
SUPER-KRETE products and systems are warranted only when applied by persons Certified in writing by Super-Krete International, Inc. as Certified Super-Krete Applicators in accordance with manufacturer's guidelines on a structurally sound surface.

Description and Uses

SUPER-KRETE LIQUID CONCENTRATE is a proprietary admixture designed to be used as a modifier for portland cement. It gives Portland cement unusual and unique properties not obtainable from other admixtures or modifiers. When added to Portland cement, sand and water,

SUPER-KRETE LIQUID CONCENTRATE provides adhesion and flexibility in thicknesses ranging from paper thin to as thick as desired while creating a new, durable restoration, protection and overlay system that will not delaminate, even at a feather edge.

SUPER-KRETE LIQUID CONCENTRATE gives cement base repairs the ability to be used as a permanent repair and/or resurfacer on virtually any sound surface. This includes concrete, masonry, asphalt, wood, metal, and surfaces not normally considered to be "bondable".

SUPER-KRETE LIQUID CONCENTRATE contains proprietary components which induce cross linking in the presence of Portland cement, producing a chemical as well as mechanical bond both adhesively and cohesively.

SUPER-KRETE LIQUID CONCENTRATE is non-toxic and environmentally safe. It is non-reemulsifiable and will waterproof and seal from the positive or negative side of substrates.

SUPER-KRETE LIQUID CONCENTRATE is an excellent priming system or bond coat for other coatings and systems.

Typical applications include:

- ?? Floor leveling / smoothing
- ?? Patching and repair
- ?? Spalled/deteriorated conditions
- ?? Horizontal concrete/asphalt renovation and resurfacing
- ?? Vertical concrete renovation
- ?? Pedestrian and vehicle surfaces
- ?? Renovation of gypsum underlayments
- ?? Slip resistant surfaces
- ?? Reduction of moisture vapor emissions through slabs
- ?? Asbestos tile encapsulation
- ?? Recreational surfaces, repair/smoothing
- ?? Highways, bridges, sidewalks and curbs
- ?? Skateboard Parks
- ?? Parking structures
- ?? Warehouses and industrial floors
- ?? Pool decks
- ?? Helicopter landing pads
- ?? Driveways
- ?? Loading docks and ramps

In powdered form, SUPER-KRETE LIQUID CONCENTRATE is the base for SUPER-KRETE BOND-KOTE®, the pre-blended, single component product.

Patching Mix

This mix is used for patching spalls, cracks, and filling uneven or unlevelled surfaces.

1. Mix standard squeegee mix. More sand may be added, up to four (4) parts sand to one (1) part cement. By volume, this mix is: 1 SUPER-KRETE LIQUID CONCENTRATE / 2 water / 2 cement / up to 8 sand.

Patching Application

1. Apply patching mix to spalls, cracks, and unlevelled areas with straightedge, asphalt lute, or squeegee. The patching mix must be allowed to flow into the cracked and deteriorated area to seek out and fill all voids.

Squeegee Application

1. Some applications require priming with Pre-Mix as previously discussed. Otherwise, start with #2.
2. Pre-moisten surface prior to application by lightly spraying with water. Do not puddle. Keep surface damp throughout application.
3. Pour SUPER-KRETE® squeegee mix onto surface and spread evenly by squeegee, straightedge, drag box, broom, brush or trowel. For large jobs, a seal coat machine may be used. Keep surface in front of squeegee moist. This is important for ease of application and maximum bond. Allow to dry.
4. Scrape or stone to remove any ridges or irregularities from surface.
5. Repeat procedure when equipment can be moved onto surface without disturbing or damaging product (minimum one (1) hour at 70 degrees F under direct sunlight at less than 1/8" thickness).

Formless Mix

This mix is used for vertical and other patches where a non-slump consistency is desired.

1. Pre-blend sand and cement, one (1) bag cement to two to three (2-3) bags silica sand.
2. Make a SUPER-KRETE Pre-mix.
3. Add Pre-Mix to pre-blended dry mix. Add only enough liquid to make the mixture moist enough to pack in hands without getting hands wet (dry packed snowball consistency).

