contributes to LEED®**

♦**Curing:** Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. Allow minimum of 24-48 hours before grouting or light traffic. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** MultiTile must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Square feet per 50 lb. bag
45 - 50 sq. feet using a 1/2" x 1/2" square notched trowel
65 - 70 sq. feet using a 1/4" x 3/8" square notched trowel
90 - 100 sq. feet using a 1/4" x 1/4" square notched trowel

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

MultiTile Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test		MultiTile Values
*Open time @ 70°F -		10-12 Minutes
Adjustability @ 70°F -		10-12 Minutes
Bucket life @ 70°F -		6 Hours
Compressive Strength ASTM C-109		>3400 psi (239 kg/cm2)
Shear Bond ANSI A118.4		
Non-Vitreous Tile	28 Days	>450 psi (32 kg/cm2)
Vitreous Tile	28 Days	>275 psi (19 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

Pro-Line by BONDED®

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.

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BONDED®

rev. Sep-12

Pro-Line MultiTile-Standard Grade

Polymer-Modified Dry-Set Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** Economical Polymer Modified**
*** Use Interior or Exterior**
*** No V.O.C.**
*** Contributes to LEED®**

♦Usage: MultiTile is an economical polymer-modified dry-set mortar designed for the bonding most types of tiles. It may be used for either walls or floors and can be used both interior and exterior applications. MultiTile is a blend of Portland cement, sand and special dry latex additives that improve bond strength. **ANSI A118.1, A118.4, A108.5**

♦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 MultiTile can be used over drywall (vertical only). With the addition of Pro-Line Pro Latex liquid additive MultiTile will also bond to EGP (interior only) and meet **ANSI A118.11**.

♦Preparatory Work: All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦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.

♦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.

♦Plywood Substrates: With the addition of Pro-Line Pro Latex liquid additive MultiTile will also bond to EGP wood flooring (interior only) when placed on top of conventional floor joist or other system, should maintain a substrate deflection not to exceed L/360th of span and L/720th of span for natural stone and that includes both live and dead loads. A gap of 3/16" must be left between sheets of EGP and all materials they abut to allow for expansion. Do not fill expansion joints with setting material. EGP substrate is acceptable for dry, interior applications only. Floors must comply with TCNA instructions for Floors, Interior: Wood Subfloor.

♦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. *MultiTile powder must be mixed with Pro-Line Pro Latex liquid additive.

♦Mix: MultiTile dry powder should be added to clean, cool, potable water or Pro-Line ProLatex at the rate of approximately 6 quarts per 50 lb. bag. Mix thoroughly until smooth and paste-like consistency is achieved and let mortar slake for 10 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.

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Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

Pro-Line MultiTile-Standard Grade

Polymer-Modified Dry-Set Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** Economical Polymer Modified * Use Interior or Exterior * No V.O.C. * Contributes to LEED®**

♦**Curing:** Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. Allow minimum of 24-48 hours before grouting or light traffic. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** MultiTile must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Square feet per 50 lb. bag
45 - 50 sq. feet using a 1/2" x 1/2" square notched trowel
65 - 70 sq. feet using a 1/4" x 3/8" square notched trowel
90 - 100 sq. feet using a 1/4" x 1/4" square notched trowel

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

MultiTile Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test		MultiTile Values
*Open time @ 70°F -		10-12 Minutes
Adjustability @ 70°F -		10-12 Minutes
Bucket life @ 70°F -		6 Hours
Compressive Strength ASTM C-109		>3200 psi (225 kg/cm2)
Shear Bond ANSI A118.4		
Non-Vitreous Tile	28 Days	>375 psi (26 kg/cm2)
Vitreous Tile	28 Days	>200 psi (14 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

Pro-Line by BONDED®

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.

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BONDED®

rev. Sep-12

Pro-Line Pool Grout

Bright White

Premium Fine Sanded Grout 1/8" – 1/2"

Packaging: Available in 50 lb. bags

***Minimizes Discoloring Caused by Pool Chemicals**
***Premium Portland Cement Grout**
*** Non-Toxic**
*** Contributes to LEED®**

Usage: Pool Grout is a Portland cement-based grout specifically designed to minimize the discoloring effects caused by chemicals used in pool maintenance. The non-shrinking, non-toxic formula is bacteria resistant and provides excellent durability and bond strength. The premium sanded consistency is ideal for joints from 1/16" up to 1/2". The fine texture allows for a smooth, dense joint. This product meets or exceeds ANSI A118.6.

Packaging: Available in 50 lb. bags, Bright White only.

Preparatory Work: All debris should be removed from grout joints prior to installation, including excess setting material. This should allow a minimum of 2/3 of the joint to be free and open for grouting material. Dampen all joints and wet the surface prior to placing grout. Joints and surface of tile should be in saturated dry condition with no standing water present. Do not apply grouting material to expansion joints. Ensure a uniform width and depth of all joints. Shades or screens may be necessary in exterior work areas to prevent flash setting in warm, sunny, or windy weather. Grout must be protected from extreme temperatures during the first 72 hours.

♦**Expansion Joints:** Expansion joints shall be installed in accordance with local building codes. See EJ171 in T.C.N.A. handbook for details. Areas where there are expansion joints, control joints and cold joints should never be filled with grouting material.

Mix: Add Pro-Line Pool Grout powder to clean, cool water at an approximate rate 1-1 1/2 gallons per 50 lb. bag. Mix thoroughly until smooth, adjusting consistency with small amounts of water if necessary and let grout slake for 10 minutes, then remix by hand or with a low RPM drill (300rpm or less) so as not to entrap air. Do not add additional water or powder after slaking period. The proper consistency is a soft, paste-like mortar. Do not use grout after initial set in bucket. During use, remix grout occasionally.

Application: Fill joints with grout until flush with surface of tile. Use a hard rubber float to spread grout at a 45˚ angle, this will both fill and compact the joints. Use the same procedure throughout application to achieve a consistent result. Remove excess grout with hard rubber float held at 45˚ angle to assist with cleaning.

Cleaning: Allow grout to achieve initial set before cleaning procedures begin. Once grout has reached initial set and can be indented slightly when pressed, use barely damp sponge or cheesecloth with clean, potable water to clean surface of tile, using a circular motion. Use a minimal amount of water in this process as too much moisture and aggressive scrubbing can negatively affect grout color intensity and consistency. Use a clean, damp towel to buff surface of tile once cleaning has been completed to remove any residual grout.

♦**Sealing/Staining:** Sealers, waxes, and stains maybe used to further enhance the grout by offering richer colors and future prevention of unwanted stains. A period of at least 30 days and complete satisfaction of grout conditions should be allowed before these products are applied. Some sealers may have adverse effects on grout joints, such as softening or discoloration. Try a small test area to be sure.

Caution: Allow a minimum of 10 days before using any chemical cleaners on grout joints. To remove any remaining grout at this point, use a mixture of hot water and TSP (trisodium phosphate). It is not recommended that acid solutions be used. If an acid solution must be used, do not exceed the following ratio:

Pro-Line by Bonded®	AllClean		Water
	2 pounds	to	5 gallons

Be sure to saturate the surface of the tile with cool, clean water prior to cleaning with an acid solution and rinse thoroughly once finished with cool, clean water. Test the solution in a small area prior to cleaning large areas to check for grout discoloration.

♦ Bonded Materials Company ♦
4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com
rev. Sep-12

Pro-Line Pool Grout

Premium Fine Sanded Grout 1/8” – 1/2”

Bright White

Packaging: Available in 50 lb. bags

***Minimizes Discoloring Caused by Pool Chemicals *Premium Polymer Portland Cement Grout* Anti-Microbial-Resists Mold & Mildew* Contributes to LEED®**

♦**Curing:** Protect grout from drying out too fast during hot weather conditions. Cover the installation with Kraft paper to slow cure and protect from other trades. Protect Surface from heavy traffic for 72 hours. Protect from freezing for 5-7 days

♦**Limitations:** When used in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 3 days and be thoroughly dry prior to water exposure. Pro-Line Brilliance is not affected by prolonged contact with water, but does not necessarily form a waterproof barrier. Chemicals used in the treatment of pools, hot tubs, and ponds can affect cement based grouts over time. Efflorescence is inherent in all Portland Cement based products and is not considered a manufacturing defect.

♦**Coverage as Grout:** Pounds of grout required per 100 square feet:

1 x 1 tile at 1/16” joint = 29 lbs.
1 x 1 tile at 1/8” joint = 58 lbs.
2 x 2 tile at 1/16” joint = 15 lbs.
2 x 2 tile at 1/8” joint = 29 lbs.
3 x 3 tile at 1/16” joint = 10 lbs.
3 x 3 tile at 1/8” joint = 20 lbs.
6 x 6 tile at 1/16” joint = 5 lbs.
6 x 6 tile at 1/8” joint = 10 lbs.

*Coverage amounts will vary depending on depth of joint

♦**Storage:** One year if kept dry in sealed containers.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. If any mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed mortar may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

Pro-Line Pool Grout Technical Data (based on 70°F [21°C] and 50% relative humidity)

Meets or Exceeds ANSI A118.6	**Values**
Initial Set @ 70°F -	2-3 Hours
Final Set	5-6 Hours
Bucket life @ 70°F -	1-2 Hours
Water Absorption	<5%
Compressive Strength ASTM C-109	>3600 psi (316 kg/cm2)
Hardness	>75

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

♦ Bonded Materials Company ♦
4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

Pro-Line Poxy™ Grout & Mortar

100% Solids Epoxy Grout & Mortar

Packaging: Available in 1/2, 1, 2 Gal. Units

*** 23 Unique Colored Silica Fillers**
*** 3 Component Water Washable**
*** Excellent Chemical Resistance**
*** Contributes to LEED®**

♦Usage: Pro-Line Poxy™ is a 100% solids blend of epoxies and special colored silica fillers and offers high performance, color uniformity, durability, and stain resistance with extraordinary ease of use. Pro-Line Poxy™ used in place of traditional cement grout, is applied using a standard hard rubber float. Pro-Line Poxy™ can be used to fill joints from 1/16" to 1/2". Do not exceed 3/16" on vertical applications. In addition it can also be used to produce an impermeable, high strength mortar, and is highly resistant to chemicals. Use it for interior floor and wall applications and for exterior applications where the surface temperature is 50 – 100° F (10-38° C). It may be used for both floor and wall installations. Pro-Line Poxy™ is water cleanable before curing and easy to work.
ANSI A108.4, A108.6, A118.3

♦Preparatory Work: All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 50ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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: It is required that surfaces such as steel, glass and fiberglass be abraded and cleaned prior to setting tile to assure proper bonding. It is also required that the existing surface be structurally sound and firmly attached to the supporting structure.

♦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.

