5-9300 Bond-Kote®

DESCRIPTION

Super-Krete® Bond-Kote® is a single component, pre-blended product designed for use as a thin-set overlayment for concrete surfaces. Bond-Kote eliminates the need to remove and replace old, damaged or deteriorated concrete by resurfacing it with a strong, flexible and highly durable coating. Bond-Kote is ready-mixed and contains a dry version of the highly successful Super-Krete Liquid Concentrate™ co-polymer, a special blend of proprietary components that ensure superior bonding to nearly any substrate. Bond-Kote has a proven success record in every type of climate and is unaffected by freeze/thaw conditions and salt treatments when used in the appropriate Super-Krete System. The delamination of waterproofing products is substantially or totally reduced when Bond-Kote is used for the base coats when used as a system in conjunction with Super-Krete Pene-Krete®. Bond-Kote is available in White and Gray. Bond-Kote can be applied over concrete with a Gauge Rake™ at 1/8″ thickness and used as a stampable overlay for use with seamless texture mats.

USES

Bond-Kote is a versatile, easy to use material with a variety of uses in residential, commercial and industrial applications. Bond-Kote can be applied by squeegee, broom, sprayer or screed rake to create a multitude of textures and finishes.

1/8" Overlay Stamping Interior / Exterior Applications Floor Leveling / Smoothing

Concrete Patching / Repairing / Resurfacing

Spalled / Deteriorated Conditions Sidewalk Restoration / Resurfacing

Curb / Gutter Resurfacing

Horizontal / Vertical / Overhead Applications Pedestrian / Vehicular Traffic Surfaces

Renovation of Gypsum Underlayments

Slip-Resistant Surfaces Asbestos Tile Encapsulation Crack Treatment System

Spray-Texture / Skip-Trowel Finishes

Anywhere a New Concrete Surface is Desired!

Recreational Surfaces Highways / Bridges Parking Decks Skate Park Renovation

Concrete Restoration Warehouse Floors

Pool Decks

Swimming Pool Plastering Helicopter Landing Pads

Driveways

Loading Docks / Ramps

Masonry Walls Decorative Surfaces

Damp-proofing Applications



ADVANTAGES

Bond-Kote is extremely versatile for any concrete resurfacing or repair project.

Environmentally Friendly and Safe Ready-Mix Formula - Just Add Water! Superior Bonding Capabilities Extreme Climate Resistance Excellent Freeze / Thaw Resistance

Reduces Moisture Vapor Emissions (MVT) Through Slabs Excellent for Use as Underlayment for Other Coatings & Systems

Repairs & Resurfaces Concrete Cost Effectively
Can Eliminate the Need to Replace Concrete

Alternative to Removal & Replacement of Old Concrete

Flexibility
Non-Toxic
Water Resistant
Salt Treatment Resistant
Non-Reemulsifiable
Easy to Use
Highly Versatile
Fire Resistant

Abrasion Resistant

CSI RELATED SECTIONS

03 01 30.61 - Resurfacing of Cast-In-Place Concrete

03 01 40.61 - Resurfacing of Precast Concrete

03 35 00 - Concrete Finishing 03 53 00 - Concrete Topping

04 05 00 - Common Work Results for Masonry

07 11 16 - Cementitious Damp-proofing

07 16 13 - Polymer Modified Cement Waterproofing

09 61 13 - Slip Resistant Flooring 32 01 26.74 - Concrete Overlays 32 16 00 - Curbs and Gutters

Super-Krete Products is a Division of Arizona Polymer Flooring, Inc.

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SURFACE PREPARATION

Surfaces that are to be repaired or coated must be structurally sound. Surface damage such as surface deterioration, cracks and spalls can typically be repaired. However, structural integrity is critical to the overall success of any coating or overlay.

Remove any loose, soft or contaminated materials from the area that is to be repaired or resurfaced. Any existing coatings, sealers, curing agents, bond-breakers, etc. must be removed from the surface providing direct contact with the original substrate to assure adhesion. Typical preparation methods may include scraping, water blasting, sand blasting, shot blasting, cleaning and degreasing.

Note: All expansion joints must be honored. Clean, repair and honor all control joints and expansion joints during entire application process, or mark them for honoring after application. Clean and treat all cracks and spalls in accordance with manufacturer's specifications.

Before any Super-Krete products are applied over concrete, the slab must be free of sealers, any type of curing compounds and bond-breakers. Always refer to the Super-Krete Products Surface Preparation Guide for surface testing, cleaning, preparation and porosity requirements prior to applying Bond-Kote.