Formless Application

1. Prime area to be patched with Pre-Mix and keep damp throughout application.
2. Pack "snowball" into area.
3. Brush placed material with Pre-Mix and finish with trowel or float to desired finish and texture.

Note: Additional Pre-Mix can be added for a more fluid mix if desired.

Integral Color Application

1. Follow the Formless Mix application
2. Add desired amount of a water-based liquid tint to the desired color into the mix.
3. Apply according to desired application.

Spray Application

SUPER-KRETE mixes can be sprayed with hopper guns, rotor-stator or diaphragm pump equipment such as used for pumping and spraying other cementitious material. Fluid content of mix combined with size and quantity of aggregate enables application of finishes from "orange peel" to globs of material for knock-down finishes. Spraying is an effective method of applying decorative finishes.

Cure Time

When SUPER-KRETE LIQUID CONCENTRATE is used as a resurfacing product or as a squeegee coat, cure time is approximately 30 minutes to one hour to dry. For interior applications or those not in direct sunlight, allow 72 hours prior to coating. If used as an additive to normal concrete, it requires the same full cure time as normal concrete, 28 days.

Coverage Rates

Coverage rates vary according to design mix, porosity and profile of surface, etc. In general five gallons of SUPER-KRETE LIQUID CONCENTRATE, mixed per standard squeegee mix instructions, will yield 45 gallons of mix. Using #60 mesh and applying the mixture with a squeegee, the mix will yield approximately 2,000 square feet per coat. This equates to .022 gallons per square foot of mix or .0025 gallons of pure SUPER-KRETE LIQUID CONCENTRATE per square foot. Each subsequent coat will increase the yield, as will finer grades of sand.

Installation

Surface Preparation:

Prior to any SUPER-KRETE application, a site survey is required. This survey determines the suitability and proper application for each specific project. Unless intended as a temporary repair, the first consideration is structural integrity. Any areas not structurally sound shall be repaired or replaced prior to application. In many cases, the repairs can be made with SUPER-KRETE Products.

All concrete, wood, asphalt, masonry, metal and other surfaces must be structurally sound, clean and free of coatings, curing compounds, dirt, oils, grease, laitance, efflorescence, mildew, fungus, or any contaminant that prevents adhesion. A combination of cleaning methods can be used. Shot blasting, sand blasting, and high pressure water blasting have proven to be effective methods of coating and contaminant removal. Some contaminants will require chemical removal, such as degreasing and etching with SUPER-KRETE Heavy Duty Degreaser™. The least destructive method that will accomplish the desired end result should always be selected.

Concrete Surfaces:

New concrete shall be allowed to cure minimum of 72 hours and shall be neutralized prior to application. SUPER-KRETE highly recommends the application of PENE-KRETE®. See specification No. S-1300 for more information on PENE-KRETE.

Asphalt Surfaces:

These surfaces have characteristics different from concrete and require special consideration. Sound surfaces can be overlaid with SUPER-KRETE products. Repairs should be made with concrete to areas completely deteriorated, alligatored, or showing evidence of tree root problems. Note: Hot mix asphalt should not be applied prior to application of Super-Krete products.

Wood Surfaces:

Surfaces must be secured with screws to the structure, and all holes, seams and cracks shall be taped prior to application.

Hairline Cracks:

Minor cracks or spalls do not require pre-filling. SUPER-KRETE squeegee mix should be allowed to flow into the cracks during an initial squeegee application. A flowable mixture will penetrate the cracks and surface and create better adhesion than a drier patching mix. Another method is to pour squeegee mix into cracks, voids, spalls or removed areas and allow to self-level until filled.

Larger Cracks:

Depending on extent of cracking, SUPER-KRETE Elastique Matting should be embedded in squeegee mix over individual cracks or over entire surface, after cracks have been filled with squeegee mix by squeegee application in pouring. See details on application of squeegee mix later in this section. Note: although no crack repair system is 100% effective, this system has proven successful on many applications.

Questionable Surfaces:

Chalky, dusting and pigmented surfaces should be pretreated with PENE-KRETE and predampened with SUPER-KRETE Pre-Mix (one (1) part SUPER-KRETE LIQUID CONCENTRATE, two (2) parts clean water).