♦Plywood Substrates: Pro-Line Poxy™ may be used over EGP on floors. Wood flooring when placed on top of conventional floor joist or other system, should maintain a substrate deflection not to exceed L/360th of span and L/720th of span for natural stone and that includes both live and dead loads. A gap of 3/16" must be left between sheets of EGP and all materials they abut to allow for expansion. Do not fill expansion joints with setting material. EGP substrate is acceptable for dry, interior applications only. Floors must comply with TCNA instructions for Floors, Interior: Wood Subfloor.

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

♦Mix: After opening each container pre stir, then add both tubs of Part A and Part B into a clean pail and stir together to blend to a uniform color, then add contents of Part C and mix to a uniform consistency. An electric drill may be used to mix the product if used at a low RPM (300 or less). Use caution - do not over-mix. 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.

Application as Grouting Material: Apply with hard rubber float held at a 45° angle to surface using diagonal strokes to fill joints completely. Remove excess grout with rubber float held at 90° angle to surface. Clean initial residue with ample amounts of clean water and sponge using as little pressure as possible and changing the water often. Use circular motion to clean surface. After initial cleaning with sponge remove any additional residue with a slightly damp towel or cloth by dragging over surface towards you. Let dry, check for any remaining residue and repeat if necessary.

♦Application as Setting Material: 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 1/16" to 1/4". Remove any tile release agent, usually a whitish powder found on the tile back. Large tiles > 8" x 8" require back butter to provide full bedding and firm support. Do not adjust tiles in mortar after they have been set past 20 minutes.

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Pro-Line Poxy™ Grout & Mortar

100% Solids Epoxy Grout & Mortar

Packaging: Available in 1/2, 1, 2 Gal. Units

*** Unique Colored Silica Fillers * 3 Component Water Washable * Excellent Chemical Resistance* Contributes to LEED®**

♦**Curing:** Minimum cure for grout is obtained in approximately 24 hours depending on ambient temperatures. As a setting material, normal grouting can be done after a minimum of 48 hours.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** Pro-Line Poxy™ must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, OSB, luan plywood or gypsum mortar beds. Do not use with glass tile 6" or larger. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure. Pro-Line Poxy is not affected by prolonged contact with water, but does not necessarily form a waterproof barrier unless special precautions are taken to maintain a continuous film of epoxy mortar 3/32" (2.4 mm) thick with no gaps.

♦**Protection:** Protect surface from heavy traffic for 72 hours. Protect from freezing for 5-7 days

♦**Coverage as Setting Material:** Per 1 Gal. Unit
20-25 sq. feet using a 1/4" x 1/4" square notched trowel

♦**Coverage as Grout:** Based on 100 Square Feet*:

1 x 1 x 1/8 tile with 1/8" joint = 2.5 gal.
2 x 2 x 1/8 tile with 1/8" joint = 1.3 gal.
4 x 4 x 5/16 tile with 1/8" joint = 1.7 gal.
6 x 6 x 5/16 tile with 1/4" joint = 2.2 gal.
8 x 8 x 5/16 tile with 1/4" joint = 1.7 gal.
12 x 12 x 3/8 tile with 3/16" joint = 1.0 gal.
16 x 16 x 3/8 tile with 3/16" joint = 0.8 gal.
24 x 24 x 3/8 tile with 3/16" joint = 0.5 gal.

*Coverage amounts will vary depending on depth of joint

♦**Storage:** One year if kept dry in sealed containers.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. If any mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed mortar may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

Pro-Line Poxy Grout Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	Values
Initial Set @ 70°F -	5.5 Hours
Bucket life @ 70°F -	60-90 Minutes
Shrinkage 7 Days	<0.20%
Sag (vertical)	None
Compressive Strength ANSI 118.3-5.6 (ASTM C579)	>6000 psi (422 kg/cm2)
Shear Bond Vitreous Tile ANSI 118.3-5.5 14 Days	>1250 psi (88 kg/cm2)
Tensile Strength ANSI 118.3-5.7 (ASTM C307) 7 Days	>2100 psi (148 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

Pro-Line by BONDED®

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 www.bondedmaterials.com

BONDED®

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Pro-Line Poxy™ Setting Mortar

100% Solids Epoxy Setting Mortar

♦**Packaging:** Available in 2 Gal. Units

*** 100% Solids Epoxy Setting Mortar**
*** 3 Component Water Washable**
*** Excellent Chemical Resistance**
*** Contributes to LEED®**

♦**Usage:** Pro-Line Poxy™ 100 % solids epoxy setting mortar is used to produce an impermeable, high strength mortar, and is highly resistant to chemicals. Suitable backing when used as a setting mortar include properly prepared brick, ceramic tile, glass mesh mortar units, steel, glass, fiberglass, masonry concrete, and cured Portland cement mortar beds. Use it for interior floor and wall applications and for exterior applications where the surface temperature is 50 – 100° F (10-38° C). It may be used for both floor and wall installations. Epoxy mortar thickness should not exceed 1/4" thickness after tiles have been properly embedded. Pro-Line Poxy™ is water cleanable before curing and easy to work. Pro-Line Poxy™ is not affected by prolonged contact with water, but does not necessarily form a waterproof barrier unless special precautions are taken to maintain a continuous film of epoxy mortar 3/32" (2.4 mm) thick with no gaps.
ANSI A108.4, A118.3

♦**Preparatory Work:** All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 50ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦**Tile:** Remove any tile release agent, usually a whitish powder found on the tile back. This may be done by scrubbing with a nylon brush and water.

♦**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:** It is required that surfaces such as steel, glass and fiberglass be abraded and cleaned prior to setting tile to assure proper bonding. It is also required that the existing surface be structurally sound and firmly attached to the supporting structure.

♦**Plywood Substrates:** Pro-Line Poxy™ may be used over EGP on floors. Wood flooring when placed on top of conventional floor joist or other system, should maintain a substrate deflection not to exceed L/360th of span and L/720th of span for natural stone and that includes both live and dead loads. A gap of 3/16” must be left between sheets of EGP and all materials they abut to allow for expansion. Do not fill expansion joints with setting material. EGP substrate is acceptable for dry, interior applications only. Floors must comply with TCNA instructions for Floors, Interior: Wood Subfloor.

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

♦**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.

♦**Mix:** After opening each container pre stir, then add both tubs of Part A and Part B into a clean pail and stir together to blend to a uniform color, then add contents of Part C and mix to a uniform consistency. An electric drill may be used to mix the product if used at a low RPM (300 or less). Use caution - do not over-mix. 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. Do not mix partial units.

♦**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 from 1/16” to 1/4”. 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. Large tiles > 8" x 8" require back butter to provide full bedding and firm support. Do not adjust tiles in mortar after they have been set past 20 minutes.

♦ Bonded Materials Company ♦
4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

BONDED®

Pro-Line Poxy™ Setting Mortar

100% Solids Epoxy Setting Mortar

♦**Packaging:** Available in 2 Gal. Units

*** 100% Solids Epoxy Setting Mortar * 3 Component Water Washable * Excellent Chemical Resistance* Contributes to LEED®**

♦**Curing:** Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. Allow minimum of 24-48 hours before grouting or light traffic When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** Pro-Line Poxy must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, OSB, luan plywood or gypsum mortar beds. Do not use with glass tile 6" or larger. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Square feet per 2 gallon unit;
45-50 sq. ft. using 3/16" x 3/16" v-notch trowel
35-40 sq. ft. using 1/4" x 1/4" square notched trowel
25-30 sq. ft using 1/4" x 3/8" square notch trowel

♦**Storage:** One year if kept dry in sealed containers.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. If any mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed mortar may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

Pro-Line Poxy Setting Mortar Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	Values
*Open time @ 70°F -	15-20 Minutes
Adjustability @ 70°F -	20-30 Minutes
Bucket life @ 70°F -	60-90 Minutes
Compressive Strength ANSI 118.3-5.6 (ASTM C579)	>6700 psi (471.2 kg/cm2)
Shear Bond Vitreous Tile ANSI 118.3-5.5 14 Days	>1250 psi (88 kg/cm2)
Tensile Strength ANSI 118.3-5.7 (ASTM C307) 7 Days	>2100 psi (148 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

Pro-Line by BONDED®

Data Sheets are subject to change without notice. For latest revision, check our website at www.bondedmaterials.com.
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Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

BONDED®

rev. Sep-12

Pro-Line ProBond

Liquid Admixture & Bonding Agent

Packaging: Available in 1, 5, 55 gallon units

*** 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 40ºF or above 100ºF) 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.

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4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com
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Pro-Line ProBond

Liquid Admixture & Bonding Agent

Packaging: Available in 1, 5, 55 gallon units

♦**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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4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com
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Pro-Line ProCrylic

Premium Acrylic Liquid Additive

Packaging: Available in 1, 5, 55 gallon units

*** Additive for mortars and grouts**
*** Improves water resistance**
*** Use Interior or Exterior**
*** Use in masonry mortars**

♦**Usage:** Pro-Line ProCrylic is a liquid polymer additive designed to be used in place of water to increase performance and bond strength of setting mortars, grouts, and Portland cement mortar mixes. It adds water resistance and improves shock absorption. Substantially increases performance of thin-set mortars for setting all types of tile, stone and setting over hard-to-bond-to surfaces. **Meets ANSI A118.4 and A118.11 installation requirements.**

♦**Suitable Substrates:** Properly prepared plumb and true masonry, concrete, cementitious backer units, cured Portland cement mortar beds, brick, ceramic tile, and stone. Use in areas subject to freeze-thaw cycles. Also for exterior grade plywood (interior only residential and light commercial dry areas), existing ceramic tile, sheet vinyl flooring, VCT, plastic laminates, and cutback adhesive. Used for both interior and exterior applications.

♦**Preparatory Work:** All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦**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.

♦**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.

♦**Plywood Substrates:** EGP, interior only applications. Please refer to individual product technical data sheets for complete application instructions.

♦**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.

♦**Mixing and Application:** Stir before use. Pro-Line ProCrylic can be used full strength or diluted 1:1 with water. Please refer to individual product technical data sheets for complete mixing and application instructions. *Note: If used in cementitious grouts, final color of grout may be affected when used in replace of water, it is recommended to make a sample, allow it to dry and then compare to representative grout color sample.

♦**Clean-up:** Clean with water before material dries.

♦**Storage:** Keep from freezing. Close container after each use. Shelf life 1 year.

♦**Safety:** Do not take internally. Avoid eye and skin contact. If eye contact occurs, immediately flush with water for 15 minutes and consult a physician.