Arizona Polymer Flooring recommends that all Super-Krete cementitious overlay product applications, over concrete, first be treated with Pene-Krete.

Important: Bond-Kote is designed to penetrate the surface for a permanent bond. Any sealers or coatings which will interfere with this penetration must be removed. The surface shall be cleaned thoroughly of all contamination by scrubbing the surface with Super-Krete Heavy Duty Degreaser™. Spray Heavy Duty Degreaser over the entire surface and allow it to dwell on the surface for approximately 15-30 minutes then, completely rinse with clean water two times. Allow the surface to dry another 24 hours before applying other coatings or sealers. Extremely oily surfaces can be pre-heated with a propane torch to bring the oil to the surface, followed by degreasing and water blasting. Repeat this process until the surface is free of oily substances.

MIXING

The amount of water required will depend upon the desired consistency and the repair or re-surface requirements. Determine in advance whether the required mix will be for resurfacing, trowel, squeegee, vertical application or 1/8" texturing.

Manual – For Mixing Small Quantities: Add 4 quarts of clean water to a container such as a 5 gallon pail and add 1 (50 lb.) bag of Bond-Kote to the water while agitating with a hand drill and paddle mixer attachment. Add additional water while mixing if needed until the desired consistency is achieved. Allow material to sit for approximately 5 minutes to allow water to saturate the fine aggregate. Add additional water as needed or when a flowable consistency is desired. For vertical or overhead repairs, a dry slump consistency is recommended (add less water).

Mechanical – For Mixing Large Quantities: Add desired amount of Bond-Kote units to the plaster mixer and add clean water until the desired consistency is achieved. Allow material to sit for approximately 5 minutes to allow water to saturate the fine aggregate. Add additional water as needed.

Note: For a dryer mix, add less water or more Bond-Kote. For a wetter mix, add more water or less Bond-Kote. The proper consistency is based upon the applicator's choice of application.

For hand trowel applications or for applying to vertical and overhead surfaces, a dryer mix is recommended.

For screeding, a more fluid mix is recommended. For squeegee mix, a flowable mix is recommended (4 to 6 quarts of water).

For 1/8" overlayment, a fluid mix is recommended. The appropriate amount of water is necessary for Bond-Kote to maintain the desired thickness. Do not over-dilute Bond-Kote with water. Over-dilution is visible when sand fines begin to separate from the mix, causing them to settle to the bottom. 3%" or larger gravel can be used as an extending material and to increase the strength of the mix.





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APPLICATION

Bond-Kote can be applied by squeegee, trowel, sprayer, broom, brush or gauge rake. In every application, Super-Krete always recommends a light spray of water be applied to all concrete substrates prior to application of Bond-Kote. Doing this will open the pores of the concrete and allows the Bond-Kote to create a co-adhesive bond. Should Bond-Kote become un-workable simply spray a mist of water over the area and it will become workable.

Repairs/Patching: Any structural repairs, crack treatments, patches and deep fills should be completed prior to resurfacing or squeegee applications, do not perform repairs monolithically with resurfacing procedure.

Squeegee Coats: A squeegee mix should be used when resurfacing in thin layers. A squeegee coat can be applied as thin as 1/32" using a Super-Krete SqueegeeTM. Mix Bond-Kote thoroughly to desired consistency. Dampen surface to be coated with clean water. Evenly distribute material by pouring it onto the surface, spreading the material from one side of working area across to the other in a 6"-8" wide pour. Follow the spread immediately using a squeegee to spread the material from side to side while working towards the nearest joint or end of work area. For even application, ensure the squeegee is held at 45° to the direction of travel. If Bond-Kote begins to dry, leave a residue or curdle on surface, spray the area with a light mist of water and squeegee the material until surface is uniform. Two or more applications are typically required to achieve a smooth, uniform finish.

Broom Finishing: For detailed application instruction on this system, refer to Super-Krete Specification No. S-1000 Broom Finishes. To achieve a broom finish, apply the first coat with squeegee and broom finish the last application by pulling a stiff-bristled broom that is turned upside-down so that bristles face away from direction of travel and pull the material in the direction of desired finish. Dragging the broom in an upside-down position allows broom to drag across the surface evenly without pulling the material and clumping.

<u>Trowel Finish:</u> After 1st coat, following directions above, material may be trowelled to desired finish or texture. A trowel finish can be achieved by using a trowel instead of a broom to finish the second coat.

