



TECHNICAL DATA SHEET

TAMOSEAL®

Cement Based Waterproofing Finish

CEMENTITIOUS AND REACTIVE WATERPROOFING
THERMAL AND MOISTURE PROTECTION

TAMMS INDUSTRIES
NOVEMBER 2003 (Replaces 4/02)

1. **DESCRIPTION:** TAMOSEAL is a cement-based, polymer modified material designed to waterproof concrete and masonry.

FEATURES AND BENEFITS

Waterproofs and decorates

- *Tenacious bond*
- *Becomes an integral part of substrate*
- *Durable*
- *Breathable*
- *Custom and special colors*

APPLICATIONS

- *Interior and exterior, above and below grade*
- *Useful on concrete, block, brick and stone*

Typical applications:

- *Concrete and block walls*
- *Foundations*
- *Water tanks*
- *Reservoirs*
- *Manholes*

2. **COLORS:** TAMOSEAL is available in White, Oyster and Gray. Gray is usually used below grade or as a base coat for other finishes. Custom colors are also available. Contact Tamms Customer Service for details.

3. **SURFACE PREPARATION:** The surface must be structurally sound, clean and free of dirt, oil, and other contaminants. New concrete and masonry must be cured 7 days before application of TAMOSEAL. Abrade the surface to provide an absorptive surface. Remove form marks and other protrusions to prevent "show through". Repair all surface defects including cracks and voids. Allow patches and other surface preparations to cure for 24 hours. Dampen the surface with potable water immediately before TAMOSEAL application.

4. **MIXING INSTRUCTIONS:** TAMOSEAL must be mechanically mixed using a slow speed motor and mixing blade to thoroughly disperse the ingredients. Do not aerate the mix. One 50 pound bag of TAMOSEAL requires approximately two gallons of mixing liquid. The mixing liquid is produced by mixing three parts of clean water with one part of AKKRO-7T.

4.1 Blend 3 parts potable water with 1 part AKKRO-7T in a clean container to make up the mixing liquid. Approximately 2 gallons of mixing liquid will be required for 50 pounds of TAMOSEAL. Two gallons of mixing liquid consists of 2 quarts of AKKRO-7T blended with 6 quarts of potable water.

Material Properties at 75° F		
Test Method	Criterion	Result
ASTM C109		
Compressive Strength, PSI	7 days	4,740
	28 days	6,810
ASTM C348		
Flexural Strength, PSI	7 days	385
	28 days	890
ASTM C190		
Tensile Strength, PSI	7 days	346
	28 days	410
ASTM C67		
Absorption, PCT	24 hour soak	4.6%
	5 hour boil	4.7%
ASTM C672		
Freeze-Thaw Resistance, PCT	Loss at 50 cycles	1.20%
ASTM C666		
Durability Factor	After 300 cycles	101.0
ASTM D144		
	Chloride Content	0.0098%
ASTM E514		
Water Permeance after coating leaking wall		
Extent of damp area	72 hours	0.0%
Maximum leakage	1 hour	none
Leakage rate	ml/hr	none
Permeance Rating		Excellent
Salt Spray Resistance		
300 hour exposure at 5% solution at 90°F resulted in no adhesion loss or deterioration at completion of test.		
Fed. Test 141, Method 6272-1		
Fungus Growth Resistance		Resistant
Fed. Spec TT-C-00555		
Resistance to Wind Driven Rain		Excellent
ASTM G96		
Weatherometer 6000 hours	No crazing, cracking, chipping or flaking. Light chalking and color change. No other deterioration.	

4.2 Pour approximately one half of the required mixing liquid into an empty, clean container and begin slow speed mixing.

4.3 Slowly add TAMOSEAL and mixing liquid as needed to the mixing liquid to bring the mixture to a heavy, completely blended pancake batter consistency.

4.4 Stop mixing and allow the mixture to "fatten" for ten minutes.

4.5 Remix and add more mixing liquid if needed to achieve proper consistency.

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5. **APPLICATION TECHNIQUES:** Prior to application, it is recommended that a mock up or field sample be made containing all materials to be coated. Obtain approval of the architect or owner for the final color, texture and coverage rate before proceeding with work. Retain approved sample until the project is completed. Dampen the wall with potable water before starting any TAMOSEAL application.

5.1 Hand Brush: Apply TAMOSEAL using a 6" cement masons brush. Load bristles with TAMOSEAL and lay on a heavy coat using long, smooth horizontal strokes. Apply sufficient material to fill all voids. Final strokes should all be in one direction to produce an even texture and finish. Allow first coat to dry for 12 to 24 hours before applying a finish coat.

5.2 Push Broom: Use a 5 gal pail or wide mouth tub to hold TAMOSEAL. Dip a 10" tampico bristle push broom into the TAMOSEAL mix just enough to load the bristles. Apply a heavy coat using long, even horizontal strokes. Apply sufficient material to fill all voids. Lift the brush at the end of each stroke. Final strokes should all be in one direction to produce an even texture and finish. Do not overbrush. Allow first coat to dry for 12 to 24 hours before applying a finish coat.

5.3 Spray: Use heavy duty spray equipment capable of spraying cement coatings or mastics.

6. **COVERAGE:** Coverage rates are approximate and will depend on the texture and porosity of the substrate. Under normal waterproofing conditions, apply TAMOSEAL base coats at 2 pounds per square yard. Add a finish coat at 1 pound per square yard. The total thickness of the two coats will be approximately 1/16 to 1/8".

7. **CLEAN-UP INSTRUCTIONS:** Clean mixing and application equipment with water immediately after use. Clean any splatter or spills with water before material sets. TAMOSEAL is a cementitious product containing an acrylic additive, and if allowed to dry on the surface removal becomes extremely difficult.

8. **CAUTIONS:** Do not apply to frozen or frost filled surfaces or when temperature is below 40°F (4.5°C), or expected to fall below 40°F (4.5°C) in 24 hours. Do not use on traffic bearing surfaces. Do not fill open cisterns, tanks, etc. with water for at least 7 days. Some colors may chalk or show water marks after weathering. When using TAMOSEAL containing AKKRO-7T in enclosed tanks or reservoirs, make sure that adequate ventilation is available during application and the total curing period. TAMOSEAL is not recommended for negative side waterproofing where hydrostatic pressures exceed 8 ft water head. TAMOSEAL should not be applied to surfaces actively leaking.

9. **PACKAGING:** 20 lb (9.07 kg) and 50 lb (22.68 kg) plastic pails, 50 lb (22.68 kg) poly-lined bags.

Shelf Life: Minimum one year in dry, protected storage.
Freight Class: Class 55.

10. **ENVIRONMENTAL AND SAFETY PRECAUTIONS:** Contains portland cement which is alkaline on contact with water. Do not breathe dust. May cause delayed lung injury (Silicosis). IARC reports Crystalline silica may cause cancer in humans. Irritating to eyes and skin. Avoid splashing into eyes or contact with skin. In case of eye contact, flood eyes repeatedly with potable water and call a physician. **DO NOT RUB EYES.** Wash skin thoroughly after handling and before smoking or eating. Use adequate ventilation. **KEEP AWAY FROM CHILDREN AND ANIMALS.** READ MATERIAL SAFETY DATA SHEET BEFORE USING. MATERIAL IS FOR INDUSTRIAL USE ONLY. EMERGENCY RESPONSE PHONE NUMBERS ARE (800) 862-2668 TAMMS OR (800) 424-9300 CHEMTREC.

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

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