♦**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

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Pro-Line ProLatex

Premium Latex Liquid Additive

Packaging: Available in 1, 5, 55 gallon units

*** Additive for Dry-set mortars**
*** Improves water resistance**
*** Use Interior or Exterior**
*** Use in masonry mortars**

♦**Usage:** Pro-Line ProLatex is a liquid polymer additive designed to be used in place of water to increase performance and bond strength of dry-set mortars such as Pro-Line FloorSet or Portland cement mortar mixes. It adds water resistance and improves shock absorption. Increases performance of non-polymer modified thin-set mortars for setting all types of tile, stone and setting over hard-to-bond-to surfaces. **Meets ANSI A118.4 and A118.11 installation requirements.**

♦**Suitable Substrates:** Properly prepared plumb and true masonry, concrete, cementitious backer units, cured Portland cement mortar beds, brick, ceramic tile, and stone. Use in areas subject to freeze-thaw cycles. Also for exterior grade plywood (interior only residential and light commercial dry areas), existing ceramic tile, sheet vinyl flooring, VCT, plastic laminates, and cutback adhesive. Used for both interior and exterior applications.

♦**Preparatory Work:** All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦**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.

♦**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.

♦**Plywood Substrates:** EGP, interior only applications. Please refer to individual product technical data sheets for complete application instructions.

♦**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.

♦**Mixing and Application:** Stir before use. Pro-Line ProLatex can be used full strength or diluted 1:1 with water. Please refer to individual product technical data sheets for complete mixing and application instructions. *Note: If used in cementitious grouts, final color of grout may be affected when used in replace of water, it is recommended to make a sample, allow it to dry and then compare to representative grout color sample.

♦**Clean-up:** Clean with water before material dries.

♦**Storage:** Keep from freezing. Close container after each use. Shelf life 1 year.

♦**Safety:** Do not take internally. Avoid eye and skin contact. If eye contact occurs, immediately flush with water for 15 minutes and consult a physician.

♦**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

♦ Bonded Materials Company ♦
4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

Pro-Line ProSet

Polymer-Modified Dry-Set Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** Multi-Use mortar with High Bond Strength**
*** Use Interior or Exterior**
*** No V.O.C.**
*** Contributes to LEED®**

♦**Usage:** ProSet is a multi-use high strength bond coat for setting high lug, absorptive, semi-vitreous and vitreous, brick, cement, ceramic, mosaic, natural stone, porcelain, precast terrazzo, and quarry tiles for service in residential and commercial use. It is used in a mortar bed from 3/32" to 3/16" after the tiles have been properly embedded. **ANSI A118.1, A118.4, A118.11, A108.5**

♦**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 ProSet can be used over EGP, drywall (vertical only), and when properly prepared-old cutback adhesive, scarified plastic laminates and vinyl composition flooring.

♦**Preparatory Work:** All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.5. 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.

♦**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.

♦**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 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.

♦**Plywood Substrates:** ProSet may be used over EGP on floors. Wood flooring when placed on top of conventional floor joist or other system, should maintain a substrate deflection not to exceed L/360th of span and L/720th of span for natural stone and that includes both live and dead loads. A gap of 3/16" must be left between sheets of EGP and all materials they abut to allow for expansion. Do not fill expansion joints with setting material. EGP substrate is acceptable for dry, interior applications only. Floors must comply with TCNA instructions for Floors, Interior: Wood Subfloor.

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

♦**Mix:** ProSet dry powder should be added to clean, cool, potable water only at the rate of approximately 6 quarts per 50 lb. bag. Mix thoroughly until smooth and paste-like consistency is achieved and let mortar slake for 10 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.

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Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

rev. Sep-12

Pro-Line ProSet

Polymer-Modified Dry-Set Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** High Bond Strength * Use Interior or Exterior * No V.O.C. * Contributes to LEED®**

♦**Curing:** Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. Allow minimum of 24-48 hours before grouting or light traffic. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** ProSet must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Square feet per 50 lb. bag
45 - 50 sq. feet using a 1/2" x 1/2" square notched trowel
65 - 70 sq. feet using a 1/4" x 3/8" square notched trowel
90 - 100 sq. feet using a 1/4" x 1/4" square notched trowel

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

ProSet Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	ProSet Values
*Open time @ 70°F -	12-15 Minutes
Adjustability @ 70°F -	15-20 Minutes
Bucket life @ 70°F -	8 Hours
Shear Bond ANSI A118.4 and ANSI A118.11	
Non-Vitreous Tile 28 Days	>550 psi (39 kg/cm2)
Vitreous Tile 28 Days	>330 psi (23 kg/cm2)
Non-Vitreous Tile (over plywood) as tested by the ANSI A118.11 standards 28 Days	>200 psi (14 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

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4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

rev. Sep-12

Pro-Line Stone-Veneer-Set

Polymer-Modified Setting Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** High Bond Strength**
*** Use Interior or Exterior**
*** No V.O.C.**
*** Contributes to LEED®**

Usage: Stone-Veneer-Set is used as a mortar bond coat for setting precast, natural stones such as marble, granite and slate, cultured stone and lightweight masonry veneer units for service in residential and commercial use. Stone-Veneer-Set has excellent water and impact resistance, is water-cleanable, non-flammable and ideal for both interior and exterior work. Stone-Veneer-Set provides a permanent installation with higher bond strength and lower material and labor costs. Use Stone-Veneer-Set for placing stone veneer on fireplaces, landscapes, walls, entryways, chimneys and custom accents. Suitable substrates can be either horizontal or vertical and include concrete, masonry, stud walls, galvanized metal lath, exterior grade plywood, and backerboards. Exceeds ASTM C270 bond strength requirements. Material conforms as it pertains to setting of ceramic, stone, or marble tiles. **ANSI A118.1, A118.4, A118.11, A108.5**

Preparatory Work: All surfaces must be dry, structurally sound and not subject to extreme temperatures (below 40°F or above 100°F) during installation. Surfaces must be free of all grease, oil, dirt, dust, sealers, coatings, old adhesive residues, and any other foreign matter.

Stone or tile: Remove any 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.

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. Dry porous concrete should be dampened prior to masonry veneer installations - do not leave puddles or standing water on surfaces.

Non-Cementitious Substrates: Vertical surfaces such as old plaster or painted surfaces that provide bonding problems should be mechanically scarified. They may be covered with a 3/8" to 3/4" coated wire mesh reinforced scratch coat or wall float. After a minimum of 20 hours, the dry-set mortar may be applied to the mortar bed.

Expansion Joints: Expansion joints shall be installed in accordance with local building codes. Expansion joints, control joints and cold joints should never be bridged with setting material.

Mix: Stone-Veneer-Set dry powder should be added to clean, cool, potable water only at the rate of approximately 1 1/2 gallons per 50 lb. bag. Mix thoroughly until smooth and let the mortar slake for 10 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 trowel to the substrate, the mortar will not flow or slump. Do not use mortar after initial set in bucket during use. Remix mortar occasionally but do not retemper mortar.

Application for masonry units: Prior to placing Stone-Veneer-Set, hose down work surfaces in direct sun or hot surfaces to prevent mortar from rapid dry-out. Remoisten work area every hour - surface should remain damp, but not wet. Use a trowel to apply mortar 1/8" up to 1/4" thick. Key in additional mortar up to 1/4" on back of stone with flat side of trowel, then press stone firmly into mortar bed, using soft mallet to set in place. Do not move or tap stone after it has been set firm. Check mortar for complete coverage by periodically removing unit or tile to ensure 100% contact.

Application for tile: 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.

Curing: Minimum cure is obtained in approximately 24 hours depending on ambient temperatures. When used for tile allow minimum of 24-48 hours before grouting or light traffic. When used in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dried prior to water exposure.

Cleaning: Clean off any uncured mortar with clean water only.

Pro-Line by BONDED®

If an installation or materials should be changed outside the detailed instructions, please contact our technical support dept .for assistance.

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Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

BONDED®

rev. Sep-12

Pro Line Stone-Veneer-Set

Polymer-Modified Setting Mortar

Packaging: Available in 50 lb. bags. Gray/White

*** High Bond Strength * Use Interior or Exterior * No V.O.C. * Contributes to LEED®**

Limitations: Stone-Veneer-Set must not be applied directly over hardwood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. Some red, black, as well as all green marbles may warp when installed with setting materials containing water, these marbles along with all resin-backed marbles must be set with Pro-Line Poxy™.

Protection: Protect from freezing for 5-7 days

Coverage: Square feet per 50 lb. bag
25 – 35 sq. feet for Masonry Veneer Units
45 - 50 sq. feet using a 1/2" x 1/2" square notched trowel
65 - 70 sq. feet using a 1/4" x 3/8" square notched trowel
90 - 100 sq. feet using a 1/4" x 1/4" square notched trowel

Storage: One year if kept dry in sealed bags.

Safety: May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

Stone-Veneer-Set Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test	Stone-Veneer-Set Values
*Open time @ 70°F -	12-15 Minutes
Adjustability @ 70°F -	15-20 Minutes
Bucket life @ 70°F –	8 Hours
Compressive Strength ASTM C-109	>3200 psi (225kg/cm2)
Shear Bond ANSI A118.4 and ANSI A118.11	
Non-Vitreous Tile 28 Days	>600 psi (42 kg/cm2)
Vitreous Tile 28 Days	>400 psi (28 kg/cm2)
Non-Vitreous Tile (over plywood) as tested by the ANSI A118.11 standards 28 Days	>250 psi (18 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

Pro-Line by BONDED®

If an installation or materials should be changed outside the detailed instructions, please contact our technical support dept .for assistance.

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BONDED®

rev. Sep-12

Pro-Line Universall Patch

Polymer-Modified Portland Cement Patch & Skimcoat

Packaging: Available in 10 lb. pails & 20 lb. bags. Gray

*** Polymer Modified Patching Material**
*** Featheredge up to 1 1/2”**
*** Use Interior or Exterior**
*** No V.O.C.**
*** Contributes to LEED®**

♦Usage: Universall Patch is designed to patch uneven or rough surfaces. Additional uses as a skim coat, leveler, rapid patch, underlayment, deep patch, and thin patch. After Universall Patch has been allowed to cure completely, surface may be exposed to constant water.

♦Suitable Substrates: Properly prepared concrete, brick, masonry, ceramic tile, Masonite, and cut back adhesive. Universall Patch can also be used under vinyl flooring, linoleum, carpet, ceramic tile, porcelain tile, natural stones, brick, masonry, slate, granite, or marble. Exterior grade plywood and OSB (interior dry areas only).

♦Preparatory Work: All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) 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. Deflection shall not exceed L/360.
Caution: DO NOT SAND ASBESTOS FLOORS!

♦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.

♦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.

♦Plywood Substrates: Apply spot patching only to wood surfaces. Gaps of 1/16” to 1/4” must be allowed between sheets of plywood for expansion. Joints must be covered with adhesive tape prior to application of metal lath and must be secured with screw-type nails and glued where possible.

Old Cutback Adhesive: Loose material and ridges should be scraped off and surface must be thoroughly dried, hard and bonded. Wet mop the surface to remove any dust, dirt, and any other foreign material before applying Universall Patch. Allow surface to dry prior to application.

♦Ceramic Tile Substrate: Existing ceramic, marble, stone, terrazzo tile substrates 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.

