



V-KRETE REPAIR MORTAR

PRODUCTION DESCRIPTION

V-Krete is a premium fast-set mortar specifically designed for resistance to animal wear and chemical attack in agricultural facilities. It's unique properties outperform conventional patching & repair material. Ideal for both slight wear and deep wear applications.

V-Krete is pre-mixed, requiring only the addition of potable water. This unique mortar provides outstanding results and enables the project to be completed more rapidly than with conventional patching & repair materials. It can be used with Vantek A.R.C. (Acrylic Resin Concentrate) for added bonding strength (primer) and resistance to absorption (admix).

INDUSTRY USES

V-Krete is excellent for all types of concrete repair applications: slat restoration, trough resurfacing, floor overlays, wall repair and resurfacing, and general concrete surface restoration. V-Krete is specifically designed for those applications requiring very rapid strength gain.

COVERAGE

Approx. Mixed Yield: 0.45 ft³ (12.7 L) per 50 lb. (22.7 kg) bag
Typical Jobsite Coverage: 16 ft² (1.49 m²) at 1/4" (6.4 mm) nominal thickness*

Aggregate Extension: Up to 50% on repairs greater than 1" (2.5 cm) (use 3/8" [9.5 mm] pea gravel or small rock)

*Typical coverage over prepared concrete. Actual coverage varies with surface profile, substrate conditions, application thickness, & material loss.

TECHNICAL DATA

LABORATORY TESTS	RESULTS
Initial Set Time at 72°F	20-30 Minutes
Final Set Time at 72°F	30-50 Minutes
Working Time at 72°F	15-25 Minutes
Application Temperature Range	50° - 90°F (10° - 32°C)
Bond Strength	24 Hours: 1500 PSI (10 MPa)
Length Change - Dry Shrinkage	-0.12%
Compressive Strength: ASTM C 109	3 hours-----3,500 psi (24.1 MPa)
	1 day-----5,200 psi (35.0 MPa)
	28 days-----8,500 psi (58.0 MPa)

BENEFITS & FEATURES

- Made in USA
- High early strength - open to traffic in 3 hours
- Extremely dense; Low permeability
- Non-corrosive
- Increased durability and freeze-thaw resistance; excellent adhesion; improves flexural strength
- Aggregate extension: Up to 50% on repairs greater than 1" (2.5 cm) (use clean dry pea gravel or small rock)
- Shrinkage compensation minimizes cracking from drying shrinkage
- Ready to use; easily mixed with water on the jobsite
- Use with A.R.C. (Acrylic Resin Concentrate) for added bond strength (primer) and to minimize absorption (admix).
- Use a non-slump mix for edging and a more fluid mix for flat or curved surfaces.

PACKAGING

V-KRETE Mortar

50 lb./22.7 kg bag (#VTK1003) 56/pallet

50 lb./22.7 kg powder in pail (#VTK1004) 24/pallet *See instructions below

3,000 lb./1361 Kg bulk bag (#VTK1006)

Optional A.R.C. (ACRYLIC RESIN CONCENTRATE)

1 gal/3.79 liter (#VTK1008C) 2/case or 60/pallet

5 gal/18.93 liters (#VTK1007C) 24/pallet

Optional SLOW SET

1 Pouch (#VTK1008) 50 Pouch/Box

V-KRETE + A.R.C. KIT (conveniently packaged kit)

50 lb./22.7 kg bag in pail with 1 qt/.95L A.R.C. (Acrylic resin Concentrate), 1 pouch SLOW SET (#VTK1005C) 24/pallet

NOTE: Vantek works hard to produce mortar formulations that meet the design criteria set forth for them. Even so, raw materials can result in slight variations that can slightly affect the mix ratios. This data sheet provides guidance to achieve the desired mixes for infield applications.

*As transportation can cause aggregate separation and mortar compaction turn pails to remix prior to use.

LIMITATIONS/WARNINGS

Apply only when the surface and ambient temperature is 50°F (10°C) and rising.

