



# TECHNICAL DATA SHEET

## TAMMS SBC

### Cement Based, Fiber Reinforced Waterproofing Coating

EXTERIOR INSULATION AND FINISH SYSTEMS  
THERMAL AND MOISTURE PROTECTION

TAMMS INDUSTRIES  
JANUARY 2000 (Replaces 5/99)

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07240

- DESCRIPTION:** TAMMS SBC, Surface Bonding Cement, is a trowel or spray applied, decorative, fiber reinforced, portland cement based, breathable, waterproofing coating. The high flexural strength of TAMMS SBC provides excellent resistance to cracking and superior durability against weathering.
- USES:** TAMMS SBC is applied exterior or interior, above or below grade to concrete block, brick, stone, precast or formed concrete, stucco, cement plaster, and other structurally sound concrete or masonry wall surfaces. TAMMS SBC conforms to ASTM C887, and is used to construct unit masonry walls without mortar. TAMMS SBC is crack resistant and used as a waterproof parge coat for below grade walls. It is used to level and fill surface holes and voids. TAMMS SBC is an excellent base coat for liquid acrylic polymer coatings such as TAMMOSHEEN and TAMMSCOAT, and flexible polymer coatings such as TAMMOLASTIC and FLEXCOAT.
- COMPOSITION AND MATERIALS:** TAMMS SBC is a proprietary formulation of special cements, selected and finely graded aggregates, graded glass fibers, plasticizers, and waterproofing compounds.

#### TECHNICAL DATA

Material Properties at 75°F, 50% RH

Properties	Results	Test Method	Remarks
Compressive Strength	1950 psi	ASTM C109	1 day
	3170 psi		7 day
	4010 psi		28 day
Flexural Strength	930 psi	ASTM C348	3 day
	970 psi		7 day
	980 psi		28 day

Meets ASTM C887 for Surface Bonding Cement.

- COLORS AND TEXTURES:** TAMMS SBC is available in natural cement gray, and natural cement white. Application by trowel and float, or spray equipment allows the applicator to produce textures ranging from smooth to coarse. For custom colors, contact Tamms Technical Service Centers.
- SURFACE PREPARATION:** Surface must be structurally sound, clean, and free of contaminants including paint, sealers, and efflorescence. Cure new concrete surfaces for a minimum of 28 days. Remove form marks and other protrusions to prevent "show through." Repair surface defects, cracks, and voids before applying TAMMS SBC. Cure patches and other surface preparations for a minimum of 24 hours before coating. Provide an absorptive surface on all substrates, including smooth precast or formed concrete by abrading the surface. Dampen surface with potable water immediately before TAMMS SBC application. Apply TAMMS H/P PRIMER to very dense, very smooth, or questionable surfaces. Do not prewet the surface when a bonding agent is used. For maximum performance and adhesion, use AKKRO-7T with the mixing liquid.
- MIXING INSTRUCTIONS:** Mix TAMMS SBC in a slow speed rotary mixer with rubber tipped blades, to thoroughly disperse all ingredients and obtain a uniform consistency. **Do not aerate mix.** Use only potable water for mixing and for dampening the surface. To improve physical properties, adhesion, and curing of TAMMS SBC, blend 1 part AKKRO-7T with 3 parts water to use as the mixing liquid.
  - With the mixer running, add one half of the required liquid, and then slowly add TAMMS SBC.
  - Gradually add more TAMMS SBC and liquid to obtain a smooth, workable consistency. Limit the mixing time to 3 to 4 minutes to avoid damage to the glass fibers.
  - Stop the mixer, and allow material to "fatten" for 5 to 10 minutes.
  - When "fattened," restart mixer to check the uniformity of the mix. If necessary, add additional mixing liquid to bring the mix to the proper trowel or spray application consistency.
  - One 60 pound bag of TAMMS SBC will require approximately 6 to 7 quarts (5.7 - 6.6 l) of mixing liquid. When using AKKRO-7T in the mix, each bag of TAMMS SBC will require approximately 1.5 to 2 quarts (1.4 - 1.9 l) of AKKRO-7T.
- APPLICATION TECHNIQUES:** Uniformly dampen surface with potable water immediately before starting application. Do not saturate substrate. Re-dampen the surface as needed during application.
  - Trowel Application** – Apply TAMMS SBC with a steel trowel. Use sufficient pressure and material to ensure good bond, uniform thickness, and complete coverage of the surface. Maintain a minimum thickness of 1/8 inch (3.2 mm) for each application. When heavier coats are required, build up to the desired thickness in successive applications. Allow 24 hours drying time between coats. Do not exceed a maximum thickness of 3/16 inch (8.0 mm).
  - Spray Application** – Dampen the wall as indicated above. Apply TAMMS SBC by spray when large areas are to be coated. For best results, use an overlapping, circular spray pattern. The finished two coat system should be approximately 1/4 to 5/16 inch thick (6.4 - 8.0 mm).
    - Structural Application:** Spray applications of TAMMS SBC may be used to convey large amounts of material to the wall; however, the material must be steel troweled to ensure a firm mechanical bond of the base coat to the surface. This method is also used for surface bonding application. Additional coats may be spray and