♦Application as an embossing leveler: Vinyl/VCT must be clean and well bonded to the substrate. Remove any loose pieces of vinyl/VCT flooring. Roughen new or smooth surfaces. The installation must be thoroughly rinsed and dried. Avoid thick or heavy applications. An embossing leveler need only be thick enough to fill in the depressions of the floor covering. Make sure coverage is smooth and uniform; avoid over-troweling. A second application may be required on deeply embossed floors.

♦Mix: Universall Patch should be mixed in a clean container with clean, cool, potable water at room temperature or lower. Mix only enough material that can be placed within 10 minutes. Always place powder into the water at a slow rate. Mix with a slow speed drill at 300 RPM or less until a smooth, creamy consistency is achieved. Do not entrap air into the mixture.
Do not use mortar after initial set in bucket. During use, remix mortar occasionally.

♦Application: Always dampen substrate to a surface saturated dry condition so the Universall Patch does not flash dry. Place Universall Patch until desired thickness is achieved. Universall Patch will go from a featheredge up to 1 1/2 inches. Finish product with a clean steel trowel immediately. Use caution to not over trowel. All expansion joints must be recognized and continue through to the finished surface. Do not cover any joint with Universall Patch. Once Universall Patch has dried completely, use flat side of trowel or fine grade sand paper to sand down to a smooth finish.

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Pro-Line Universall Patch

Polymer-Modified Portland Cement Patch & Skimcoat

Packaging: Available in 10 lb. pails & 20 lb. bags. Gray

*** Polymer Modified Patching Material * Use Interior or Exterior * No V.O.C. * Contributes to LEED®**

♦**Curing:** Minimum cure is obtained in approximately 30 minutes. When used in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 14 days and be thoroughly dry prior to water exposure.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** Universall Patch must not be applied directly over hardwood, cushion backed or perimeter bonded sheet vinyl, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, fiberglass, plastic, epoxy or urethane floor coatings, luan plywood or gypsum mortar beds. Improperly cured or wet plywood, particle board or stripwood surfaces are not considered suitable substrates. All substrates must be structurally sound and meet all local regulations. All bond breakers such as dust, sealers, old adhesives, curing compounds, oil, and gypsum based materials, surface hardeners; paints, old flooring, and any loose or foreign matter must be removed before application. Cement substrates and special surfaces must be of proper profile.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Per 20 lb. bag
20-25 Sq Ft @ 1/8" Thick
80-100 Sq Ft @ 1/64" Skimcoat

♦**Storage:** One year if kept dry in sealed bags.

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

Universall Patch Technical Data (based on 70°F [21°C] and 50% relative humidity)

Test		Universall Patch Values
*Pot Life @ 70°F -		35 Minutes
Initial Set @ 70°F -		12-15 Minutes
Final Set @ 70°F -		30 Minutes
Drying Time before applying Floor Covering		30-60 Minutes
Compressive Strength		
ASTM C-109	28 Days	>3300 psi (232 kg/cm2)
ASTM C-348	28 Days	>600 psi (42 kg/cm2)

**Open times vary based on temperature, humidity, substrate, trowel size, and job-site conditions.*

♦ Bonded Materials Company ♦
4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
Ph. 623-873-0001 Toll Free 877-726-6333 www.bondedmaterials.com

Pro-Line Wall Float

Portland Cement Based Wall Mortar 3/8” - 5/8”

Packaging: Available in 75 lb. bags -Gray

*** Traditional Wall Mud**
*** Use Interior or Exterior**
*** No V.O.C.**
*** Contributes to LEED®**

♦**Usage:** Wall Float is designed for both interior and exterior use and can be applied over the following items with or without the use of metal lath: Portland cement, plaster, haydite block, hollow clay tile, brick, and gypsum board. Wall Float is not affected by prolonged contact with water. Use interior or exterior, walls or ceilings, superb workability over wood or metal studs. All ingredients are pre-measured, no waste. Convenient for small or large jobs, creates a dense substrate on which to apply ceramic tile or stone. **ANSI A108.1A**

♦**Suitable Substrates**: Portland cement, plaster, haydite block, hollow clay tile, brick, EGP, and Gypsum wall board (interior dry areas only). Metal lath must be used on: waterproof or vinyl covered wall board, exterior grade plywood, Masonite®, metal products, plastic products, cement asbestos products. Metal lath must be used on all commercial applications.

♦**Preparatory Work:** All substrates must be clean, dry, and structurally sound and not subject to extreme temperatures (below 40ºF or above 100ºF) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.1, A108.4, A108.5, A108.6. 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.

♦**Application:** For areas not requiring metal lath, attach your temporary screeds to the surface to be floated in. Screeds are normally spaced approximately 4 feet apart. You are now ready to float your Wall Float to the desired thickness of 3/8” - 5/8”. The float coat should be cut vertically and horizontally about every 2 feet. Cuts should correspond with the tile joints. When using Wall Float on a surface which has metal lath, the scratch coat is completely eliminated as you can float the Wall Float to your desired thickness. You may start setting tile the same day. A two coat application is required over open stud framing. Follow details in T.C.N.A. Handbook. All installations must conform to ANSI A108.1 or ANSI A108.5.

♦**Mix:** Wall Float should be mixed in a clean mortar box using clean, cool, potable water or latex admixture such as Pro-Line ProLatex at the appropriate rate of 1 3/4 - 2 gallons of water per 75 lb. bag. Smaller amounts may be mixed in a 5 gallon pail using an electric drill at a low RPM (300 or less). Let material slake for 10 - 15 minutes before use. Use of ProLatex admixture increases bond strength, flexibility and is recommended for demanding applications including exterior applications.

♦**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.

♦**Curing:** Under normal job conditions, a minimum of 24 hours cure at 70°F (21°C) is adequate, but longer mortar bed cures up to 10 days are desirable.

♦**Cleaning:** Clean off any uncured mortar with clean water only.

♦**Limitations:** Wall Float must not be applied over unsound structures. Some above grade, metal studs, and wooden structures may require additional structural support prior to placement due to the weight of this product. Consult an architect or structural engineer for these cases. This product is not affected by prolonged water contact but it does not form a water-proof barrier.

♦**Protection:** Protect from freezing for 5-7 days

♦**Coverage:** Approximately 37 square feet per 75 lb. bag

♦**Storage:** One year if kept dry in sealed bags.

Pro-Line by BONDED®

If an installation or materials should be changed outside the detailed instructions, please contact our technical support dept .for assistance.

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BONDED®

rev. Sep-12

Pro Line Wall Float

Portland Cement Based Wall Mortar 3/8” - 5/8”

Packaging: Available in 75 lb. bags Gray

*** Traditional Wall Mud * Use Interior or Exterior * No V.O.C. * Contributes to LEED®**

♦**Safety:** May cause eye, skin, or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete, or grout may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. 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.

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Installation of Metal Backed Medallions

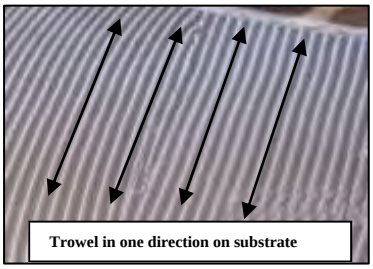
Substrate
Surface is to be clean, dry, no sealers, curing compounds, oils, old glue, paint, etc. Water should penetrate the slab quickly and fully in a manner of seconds to provide strong bond. This cannot be emphasized enough, even the smallest amounts of contaminates cause failures. If absorption is slow or water beads appear on surface, grind, or shot-blast surface to correct.

Back surface of the medallion (aluminum side) Roughen with grinder or coarse sand paper to remove oils, greases, or coating, bright finish of the metal should be visible, when finished surface should be wiped clean with a rag.

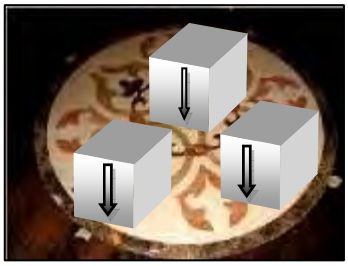
Use an 100% solids epoxy setting mortar. Use Pro-Line Poxy or C-Cure ColorSet Epoxy. **Do **not** use products that contain Portland cements because they will have a negative reaction with the aluminum.*

Back of Medallion,
Apply skim coat of epoxy to back of metal with flat side of trowel.

Apply the epoxy setting mortar,
Straight trowel rows to avoid air pockets use correct notched trowel. Apply **sufficient amounts** to prevent hollow-sound and maintain **90% or higher contact**.



Apply weight to flatten,
After setting medallion apply at least 100 lbs. to flatten medallion.



Pro-Line Aqua Seal as Moisture Barrier Application

Purpose: Slab-on-grade installations of resilient, wood flooring, carpet, and tile when a moisture barrier is required. Proper installation will reduce moisture transmission as high as 12 lbs. to below 3 lbs per 1000sq.ft. Following information includes AQUA SEAL WATERPROOFING MEMBRANE used as the moisture barrier and UNIVERSALL PATCH as a cement top coat.

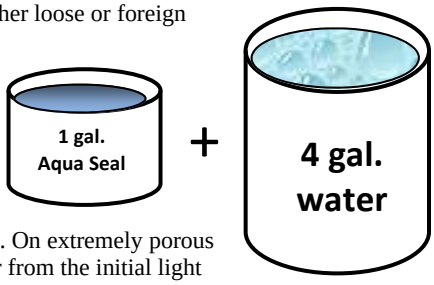
Site Conditions: Building interior should be weather enclosed, acclimated with a minimum slab temperature of 55° F or warmer. The moisture transmission shall be less than 12 lbs. per 1000 sq.ft, based on ASTM F1869-98 Calcium Chloride testing for this method of application. Readings or Calcium Chloride testing results higher than 12 lbs are not suggested for this method, contact our technical department for concerning these extreme conditions.

MOISTURE BARRIER APPLICATION

STEP 1. **Substrate prep**

All surfaces must be structurally sound. Surfaces shall be dry and free of all curing compounds, grease, oil, dust, dirt, old adhesive residue, waxes, sealers, efflorescence, gypsum-based patching compounds, and any other loose or foreign matter.

STEP 2. **Primer Coat**



All slab surfaces to receive Aqua Seal must be primed with a diluted coat consisting of: one (1) part Aqua Seal diluted with four (4) parts clean, cool water. Mix in a clean bucket at low speeds until lump free, fluid solution is attained. The primer can be brushed, rolled, or sprayed to achieve an even coat. Brush or roller primer coat to the floor at a rate of 250-300 sq. ft./gallon. Drying time will depend on ambient conditions but is normally less than one hour. On extremely porous surfaces, two applications may be required. Drying is indicated by darkening of aqua-blue color from the initial light pale blue color.

