



# TK-LIQUID BONDING AGENT 225

Item No. TK-225

## PRODUCT DESCRIPTION

TK-LIQUID BONDING AGENT 225 is an acrylic latex liquid bonding agent with an admix (in place of water) for cement mortar patching and resurfacing. When mixed with a cement/sand or gravel combination, TK-LIQUID BONDING AGENT 225 becomes an effective patching and topping mortar.

### Features:

- Excellent adhesion to a variety of substrates.
- Excellent resistance to abrasion, freeze/thaw cycles, chemicals and deicing salts.
- Retains flexibility, elongation and will not discolor with exposure to heat, cold or aging.
- Economical to use because of its high performance with low maintenance costs. Eliminates the need for further curing/sealing processes resulting in additional labor and material savings.
- Field and laboratory tests prove superior tensility, compressive strength, flexural shear bond, and impact strength over styrene-butadiene rubbers, polyvinyl acetates and unmodified mortar.

### USES:

Suitable for use on many substrates including concrete, brick, masonry, terrazzo, wood, metal and glass.

1) *Mortar Patching:* Use for filling cracks, floor underlayment to level floors prior to tiling, precast building panels and beams, pavement and bridge deck repairs, pipe setting and spray and fill coats.

2) *Bonding Agent:* Use for bonding plaster, stucco, cement and slurry coats.

3) *Admixture:* Use for cement base plaster and stucco mixes and as a base coat to reduce cracking and improve curing.

## APPLICATION PROCEDURES

### PREPARATION:

Remove all loose and/or crumbled material from the area and sweep or air blow to remove as much dust as possible. Grease or oil stains should be removed with TK-CHEMICAL CLEANER 101\* or a suitable cleaner. Rinse thoroughly and do not leave puddles of water on the surface.

### MIXING:

Use only clean, dampened containers and clean, dry cement for the mix. Thoroughly premix the sand/aggregate or gravel with the cement. Blend TK-LIQUID BONDING AGENT 225 into the mix, stirring slowly.

### Typical Mix Ratios per

#### 1-gallon of TK-LIQUID BONDING AGENT 225:

- 1 - 3 cement mix: 1-45lb. bag packaged sand mix
- Graded gravel mix: 1-80lb. bag packaged sand mix

### Suggested Resurfacing Mixes per

#### 1-gallon of TK-LIQUID BONDING AGENT 225:

Depth (Inches)	Sharp Masons Sand	Portland Cement
0" - 1/8"	20 lbs.	20 lbs.
1/8" - 3/8"	40 lbs.	20 lbs.
3/8" - 1"	60 lbs.	20 lbs.

## TECHNICAL DATA

Composition and Materials:	100% acrylic polymers in a water dispersion
Solids by Weight (%):	28%
Set Time:	4-6 hours with typical sand/cement mix
Average Dry Time (70°F):	24-48 hours
Normal Use	4 days
Heavy Traffic	
Viscosity:	Slightly thicker than water
Pot Life:	1-2 hours
VOC Content:	< 350 g/l
A.I.M. Category:	Primers and Undercoaters Maximum VOC 350 g/l
Applicable Standards:	-ASTM C1059, Type II, Non-Redispersable -ASTM C190 -ASTM 109 -ASTM 348 -ASTM 321

### Comparison of water-mixed mortar vs. TK-LIQUID BONDING AGENT 225

STRENGTH	WATER	TK-225
Tensile	235 psi	645 psi
Compressive	2390 psi	5715 psi
Flexural	610 psi	1585 psi
Impact	6 psi	16 psi
Abrasion Resistance	23.8%	1.15%*

\* % weight loss; lower value = higher resistance

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## **APPLICATION:**

*Repair Work* - When used as a bonding agent for patch repair or overlayment, saturate the area with TK-LIQUID BONDING AGENT 225 and place the mortar while the bonding agent is still in a tacky state. DO NOT allow it to dry before placing the mortar. Use a wet trowel to apply, cleaning it frequently. DO NOT use a heavy pressure as polymer modified concrete cannot be worked like a pure sand/cement mortar due to wet drag and surface skin formation. Over-troweling results in floating the solids to the surface or in treating away the surface skin.

When necessary, the surface may be refinished with a trowel approximately 15 minutes after initial placement. Retemper the surface with a 1:1 blend of water and TK-225. Sprinkle the blend onto the surface with a fine bristled brush then trowel LIGHTLY.

On large areas, screed the mix with a narrow metal straight edge while ensuring a build-up of the mortar in advance of the edge. Use a short vibratory stroke to achieve the smoothest surface. Two screeds working together (first as a rough strike off and second to provide the final surface finish) will reduce the possibility of surface skinning and will provide a smoother finish.

**NOTE:** All polymer modified emulsions for cement have a minimum film forming temperature. Below such temperatures, the polymers will not bind together. Additionally, in conditions of high temperatures, high humidity and wind, both the pot life and cure times can be affected. When this occurs, a small amount of water may be added by placing wet burlap on the surface. This prevents it from drying too rapidly and also prevents surface cracking.

## **CLEAN UP:**

Trowels and containers may be cleaned with water. Flush sprayer and equipment with water before storing.

## **COVERAGE:**

Typical coverage rate is 300 ft<sup>2</sup>/gallon when used as a bonding agent.

*Coverage rates are provided as a guideline only. Many factors including surface texture, porosity and weather conditions will determine actual coverage rates.*

## **LIMITATIONS:**

- The application instructions of the manufacturer must be followed when the material is to be applied over newly formed concrete.

## **FIRST AID:**

- Consult this product's safety data sheet for additional health and safety information. Safety Data Sheets are available through TK distributors, the TK office and the TK website.

## **AVAILABILITY:**

TK-LIQUID BONDING AGENT 225 is available through TK Distributors. Contact TK Products for the nearest distributor.

Packaged in 55-gallon drums, 5-gallon pails and 1-gallon cans.

FOR PROFESSIONAL USE ONLY

## **NOTES**

**\*TK-CHEMICAL CLEANER 101 must be purchased separately.**

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