Do not add more water than specified. Do not over mix or retemper. Do not apply to a dry substrate.

Avoid exposing material to high moisture, rain, or snow. Store in cool, dry, interior area.



SURFACE PREPARATION

Concrete must be sound and fully cured (28 days). Remove all unsound concrete, laitance, oil, grease, curing compounds and other contaminants that could prevent adequate bond. USE PREP & ETCH to clean surface - mix 1 part acid to 1 part water. Rinse thoroughly. For a more durable repair, saw cut the concrete 1/4" in depth around perimeter of area being patched.

NOTE: Concrete substrate should be saturated surface dry (SSD), without standing water, before application.

MIXING

Use straight water, or for best results, use A.R.C. (ACRYLIC RESIN CONCENTRATE).

Optional **A.R.C. Liquid Admix**: Pre-mix 1 part A.R.C. to 3 parts water.

Small Batches: Mix 1-quart liquids to 4-4.5 quarts mortar.

Large Batches: Mix 3.5-4 quarts liquids to 50 lbs. (27.2 kg.) mortar.

Adjust slightly with liquids or mortar for desired mix.

Mixing must be achieved mechanically using a slow speed, 1/2" drill and mixing paddle. **Note: In Hot Weather, add 1 pouch of SLOW SET Additive per gallon of mixing liquids to extend the working time 15-20 minutes. Just dissolve the SLOW SET into the mixing liquids.**

APPLICATION

Apply the mixed mortar onto a damp or surface-primed substrate by trowel (DO NOT APPLY MORTAR TO A DRY SUBSTRATE). Minimal thickness of the repair layer is 1/4" Optimal results are achieved by the repair layer being 1/2" thick. Complete by applying a desired finish or texture within the working time of the mortar. Use a straight trowel for smooth finish or use a broom, brush or notched trowel for textured finish.

CLEAN UP

Clean tools and equipment with clean water immediately after use. Cured material must be removed mechanically.

CAUTION

Safety Considerations

- Use adequate ventilation.
- Use of NIOSH/MSHA approved dust vapor respirator, safety goggles and protective gloves are recommended.

First Aid

- EYE CONTACT: Flush immediately with water for at least 15 minutes. Contact physician immediately.
- RESPIRATORY CONTACT: Remove person to fresh air. If the discomfort persists, breathing difficulty occurs, or if swallowed seek medical attention.
- SKIN CONTACT: Remove any contaminated clothing. Wash skin thoroughly with soap and water. If irritation persists, seek medical attention.

KEEP CONTAINER TIGHTLY CLOSED - KEEP OUT OF REACH OF CHILDREN - NOT FOR INTERNAL CONSUMPTION - FOR INDUSTRIAL USE ONLY

LIMITED WARRANTY

Vantek warrants for a period of one (1) year that its products will be free of manufacturing defects and will be in conformity with published specifications when handled, stored, mixed, and applied in accordance with recommendations of Vantek. If any product fails to meet this warranty, the liability of Vantek will be limited to replacement of any non-conforming material if notice of such non-conformity is given to Vantek within (1) one year of delivery of materials. Vantek may in its discretion refund the price received by Vantek in lieu of replacing the material. No customer, distributor, or representative of Vantek is authorized to change or modify the published specifications of this warranty in any way. No one is authorized to make oral warranties on behalf of Vantek. In order to obtain replacement or refund the customer must provide written notice containing full details of the non-conformity. Vantek reserves the right to inspect the non-conforming material prior to replacement. EXCEPT FOR THE EXPRESSED WARRANTY STATED ABOVE, THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE. VANTEK'S OBLIGATION SHALL NOT EXTEND BEYOND THE OBLIGATIONS EXPRESSLY UNDERTAKEN ABOVE AND VANTEK SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO THE PURCHASER OR ANY THIRD PARTY FOR ANY LOSS, COST, EXPENSE, DAMAGE OR LIABILITY, WHETHER DIRECT OR INDIRECT, OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.