STEP 3. **Application Coat**

Aqua Seal can then be applied full strength to the "primed" slab or concrete per application instructions in the Aqua Seal data sheet or packaging directions.

COVERAGE:

Primer Coat - Diluted Aqua Seal as "Primer" at 1 part membrane to 4 parts water is 250 to 300 sq. ft. per gallon. One gallon of undiluted Aqua Seal will make 5 gallons of primer.
Finish Coat -Undiluted Aqua Seal: 190 - 200 sq. ft. per 5 gallons at 40 mils wet film thickness, 20 mils dry.

STEP 4. **(Required for resilient or wood)**

Encapsulation- Apply Universall Patch at 1/8" application layer thickness. The skim coat or encapsulation layer is to achieve a smooth finish, cementitious surface for resilient flooring and/or require a cementitious surface for the finish flooring adhesive to properly tackify or set/bond.

Ceramic Tile or Stone installation- can be applied directly to dry membrane. Use a Latex-Polymer modified dry-set mortar per product directions and literature. ANSI 118.4, ANSI 118.11. All surfaces must be structurally sound and subject deflection not to exceed 1/360th of the span. Expansion joints shall be installed in accordance with local building codes and manufacturer's instructions per the specifications detailed in EJ 171 in the T.C.N.A. Handbook. Expansion joints, control joints and cold joints shall never be bridged with setting material.

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Tools and Supplies needed for Installation of Pro-Line Poxy Grout

Pro-Line Poxy™ is a 100% solids blend of epoxies and special colored silica fillers and offers the high performance, color uniformity, durability, and stain resistance with extraordinary ease of use. Pro-Line Poxy™ used in place of traditional cement grout, is applied using a standard hard rubber float.

Being prepared before starting an epoxy application is extremely important. Having all the necessary tools and supplies ready to go will make your job go smoothly from start to finish.

Checklist for application and cleaning:

- ☑ Hard rubber float
- ☑ Buckets
- ☑ Sponges
- ☑ Rubber gloves
- ☑ White scrub pads
- ☑ Large terry cloth or cotton towels
- ☑ Scrub pads (white)
- ☑ Tape
- ☑ Proper size notched trowel *(if using as setting material)*

Checklist for mixing:

- ☑ Low speed drill (300 rpm or less)
- ☑ Margin trowel
- ☑ Buckets
- ☑ Plastic to protect mixing area

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Mixing of Pro-Line Poxy

Pro-Line Poxy™ is a 100% solids blend of epoxies and special colored silica fillers and offers the high performance, color uniformity, durability, and stain resistance with extraordinary ease of use. Pro-Line Poxy™ used in place of traditional cement grout, is applied using a standard hard rubber float. *Care must be taken to mix properly, per the manufacturer's directions. When used as a grouting material in exterior applications, color may lighten or yellow with extended UV exposure.*

Add both tubs of Part A and Part B into a clean pail

Stir to blend to uniform color.

Add contents of Part C and thoroughly mix

An electric drill may be used to mix the product if used at a low RPM (300 or less). Use caution - do not over-mix.

Grouting and cleaning Pro-Line Poxy

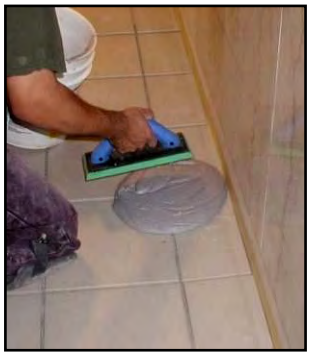
Pro-Line Poxy™ is a 100% solids blend of epoxies and special colored silica fillers and offers the high performance, color uniformity, durability, and stain resistance with extraordinary ease of use. Pro-Line Poxy™ used in place of traditional cement grout, is applied using a standard hard rubber float.

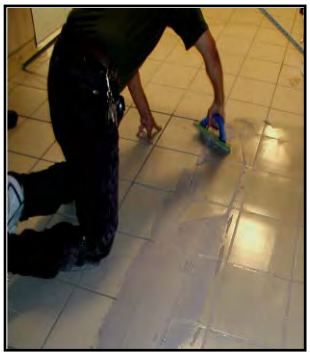
Application:
Apply with hard rubber float held at a 45° angle to surface using diagonal strokes to fill joints completely.

Remove excess grout with rubber float held at 90° angle to surface.

Clean initial residue with ample amounts of clean water and sponge using as little pressure as possible and changing the water often. Use circular motion to clean surface.

After initial cleaning with sponge remove any additional residue with a slightly damp towel or cloth by dragging over surface towards you. Let dry, check for any remaining residue and repeat if necessary.





For best results, surface, grout, and tile should be at room temperature (70ºF to 75ºF). Do not apply at temperatures below 50ºF, or above 100ºF. Shade areas from direct sunlight to lower temperatures during application. Epoxy materials are affected by temperature variations. Cooler temperatures will decrease workability. Warmer temperatures will reduce sag resistance. To extend working time, remove material from mixing container and pour it on a cool substrate as soon as possible. Material generates heat in container, which causes the material to set up quicker

Curing: Minimum cure is obtained in 24 hours, protect surface from heavy traffic for at least 72 hours. Protect from chemicals for at least 14 days, using only clean water for cleaning until then.

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Using Pro-Line Poxy as a Setting Material

Pro-Line Poxy can be used to produce an impermeable, high strength mortar, and is highly resistant to chemicals. Suitable backing when used as a setting mortar include properly prepared brick, ceramic tile, glass mesh mortar units, steel, glass, fiberglass, masonry concrete, and cured Portland cement mortar beds.

For best results, surface, grout, and tile should be at room temperature (70ºF to 75ºF). Do not apply at temperatures below 50ºF, or above 100ºF. Shade areas from direct sunlight to lower temperatures during application. Epoxy materials are affected by temperature variations. Cooler temperatures will decrease workability. Warmer temperatures will reduce sag resistance. To extend working time, remove material from mixing container and pour it on a cool substrate as soon as possible. Material generates heat in container, which causes the material to set up quicker

Key mortar into substrate with flat side of trowel

Then apply additional mortar with suitable notched trowel to provide mortar bed of 1/16” for ceramic tiles and 1/8” mortar bed for pavers and quarry tiles.

Trowel mortar rows in one direction, set tile and move back and forth ¼” perpendicular to mortar rows

Back buttering of tile may be required to ensure 100% coverage. Large tiles > 8" x 8" require back butter to provide full bedding and firm support.

Preparatory Work: All surfaces must be dry, structurally sound and not subject to extreme temperatures (below 40°F or above 100°F) during installation. Detailed instructions may be found in the T.C.N.A. Handbook and ANSI A108.6 Surfaces 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.
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. Dry porous concrete should not be dampened prior to installation of Pro-Line Poxy setting material.
Plywood Substrates: Plywood surfaces must not exceed a deflection of L/360 span. Pro-Line Poxy is suitable for exterior grade plywood (interior only). Fill gaps between plywood completely with Pro-Line Poxy and be sure to protect surface from exposure to water.
Additional Substrates: It is required that surfaces such as steel, glass and fiberglass be abraded and cleaned prior to setting tile to assure proper bonding.
Expansion Joints: Expansion joints, control joints and cold joints should never be bridged with setting material. Follow installation procedures EJ171 as outlined in TCNA Handbook.
Curing: Minimum cure is obtained in 24 hours, protect surface from heavy traffic for at least 72 hours. Protect from chemicals for at least 14 days.
Cleaning: Clean off any uncured mortar with clean water only

Coverage: When used as setting material:

35 square feet per gallon with 3/16” x 1/4” notched trowel

21 square feet per gallon with 1/4” x 1/4” notched trowel

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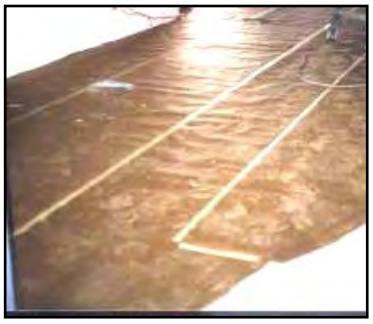
Cleaning and Maintenance of Pro-Line Poxy Grout

After Final Clean: Some sticky film or tacky smeared haze on tile surface, may appear as streaks, like a waxed car with residue wax
Needs to be removed in 12-72 hours (within 3 days)
Removal with mild dish soap or cleanser with a white nylon scrub pad



"Protect and Cover" good work from other trades

Caution: <u>Does not self clean</u>, *"Sometimes epoxies are over-sold to the customer as never needs cleaning…"* They will need regular maintenance scheduled mopping

Wait 14 days before using acid or chemical cleaners
24 hours -14 days use mild detergent and/or clean water
14 Days achieves <u>full cure - Chemical resistance</u>.

Once epoxy is fully cured it is very resistance to staining. Regular cleaning is necessary to prevent build up and remove surface contaminates on the grout.

Most cleaners leave a residue behind that attracts more dirt/contaminates. Make sure to rinse thoroughly with lots of clean water. Change water often when cleaning and rinsing.

The absolutely best way to clean grout is to apply the cleaner and then vacuum ("shop vac") up the dirty water. This lifts the dirt off the joint. Apply rinse water and vacuum that water up. This lifts off any remaining soap film.

***Note:** Do not use non-rinse, enzyme-based cleaners to maintain 100% Solids Epoxy Grout for the reason that if the enzyme-based cleaner is not rinsed after application, it will break down the organic epoxy grout, causing permanent damage. Testing has revealed that non-rinse, enzyme-based cleaners damage epoxy grout and soften the surface. Results showed the enzymes will attack the epoxy as they would any organic material, causing the epoxy polymer to break down, which softens the grout to a degree that it can be washed away during regular or daily maintenance.

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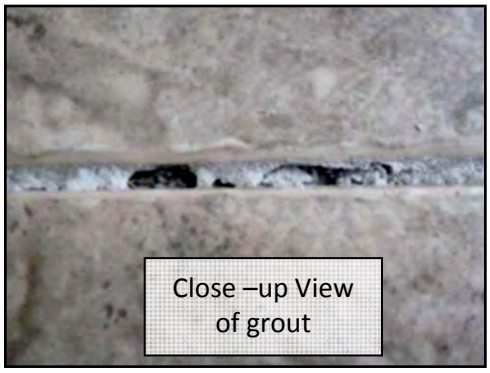
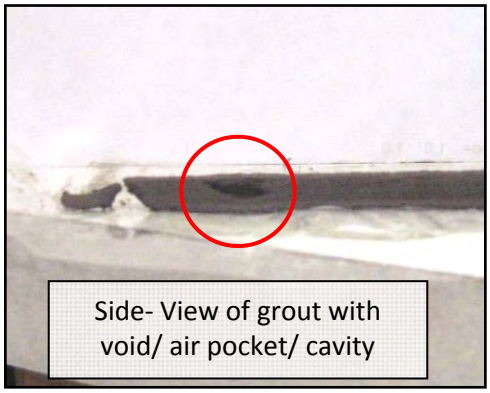
"Soft Grout" or "Dog Holes" in grout lines. Are pets really the issue?

