



TECHNICAL DATA SHEET

AKKRO®-7T

Liquid Bonding Admixture

03300

CAST-IN-PLACE CONCRETE
CONCRETE

1. **DESCRIPTION:** AKKRO-7T is a non-redispersable, liquid bonding admixture used to produce polymer modified concrete and mortar.

FEATURES AND BENEFITS

- *Increases flexural and tensile strength*
- *Improves bond strength*
- *Reduces shrinkage*
- *Resists water penetration*
- *Protects from freeze-thaw damage*
- *Complies with ASTM C1059, Type 2*
- *Non-yellowing*
- *USDA compliant*

APPLICATIONS

- *Cement based coatings, toppings, patching mortars, leveling compounds, stucco, and terrazzo*
- *Mixing liquid for Tamoseal, Concrete Finisher, Tamms SBC and Tamms Stucco Finish*

2. **COMPOSITION AND MATERIAL:** AKKRO-7T is a milky white, water based emulsion of high solids acrylic polymers and modifiers. AKKRO-7T is non-yellowing, and has excellent resistance to ultraviolet degradation, heat and most common chemicals. AKKRO-7T does not alter the color of the mixture.

3. **SURFACE PREPARATION:** Surface must be structurally sound, clean, free of dust, dirt, oil, curing or form release compounds, paint, laitance, efflorescence and other contaminants. New concrete and masonry surfaces must be cured 7 days. Provide an absorptive surface on smooth precast or formed concrete by abrading the surface. Follow the surface preparation directions for the product in which AKKRO-7T is being used as an admixture.

4. **MIXING INSTRUCTIONS:** Stir AKKRO-7T slowly and thoroughly using slow speed mixing equipment and a clean container. Do not aerate the AKKRO-7T.

5. RECOMMENDED MIXTURES:

5.1 **BONDING SLURRY:** Dry mix 1 part Portland cement with 3 parts dry sand and add undiluted AKKRO-7T to produce a pourable slurry coat. Brush mixture thoroughly into voids and pores of surface to eliminate air pockets. Before slurry coat dries, follow immediately with patching materials that are compatible with portland cement.

5.2 **PATCHES, OVERLAYS AND TOPPING:** For depths 1/2 inch (12.7 mm) or greater, mix 1 part AKKRO-7T with 3 parts potable water. Proportion dry sand, cement, aggregate and add measured amount of mixing liquid. Featheredging and repairs less than 1/2 inch (1.27 cm) deep will require additional AKKRO-7T in the mix.

5.3 **TERRAZZO:** Make up a mixing liquid of 1 part AKKRO-7T to 3 parts potable water.

5.4 **THIN COAT WALL APPLICATIONS:** Manufactured wall coatings including TAMOSEAL, CONCRETE FINISHER, TAMMS SBC, and TAMMS STUCCO FINISH; mix 1 part AKKRO-7T to 3 parts potable water for mixing liquid, or as directed in instructions for mixing coating.

5.5 **FIELD MIXED STUCCO:** Mix 1 part AKKRO-7T to 3 parts potable water.

5.6 **CEMENT PLASTER COATINGS:** Applications 3/8 inch (0.95 cm) or less; use 1 part AKKRO-7T to 2 parts potable water. Applications over 3/8 inch (0.95 cm); use a 1:3 mixture.

5.7 **POINTING MORTARS:** Manufactured tuck pointing mortars such as JOINT-DRI and other special mortars for thin applications; mix 1 part AKKRO-7T to 3 parts potable water for mixing liquid.

Material Properties

| | | |
|--------------------------------|------------------------|---------------------------|
| Weight per Gallon: | 8.65 lbs. | |
| Specific Gravity: | 1.04 | |
| | Unmodified Sand-Cement | Sand-Cement with Akkro-7T |
| ASTM C 109 | | |
| Compressive Strength | | |
| 3 days, psi | 1,640 | 2,890 |
| 7 days, psi | 2,345 | 3,410 |
| ASTM C 190 | | |
| Tensile Strength, 7 days, psi | 246 | 510 |
| ASTM C 78 | | |
| Flexural Strength, 7 days, psi | 410 | 1,096 |
| ASTM C 321 | | |
| Bond Strength, 7 days, psi | 56 | 486 |

Data presented are typical laboratory values.

TAMMS INDUSTRIES
NOVEMBER 2003 (Replaces 3/02)

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6. **APPLICATION TECHNIQUES:** Use only light pressure on trowel and finish with as few strokes as possible. Keep trowel clean and wet to prevent sticking. Do not over-trowel. Mixes with AKKRO-7T do not normally require curing, but on hot, dry days, or windy days, it is advisable to cover with moist burlap for 24 hours or as recommended. Air-cure the surface for 2 to 4 days for normal use, and 4 to 7 days for heavy traffic areas. Refer to "CAUTIONS," for curing water containment structures.

7. **CLEAN-UP INSTRUCTIONS:** Clean tools and equipment with detergent and water immediately following use. Clean drips, spills and smears while mix is still wet. Mixes containing AKKRO-7T are extremely difficult to remove if allowed to dry before cleaning.

8. **CAUTIONS:** Do not apply mixes modified with AKKRO-7T when the temperature is below, or expected to fall below 40°F (4.4°C) within 48 hours. Do not use with air entrained cements. Excessive moisture and high humidity will slow curing time. Provide adequate ventilation when using AKKRO-7T in enclosed tanks, reservoirs or other areas where air circulation is limited. Air-cure cisterns, tanks or pools for minimum 7 to 10 days before filling with water. Concrete mix designs using AKKRO-7T should be evaluated and tested for performance and application properties prior to use.

9. **ENVIRONMENTAL AND SAFETY PRECAUTIONS: Industrial Use Only.** AKKRO-7T is a water based product. It can be irritating to the eyes and skin. In case of eye contact, flood eyes repeatedly with clean water and call a physician or ophthalmologist immediately. **DO NOT RUB EYES!!** Wash hand thoroughly with soap and water after handling, or before smoking or eating. Do not take internally. **KEEP AWAY FROM CHILDREN AND ANIMALS.** Consult Material Safety Data Sheet for further information. **EMERGENCY RESPONSE PHONE NUMBER:** (800) 862-2667 TAMMS or (800) 424-9300 CHEMTREC.

10. **PACKAGING:** 1 gallon plastic bottles, 5 gallon plastic pails, 55 gallon open top steel drums (Metric Equiv. – 3.79l, 18.9l & 208.22l)

Storage: 40-90°F (4.5 – 32.2°C). **Protect from freezing.** If frozen, place in a warm room to thaw. Do not use direct heat or force thawing.

Shelf Life: 1 year, unopened, protected storage.

Freight Class: Class 55.

11. **TECHNICAL SERVICE:** For application procedures or surface conditions not specified above, please contact:

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