Expansion Joints:

Existing expansion joints should always be maintained. If joints are already filled, mask joint and remove masking after application. In unfilled joints, place temporary filler that can be removed after application. Prior to filling joints with joint filling material, brush apply two (2) applications of SUPER-KRETE Squeegee mix to edges of joints to provide a waterproof surface. Saw cutting can be used to reestablish expansion joints and can also help when a joint should have been installed in the original surface.

SUPER-KRETE Mixes:

There are different design mixes for different applications, ranging from very fluid squeegee mixes to dry, zero slump, patching mixes. More moisture can be added to any SUPER-KRETE mix using SUPER-KRETE Pre-Mix. Sand may be added up to four (4) parts aggregate to one (1) part cement. For deep fills, gravel may be added. SUPER-KRETE® Pre-Mix will be referred to in various sections. Pre-Mix consists of preblended one (1) part SUPER-KRETE LIQUID CONCENTRATE, two (2) parts clean water.

Mixing is to be done mechanically. A ½ " drill motor with proper mixer works well for small batches. Mortar type mixers can be used for larger batches. When color pigment is to be added, separate mixing of dry materials and wet materials is recommended prior to blending. This procedure help assure that all cement and color particles are properly blended and dissolved.

Squeegee Mix

This is the most common mix design, consisting of:

1. Mix 5 gallons SUPER-KRETE LIQUID CONCENTRATE with 5-10 gallons clean water. Mix well.
2. Add one 94-pound bag Portland cement. Mix until no lumps remain.
3. Add two 100-pound bags silica sand. Mix until no lumps remain. Size of sand determines thickness and texture of coating.
4. Add sufficient water, not to exceed 10 gallons total, to make a good squeegee consistency.

By volume, this mix is: 1 SUPER-KRETE® LIQUID CONCENTRATE / 2 water / 2cement / 4 sand.

Maintenance

SUPER-KRETE Products are often applied as wear surfaces. As such, these surfaces should be inspected at regular intervals and touched up or repaired as necessary to preserve the integrity of they system. Frequency of required maintenance will be determined by factors such as use, wear, abuse, additional coatings, etc.

Technical Services

Assistance within the United States will be provided through Super-Krete, Certified Applicators who will assist in site evaluations, recommendations, specification writing and job follow-ups. Contact us at 800-995-1716 or 619-401-8282.

SUPER-KRETE Offices: *Contact for technical and marketing information and for representative or Certified Applicator in area:* **Corporate Headquarters, Sales & Technical Support**

SUPER-KRETE® International, Inc.
1290 North Johnson Ave. #101
El Cajon, CA USA 92020
800-995-1716 or 619-401-8282
FAX: 619-401-8288

www.super-krete.com, sales@super-krete.com

Note: SUPER-KRETE Specification guides for specific type applications are available for additional reference. Specifications will also be developed for specific projects following site surveys to determine requirements.

Limitations

SUPER-KRETE products are to be applied only when surface temperatures are above 55 degrees F and rising. SUPER-KRETE products are not to be applied when precipitation is expected within 24 hours following completion of application. Do not allow materials to freeze.

Note: SUPER-KRETE® International, Inc. warrants this product to be of merchantable quality when used or applied by professional applicators approved by this company in strict accordance with manufacturer's specifications. SUPER-KRETE International, Inc. does not warrant this product for uses other than those intended. SUPER-KRETE International, Inc. does not make nor does it authorize any agent or representative to make any other warranty of MERCHANTABILITY OR FITNESS for purpose or any warranty, guarantee, or representation, express or implied, concerning this material except that it conforms to product specifications distributed by this company. SUPER-KRETE believes this information to be true to the best of our knowledge and products are of the highest quality and uniform within manufacturing tolerances. Since no control is exercised over product use, no warranty, expressed or implied, is made as to the effect of such use and no liability is assumed, directly or indirectly, from their use. Buyers and users accept this product under these conditions and assume the risk of any failure, injury, to person or property (including of buyer and user), death, loss or liability resulting from the handling, storage, or use of the product whether or not it is handled, stored, or used in accordance with directions or specifications. Any liability of this company to the buyer or user of this product is limited to the replacement value of the product. Buyers and users are encouraged to conduct their own test prior to application.