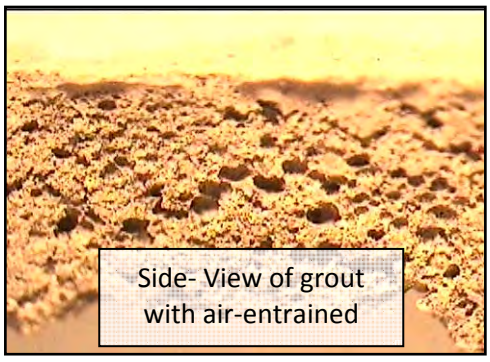
Symptom:
"Soft Grout" or "Dog Holes" in grout lines start to appear in narrow ⅛" – ¼" joints on floor installations. Mainly issues are seen in walkway and pathway floor areas.


Close –up View of grout

Pets no matter what size or breed are not the cause of holes that appear in the grout joints. Our pet's toenails only discovers or pierces the voids that are under the surface of the grout due to poor mixing and lack of full application of cement grouts.


Side- View of grout with void/ air pocket/ cavity

Causes: Poor grout performance is due to not fully packing/filling the grout into the joint during installation. Other causes can be mixing the grout with a high speed or improper mixing wand that entrains air into the grout thus weakening it. Another cause, and also is also an error in the re-grout or repair is make the grout more fluid or flowable/soupy.


Side- View of grout with air-entrained

Prevention/ Repair: *narrow ⅛" – ¼" joints*, will require a paste consistency for the grout when installing and the effort to **completely compact and fill the joint**. Damp cure your grout with clean water moping once a day for 3- consecutive days after an over-night cure. This will also enhance the hardness of the grout. Remember voids and air-entrain are at the installing stages. The extra time to detail is a great advantage to the longevity and durability of the installation.

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Pro-Line by Bonded Materials
Low or No VOC Products

The following PRO-LINE by BONDED MATERIALS product information is provided for use in building projects that need to comply with LEED certification.

BONDED MATERIALS produces Portland cement based setting and grouting materials.

Intent (referenced from USGBC v2.2 2005)
Reduce the quantity of indoor air contaminants that are odorous, irritating, and/or harmful to the comfort and well-being of installers and occupants.

Requirements (referenced from USGBC v2.2 2005)
All adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) comply and or surpass the requirements of the following reference standards:

❑ Adhesives, Sealants, and Sealant Primers: South Coast Air Quality Management District (SCAQMD) Rule #1168, effective date of July 1, 2005 and rule amendment date of January 7, 2005.

Pro-Line Product	VOC's
AllFlex	0%
AllFlex Lite	0%
AllSet	0%
Aqua Seal	0%
Deck Mud	0%
FloorSet Modified	0%
Glass Bond L	0%
Glass Bond P	0%
LevelBond	0%
LevelBond Primer	0%
Medium Bed Modified	0%
Medium Bed Premium	0%
MultiTile Thinset	0%
Pool Grout	0%
Stone Veneer Set	0%
Universal Patch	0%
VSet	0%
VSet Modified	0%
Wall Float	0%

Pro-Line Aqua Seal over Gyp-Crete®

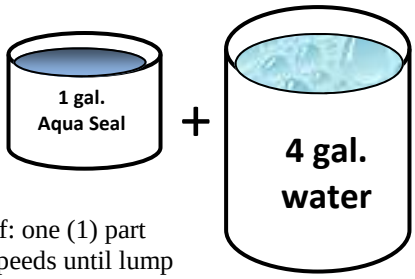
Purpose: Installing tile, stone and other floor coverings over Gyp-Crete®

Site Conditions: Building interior should be weather enclosed, acclimated with a minimum temperature of 55° F or warmer before apply Aqua Seal. Check for dryness using the recommended procedure of taping a 24" x 24" (609 mm x 609 mm) section of plastic to the surface of the underlayment; or lay a flat, 24" x 24" (609 mm x 609 mm), high-density, smooth rubber mat weighted down on the underlayment surface. If no condensation or darkening of the slab occurs in 48 to 72 hours, the underlayment is considered dry and ready for the following steps.

AQUA SEAL APPLICATION

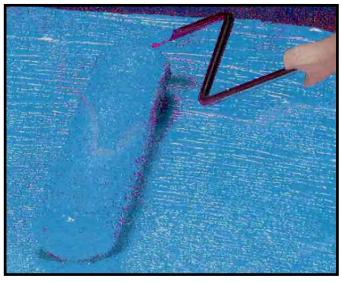
Substrate prep

All surfaces must be structurally sound. Surfaces shall be dry and free of all curing compounds, grease, oil, dust, dirt, old adhesive residue, waxes, sealers, efflorescence, and any other loose or foreign matter.



Primer Coat

All slab surfaces to receive Aqua Seal must be primed with a diluted coat consisting of: one (1) part Aqua Seal diluted with four (4) parts clean, cool water. Mix in a clean bucket at low speeds until lump free, fluid solution is attained. The primer can be brushed, rolled, or sprayed to achieve an even coat. Brush or roller primer coat to the floor at a rate of 250-300 sq. ft./gallon. Drying time will depend on ambient conditions but is normally less than one hour. On extremely porous surfaces, two applications may be required. Drying is indicated by darkening of aqua-blue color from the initial light pale blue color.



Application Coat

Aqua Seal can then be applied full strength to the Gyp-Crete® per application instructions in the Aqua Seal data sheet or packaging directions.

COVERAGE:
Primer Coat - Diluted Aqua Seal as "Primer" at 1 part membrane to 4 parts water is 250 to 300 sq. ft. per gallon. One gallon of undiluted Aqua Seal will make 5 gallons of primer.
Finish Coat -Undiluted Aqua Seal: 500-550 sq. ft. per 5 gallons at 30 mils wet film thickness.

Ceramic Tile or Stone installation- can be applied directly to dry membrane. Use a Latex-Polymer modified dry-set mortar per product directions and literature. ANSI 118.4, ANSI 118.11. All surfaces must be structurally sound and subject deflection not to exceed 1/360th of the span. Expansion joints shall be installed in accordance with local building codes and manufacturer's instructions per the specifications detailed in EJ 171 in the T.C.N.A. Handbook. Expansion joints, control joints and cold joints shall never be bridged with setting material.

(Required for resilient or wood)
Encapsulation- Apply Universall Patch at 1/8" application layer thickness. The skim coat or encapsulation layer is to achieve a smooth finish, cementitious surface for resilient flooring and/or require a cementitious surface for the finish flooring adhesive to properly tackify or set/bond.

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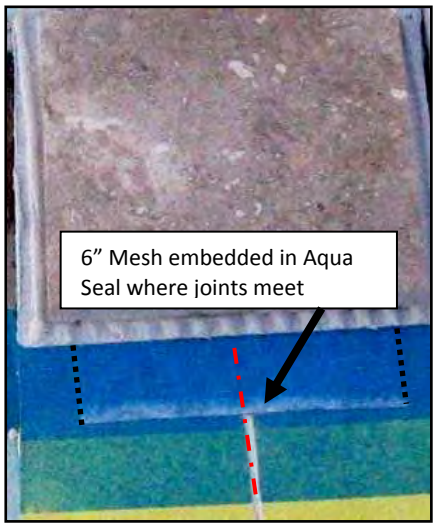
Applying Pro-Line Aqua Seal as a water resistive barrier over DensGlass™ Exterior Sheeting

Purpose: Providing a water resistive barrier under ceramic tile or stone over DensGlass™ Exterior Sheeting.

Site Conditions: Sheeting on building exterior should be dry; air temperature should be a minimum of 55° F or warmer before applying Aqua Seal.

Substrate prep
**DensGlass™ Exterior Sheeting needs to be installed per manufacturer's instructions. All surfaces must be structurally sound. Surfaces shall be dry and free of all grease, oil, dust, dirt, old adhesive residue, waxes, sealers, efflorescence, and any other loose or foreign matter.



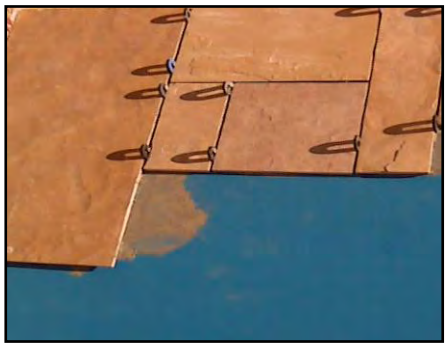
AQUA SEAL APPLICATION

Seam Prep
All seams and corners are required to have 6" mesh embedded in Aqua Seal before applying first coat. Gapping between sheets should not exceed 1/8".

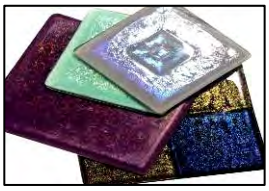
Application Coat
Use a rough textured synthetic roller at 3/4", sprayer, or 3/16" x 1/4" V-notched trowel. If using trowel, flatten ridges after initial application. If using roller, apply an even film with overlapping strokes. If using sprayer, flow rate should be between 1.0 and 1.5 gpm at 1900 to 2300 psi. Tip orifice should be .025 to .029 and should be applied with even, overlapping strokes. Aqua Seal is bright aqua in color when wet and dries to a darker blue. After initial coat, apply second coating at right angle to first application after visually inspecting first applications for pinholes and voids. Combined dry coating should be at least 47 mils (0.047") thick or a minimum of 93 mils (0.093") when wet and should not exceed 125 mils (0.125") when wet.

COVERAGE:
Aqua Seal: 5 gallon pail: 175 - 200 sq. ft. at 93 mil thickness when wet, 47 mils dry

Ceramic Tile or Stone installation- can be applied directly to dry membrane. Use a Latex-Polymer modified dry-set mortar per product directions and literature. ANSI 118.4, ANSI 118.11. All surfaces must be structurally sound and subject deflection not to exceed 1/360th of the span. Expansion joints shall be installed in accordance with local building codes and manufacturer's instructions per the specifications detailed in EJ 171 in the T.C.N.A. Handbook. Expansion joints, control joints and cold joints shall never be bridged with setting material.



Glass Tile Installation using Pro-Line Glass Bond P



While the use of glass has been growing, the installation techniques have been limited to a few industry approved methods. The method used below conforms to ANSI A108.16. This technical bulletin is a guideline for installing paper-faced, back-mounted, edge-mounted, or clear film face-mounted glass mosaic tile, 3/16 in. and thicker, using the direct bond method over Portland cement mortar beds, cured seven days minimum, and cementitious backer units (CBU's). **This document assumes that the substrate has been prepared according to industry and manufacturer standards.