<u>Vs" Overlay Texturing:</u> For detailed application instruction on this Super-Krete System, refer to Super-Krete Specification No. S-1050 ½" Seamless Texture Overlayment. When texturing Bond-Kote with stamp or texture tools, gauge Bond-Kote to ½" thickness using a Gauge Rake. With a ½" application, the appropriate amount of water is necessary to maintain the desired thickness. 4 to 6 quarts of water per bag of material may be necessary to achieve the necessary consistency.

After mixing and pre-wetting surface, distribute material by pouring out of a 5 gal. pail onto the surface, spreading from one side of working area across to the other in a 6"-8" wide pour. Spread immediately with Gauge Rake (ensure that cams are set to 1/8" depth), remove gauge marks with Super-Krete Flex SmootherTM. Immediately after smoothing, spray Super-Krete S-1710 Liquid Release AgentTM (do not use any other type of release agent) over Bond-Kote. Spray texture mats with Liquid Release Agent and begin to texture/stamp Bond-Kote being careful not to move mats when lifting to change location.

Allow stamped surface to dry overnight. When dry, detail surface by sanding lightly to remove any high spots. Re-establish all sawcut and expansion joints, especially if they weren't protected during resurfacing process. Wash surface using Super-Krete S-200 Super-ScrubTM and rinse with clean water. If color is desired apply Super-Krete Color StainTM (Refer to Super-Krete Spec. No S-9500).

GENERAL INFORMATION

Bond-Kote is ready-mixed and only requires the addition of water when mixing. Bond-Kote requires no primer, bonding agents or cementitious underlayments to ensure a bond. Bond-Kote cannot be removed from the concrete substrate once cured, without removing the substrate that it is attached to. Bond-Kote is a high strength product that is very resilient and durable.





5-9300 Bond-Kote[®]

Coverage

1 (50 lb.) bag of Bond-Kote will typically cover: 300 sf in a squeegee coat (1/32") application

50 sf at 1/8" thick application.

*Coverage rates will vary, these are approximations only. Actual coverage will vary due to substrate conditions and surface porosity.

Cure Time 72 hours

Compressive Strength 6500 psi at 7 days

Bond Strength 235 psi

Tools Required

5 Gallon Pail Pump Sprayer Mixing Paddle Drill S-18000 Squeegee Trowel(s) Straight edge S-16000 Smoother

S-19000 Gauge Rake

Diamond Crack Chaser and grinder

Shelf Life 5 Years when properly stored.

Storage Store in a dry place. Do not expose

to moisture.

Packaging 50 lb. bags / 50 per pallet

Appearance Gray or White, in dry

powdered form

Odor None

Specific Gravity 3.15

Percent Volatiles

by volume

CAUTION

Keep away from children. Do not take internally. Always use safety gloves, appropriate eye protection, and appropriate OSHA/NIOSH approved respirator in areas with poor ventilation and when exposed to spray mist both indoors and outdoors. If ingested, seek medical attention immediately.

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LIMITATIONS:

Super-Krete Products are to be applied only when surface temperatures are above 55°F and rising and not to exceed 100°F. Super-Krete Products are not to be applied when precipitation is expected within 24 hours following completion of application. Do nat allow materials to freeze. Each Super-Krete product acts as an inherent part of a proven system. Super-Krete Products are professional, contractor grade products. Training in the use of these products is available. Consult a Super-Krete Products representative for information and assistance locating approved contractors in your area or for training class dates.

MOISTURE VAPOR EMISSIONS PRECAUTIONS:

All concrete floors not poured over an effective moisture vapor retarder are subject to possible moisture vapor transmission that may lead to blistering and failure of the coating system. It is the coating applicator's responsibility to conduct calcium chloride testing in compliance with ASTM F1869 and relative humidity probe testing to determine if excessive levels of vapor emissions are present before applying any coatings. Arizona Polymer Flooring offers Super-Krete® Pene-Krete® for cementitious overlay products and VaporSolve® Moisture Remediation systems for resinous floor coatings. Consult our technical service department. Arizona Polymer Flooring and its sales agents will not be responsible for coating failures due to undetected moisture vapor emissions.

WARRANTY:

Arizona Polymer Flooring guarantees that this product is free from manufacturing defects and complies with our published specifications. In the event that the buyer proves that the goods received do not conform to these specifications or were defectively manufactured, the buyer's remedies shall be limited to either the return of the goods and repayment of the purchase price or replacement of the defective material at the option of the seller. ARIZONA POLYMER FLOORING MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. Arizona Polymer Flooring shall not be liable for damages caused by application of its products over concrete with excessive moisture vapor transmission or alkalinity. Arizona Polymer Flooring shall not be liable for any injury incurred in a slip and fall accident. Manufacturer or seller shall not be liable for prospective profits or consequential damages resulting from the use of this product.