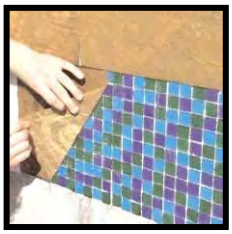
1. Using the flat side of the trowel to initiate the bond coat, firmly apply the setting material into the substrate.

2. With additional setting material, using an appropriate sized V-notch trowel, comb the notches full to establish the proper depth of the setting bed.

3. Using the flat side of the trowel, flatten the notches to achieve a smooth, consistent setting bed.

4. Apply Glass Tiles into the setting bed using light, even pressure to establish 100 % coverage.

5. To achieve a uniform flat surface tap lightly using a wooden beating block and a hammer.



Paper faced mounted sheets require 15-30 min. of set time before removal of paper and then align tiles. Glass tile is a reflective material and any inconsistencies in your substrate will show after the tile is installed.

Setting material should cure a minimum of 24 hours before grouting. Longer cure times are necessary when installed over some substrates.

Grouting:

1. Apply modified grout with a rubber grout float forcing grout into joints until full.
2. Grout joints shall be full and uniformly finished. Due to the impervious quality of glass, grout will take longer to set before you do the initial cleaning.
3. When the grout turns dull use dry cheesecloth for the first cleaning and to wick the remaining moisture from the grout.
4. After the grout turns dull again smooth the grout with a clean, lightly damp sponge.
5. The day after installation, remove any grout film or haze using a soft cloth and mild detergent solution.

NOTE – Not all ANSI A118.4 latex modified thin-sets, whether spray dried polymer or two part bonding mortar systems, are suitable for installing glass tile. It is the responsibility of the specification writer and the installer to confirm with the glass tile and setting material manufacturers the use of required setting materials, method, and cure times.

Expansion: Glass tile has a high degree of expansion and contraction requiring the installation of expansion joints. Size, location, and type, must be designated by an architect, builder or design professional, and shown on drawing details. Maximum spacing between movement joints should be 8 ft.-12 ft. on center for exterior applications and 20 ft.-25 ft. on center for interior applications, between adjoining dissimilar materials, ceilings and perimeter. For additional recommendations regarding expansion joints, including applications for extreme temperature variations, refer to TCA EJ171-05 or ANSI specification A108.01 Paragraphs 3.7 thru 3.7.4.1.1-2005.

Pro-Line by BONDED

This information is given as generalized reference; see specific product instructions or product sheets for detailed information.
If an installation and materials should be change outside the detailed instructions, please contact our technical support dept .for assistance.

BONDED

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Cleaning Grout using AllClean!

AllClean Sulfamic Acid Crystals is a fast acting, mild acid cleaner for textured, non polished, natural and manufactured surfaces. AllClean removes sanded grout haze and mortar residue, joint cement, lime and hard water deposits, efflorescence, rust and other heavy dirt and grime. AllClean is suitable for interior and exterior use. AllClean will help even out uneven colored grout installations. Do not use on acid sensitive surfaces. Allow newly grouted and concrete surfaces to cure a minimum of 7 days prior to using.

Sample Testing:
Due to the differences of each material, several inconspicuous test patches should be completed to assure maximum performance. Users must determine the suitability of the product for their intended use.

STEP 1: MIXING: Mix 2 pounds of **AllClean** to 5 gallons of water and mix well being sure all the crystals are dissolved.

STEP 2: WATER: Pre-soak or saturate the grout joint with clean water and let stand for 3-5 minutes. Remove the excess with either a rag or mop.

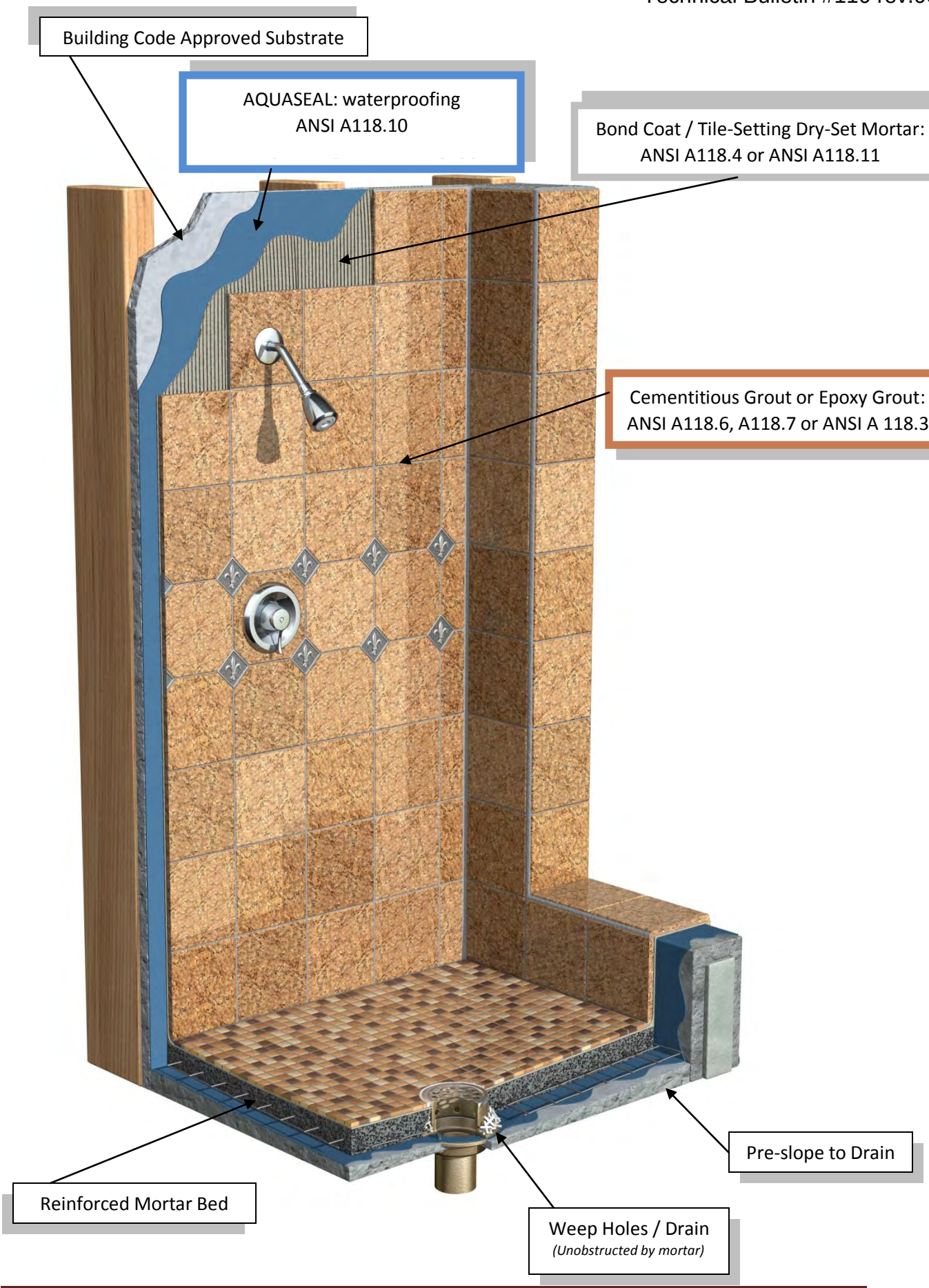
STEP 3: APPLY AllClean: Apply "mixed" solution from **STEP 1** to the surface. Always protect neighboring surfaces including wood, carpet, metal, landscaping and other surfaces.

STEP 4: AGITATE: After the **AllClean** has been on the floor for about 3-5 minutes, agitate with a medium bristle grout brush or standard scrub brush. Use a towel or wet-dry vacuum to remove excess material.

STEP 5: NEUTRALIZE: Rinse floor with water similarly to **STEP 2**. Let the water sit for a couple minutes and then remove with towel or a wet-dry vacuum.

***Note: Acids, no matter how mild, may etch, lighten or alter the color of tile, cementious and natural stone surfaces. Repeated acid washing may damage some surfaces.*

Caution:
Sulfamic Acid Crystals *contain acid crystals. Keep away from eyes and skin. Do not inhale or swallow. Chemical resistant gloves and respirators should be worn at all times. Use in a well-ventilated area. Good ventilation means fresh air is flowing in such a way to feel a slight breeze. Continue to ventilate until odors are completely eliminated. Inhaling odors can be harmful. Keep away from heat and flames. Avoid prolonged contact with skin. Keep small children and pets out of the area until products or surfaces have thoroughly dried.* ***Refer to the MSDS for additional information.***



Bonded Materials Co: Shower Illustration

Chemical Resistance of Pro-Line Poxy Grout

Pro-Line Poxy™ is a 100% solids blend of epoxies and special colored silica fillers and offers high performance, color uniformity, durability, and stain resistance with extraordinary ease of use. Pro-Line Poxy™ used in place of traditional cement grout, is applied using a standard hard rubber float. Pro-Line Poxy™ can be used to fill joints from 1/16" to 1/2". Do not exceed 3/16" on vertical applications. In addition it can also be used to produce an impermeable, high strength mortar, and is highly resistant to chemicals. It may be used for both floor and wall installations. Pro-Line Poxy™ is water cleanable before curing and easy to work.
ANSI A108.4, A108.6, A118.3

Chemical Resistance Conditions After 7 Days Exposure at 80°F.

Petroleum Product:	
Benzene	P
Toluene	P
Mineral Spirits	E
JP - 4C Jet Fuel	E
Gasoline	E
Crude Oil	E
Solvents:	
Methyl Isobutyl Ketone	P
Acetone	P
Butyl Acetate	E
Cellosolve Acetate	E
Dibutyl Phthalate	E
Methyl Alcohol	G
Ethyl Alcohol	E
Ethylene Glycol	E
Butyl Cellosolve	F
Carbon Tetrachloride	F
Chlorothane	F
Methylene Chloride	P
Acids. Organic	
Citric Acid (10%)	E
Citric Acid (50%)	G
Acetic Acid (10%)	G
Acetic Acid (50%)	P
Lactic Acid (10%)	E

Acids. Inorganic:	
Nitric Acid (10%)	F
Nitric Acid (50%)	P
Sulfuric Acid (10%)	G
Sulfuric Acid (50%)	G
Hydrochloric Acid (10%)	G
Hydrochloric Acid (37.6%)	G
Phosphoric Acid (85%)	G
Chromic Acid (10%)	G
Chromic Acid (50%)	G
Inorganic Chemicals:	
Sodium Hydroxide (10%)	G
Sodium Hydroxide (50%)	G
Ammonium Hydroxide (10%)	G
Armrlonium Hydroxide (28%)	G
Sodium Hypochiorite (10%)	G
Hydrogen Peroxide (30%)	G
Pool Chlorine Water	E
Sodium Carbonate	E
Ferric Chloride	E
Miscellaneous:	
Sea Water	E
Cola Syrup	E
Hydraulic Fluid}	E
Brine	E

E Excellent (unaffected)
G = Good (slight softening)
F = Fair (softening)
P = Poor (evidence of disintegration)

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Guide to Colored Grout Uniformity

Colored grout when properly installed will enhance the beauty of any tile installation. However, colored grouts are often used improperly and remain as one of the largest issues facing the tile contractor industry. Grouting is usually the last and final step in tile installation and is often left to those on the job with the least amount of experience. The tile contractors can assist in reducing the number of callbacks for grouting issues by placing as much emphasis on proper grouting procedures as they do for floor layout and tile installation.

Colors shown are representative of colors manufactured as accurately as can be produced using the finest methods of printing and reproduction. The final color of the installed joint may vary from the printed sample.

Inconsistent Grout Color

Colored grouts, like concrete are a combination of Portland cement and an inert aggregate. It is not uncommon for grout, concrete driveways, or sidewalks to show discoloration, inconsistent or lighter/darker color then samples. This is mainly due to the uneven drying of the cement and is beyond the control of the manufacturer, distributor and installer.

Inconsistent grout color is a phenomenon where colored grout dries to its expected color in some areas, a darker color in some areas and varying shades in between. The main cause for this variation in color is uneven drying of the Portland cement in the grout. Inconsistent grout color is not considered a manufacturing defect due to the inconsistent nature of Portland cement.

Inconsistent grout color is common after repairs are made to existing grout and is not considered an installation or product defect. There are jobsite conditions and factors which create the conditions for uneven drying and improper cement hydration. Portland cement is a natural product, mined from the ground, and has inherent properties which can only be controlled to a point.

Color correction may be achieved by the use of Pro-Line Brilliance Grout Stain Colorant which is available in all grout colors. Grout Stain Colorant will effectively stain and seal grout to a uniform color 7 days after grout installation.

Following are some common issues associated with colored grouts including causes, preventions and corrections:

Causes:

1. Grout mixed too wet.
2. Grout not cured properly or consistently.
3. Inconsistent joint sizes.
4. Cleaning acid concentration too strong, used too early, used on dry joints, or inadequate rinsing after acid wash.
5. Too much water used in grout cleaning procedure. Grout not sufficiently mixed or improperly mixed by hand with trowel or hoe; mixing too fast with high speed drill; or mixing in dirty or contaminated containers.
6. Inconsistent absorption of highly absorbent tiles. Glaze on some edges of tile. Scored tile.
7. Grouting done by different grouters and under different environmental conditions.
8. Setting material inconsistent in the upper 2/3 of grout joint.
9. Spacers left in tile joints.
10. Cleaning with water prior to initial set of grout.
11. Damp curing with polyethylene.
12. Sealed with sealer not specifically made for the purpose; or sealer applied too early.
13. Gypsum dust from drywall or plaster, or dirt and dust from construction conditions.
14. Residue from materials used in initial cleaning and maintenance procedures.
15. Insufficient curing time allowed for the setting material or substrate before grouting.

Prevention:

1. A stiff, consistent water ratio grout mix, properly slaked.
2. Damp cure consistently with 40 lb. kraft paper for 72 hours to ensure slow, even curing.
3. Maintain uniform grout joint depth and width.
4. Do not use muriatic acid. Avoid cleaning too early with acid type cleaners. Wet grout joints before cleaning and thoroughly rinse afterwards.
5. Reduce water during cleanup. Dry blend grout when uniformity is not a manufacturer-assured, quality control factor. Dry blend entire bag. Machine mix grout materials at 300 RPM or less. Mix in clean containers.
6. Use latex additive specifically designed for grouting. High absorption tile should be uniformly wet prior to grouting with commercial Portland cement grout.
7. When possible, use same craftsmen throughout an area and maintain consistent environmental conditions. Avoid concentration of direct sunlight, heat or air flow such as space heaters, air conditioners, and draft areas during installation and curing.
8. Rake our high ridges of setting material from the joints prior to grouting to insure uniform grout thickness.
9. Remove spacers.
10. Allow grout to acquire initial set before cleaning with water.
11. Damp cure consistently with 40 lb. kraft paper for 72 hours to ensure slow, even curing.
12. After damp curing and proper hydration, apply sealers according to manufacturers' recommendations.
13. Protect the finished grout from construction debris.
14. During initial cleaning, remove, the residue of grout from both the tile surface and the surface of the grout joint. Furnish maintenance personnel with proper maintenance instructions.
15. Follow the setting material manufacturer's instructions for curing time required before grouting.

Correction:

1. Consult manufacturer prior to applying any corrective material. Many treatments suggested here may inhibit correction measures that may be recommended by the manufacturer.
2. Dampen and continue damp curing with 40 lb. Kraft paper.
3. On dark grout only – lightly brush with wire brush.
4. Pre-wet and try recleaning with sulfamic acid or other manufactured cleaners with controlled acid effect. Thoroughly rinse with clean water.
5. Permanently stain grout joint with grout stain manufactured for this purpose.
6. Darken grout joint by brushing joints with mixture of 50% boiled linseed oil and 50% mineral spirits.
7. Reclean with a neutral detergent such as Super Shine All®.
8. Apply a flax-soap such as Fresh-N-Klean® or Murphy's Oil Soap®.

White Tile Grout Yellowing:

1. Sand used in the mortar bed may contain iron, iron oxide or clay.
2. Uncured organic adhesive used over Cementitious Backer Board (CBU).
3. Trace amounts of sulfur compounds from temporary heating systems such as salamanders.
4. Use prepackaged floor mud. Use cleaned and dried bagged sand from a reputable supplier.
5. Install the CBU as illustrated in TCA B-416. Use a dry set mortar as illustrated in TCA B-415.
6. Discontinue use of the heating system or use another type. Provide adequate ventilation.
7. Apply a pumice of Oxalic Acid or Naval Jelly only as a temporary correction.
8. Apply household bleach followed by a penetrating sealer.

Other possible causes of inconsistent grout color:

- Different grouting material batch numbers.
- Grout not properly slaked.
- Use of partial bags of grout where ingredients have separated.
- Use of contaminated water or water with a high mineral or salt content.
- Variations for raw materials supplied to the manufacturer may result in slightly inconsistent grout color from batch to batch.

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4330 N. 43rd Ave. Suite B-4 Phoenix, Az.85031
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Pro-Line Poxy and Stainless Steel

Product Use: Pro-Line Poxy™ is a 100% solids blend of epoxies and special colored silica fillers and offers high performance, color uniformity, durability, and stain resistance with extraordinary ease of use.

Setting Mortar: 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 1/16" to 1/4".

Grout: Apply with hard rubber float held at a 45° angle to surface using diagonal strokes to fill joints completely. Remove excess grout with rubber float held at 90° angle to surface. Clean initial residue with ample amounts of clean water and sponge using as little pressure as possible and changing the water often. Use circular motion to clean surface. After initial cleaning with sponge remove any additional residue with a slightly damp towel or cloth by dragging over surface towards you. Let dry, check for any remaining residue and repeat if necessary.

Curing: Minimum cure for grout is obtained in approximately 24 hours depending on ambient temperatures. As a setting material, normal grouting can be done after a minimum of 24 hours. When used to install tile in an area that will be continually wet, it is recommended the installation be allowed to cure a minimum of 7 days and be thoroughly dry prior to water exposure.

Glass Tile: Not all glass tiles can be used for exterior, wet areas, or be submerged in water. Check with glass tile manufacturer for recommended areas of use.

Stainless Steel Substrate: Steel must be rigid, meet the maximum allowable standard for deflection of L/360 for tile or L/480 for natural stone, and be free of rust, dirt, paint, manufacturing oils, or other surface contamination. Scarify surface and wash with a strong detergent, then rinse thoroughly. Follow the stainless steel manufacturer's instructions to confirm waterproof integrity and to "stretch" the steel elements before installation.

Bonded Materials Company products are designed for the sole purpose of adhesion, not for protection of steel elements and cannot be held responsible for corrosion, rust or contamination of steel elements or construction

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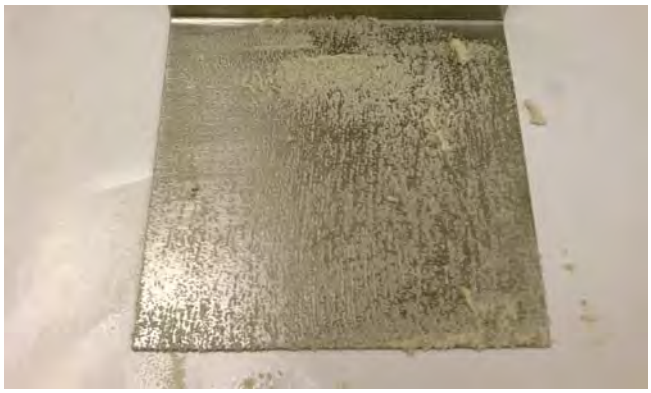
Installation of Glass Tile on stainless steel mockup:

This application should not be construed as a general endorsement with respect to the application of glass tile over stainless steel since job site conditions, grade, finish of the stainless steel and the type of glass tile available vary considerably.

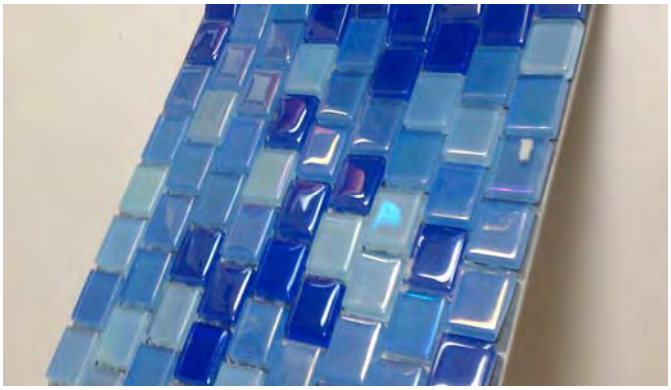
Grind surface and washed clean

Apply skim coat with flat trowel onto surface.



Apply mortar combed in one direction

Apply tile and press in with grout float or other flat object to ensure 100% coverage to surface and back of tile leaving minimum of 1/8" thickness continuous setting bed between tile and substrate.



Allow mortar to cure 24-48 hrs.
Mix and apply PL Poxy grout per instructions contained within data sheet.

Using epoxy to set ceramic tile or stone on a stainless steel surface is no small task. It does take time and patience. Dividing the area into smaller sections would be the preferred method. When done properly it will make a strong, durable, and aesthetically pleasing finish.

Note: *There are alternative methods to set tile over stainless steel. When doing exterior applications it is highly recommended that the work area and material at the jobsite be shaded from the direct sunlight. When applying tile on vertical surfaces depending on size and weight of tile sag/slippage may occur.*

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