trowel or float finished, or left with the spray applied texture.

- b) **Decorative Application:** Spray apply TAMMS SBC when it is not necessary to level the wall (Spray applications will seal and decorate, but will not level the surface or fill voids). Some variance in the spray texture can be expected. Apply a light spray coat of TAMMS SBC to retard surface absorption. Then, double back with the finish coat before the first coat has lost its sheen.

8. **SURFACE BONDING:** TAMMS SBC may be used to build unit masonry walls without mortar. Concrete block must be dry, clean, sound, and free of contaminants that would prevent proper adhesion.

- 8.1 Level the first course of block in a full bed of mortar or TAMMS SBC. Stack the remaining courses of block, without mortar, in a running bond pattern. To plumb and level the wall, use mortar or TAMMS SBC.

Do not use wood shims or sand for leveling.

Use TAMMS SBC or mortar to fill gaps 1/4 inch (6.4 mm) or larger.

- 8.2 Lay the top course of the wall in a full mortar bed. Dampen wall with potable water immediately before the application. Trowel on a minimum 1/8 inch (3.2 mm) thickness of TAMMS SBC. Continue to wet the wall as needed to maintain a damp surface ahead of the trowel application. Should the surface dry out, and the material start to pull, dampen the wall again.

- 8.3 For surface bonding construction, TAMMS SBC must be applied to both sides of the wall. Apply the material to each complete wall section without interruption. When this is not possible, cut the material straight and square in the middle of one course to form a butt joint, so that the horizontal joint will not be overlapped when the application is resumed. Do not exceed 45 sq. ft. per 60 lb. bag. (6.5 kg/sq.m)

9. **CURING:** To prevent the development of shrinkage cracks from very rapid drying, the finished work should be periodically fog spray cured with water for 24 to 48 hours following application. Weather and jobsite conditions will dictate the amount and frequency of dampening required. Protect finished work from rain and other adverse weather conditions for 48 hours following application. When using TAMMS SBC containing AKKRO-7T in enclosed tanks or reservoirs, ensure that adequate ventilation is available during application and the full curing period.

Do not fill open cisterns, tanks, etc. with water for a minimum of 7 days.

Wait minimum 72 hours following cure, before applying a liquid polymer decorative coating.

10. **TEMPERATURE AND WEATHER LIMITATIONS:** Do not apply TAMMS SBC to frozen or frost filled surfaces, or when temperatures are expected to fall below 40°F or rise above 100°F in 72 hours without proper protection and temperature control. (4.4 - 37.8°C)

- 10.1 **Cold Weather Protection:** When temporary heaters are required to maintain temperature, ensure that the heat and fumes face away from the finished work. Use fans for proper air movement and circulation as needed.

- 10.2 **Hot Weather Protection:** Protect surface by wind screens and shade screens during periods of high temperatures, low humidity, sun, or wind.

11. **COVERAGE:** The coverage rates below are approximate and for estimating purposes only. Surface texture, porosity, and thickness of coating determines the total amount of TAMMS SBC required. Apply a field sample to all materi-

als to be coated. Obtain approval of Architect or Owner for the final color, texture, waterproofing, and coverage rate before proceeding with work. Retain sample or mock-up until work is completed. One 60 pound bag of TAMMS SBC will yield 40-50 square feet applied at approximately 1/8 inch thickness. (3.7-4.6 sq.m/bag). Leveling uneven surfaces will require more material. For estimating purposes, 12-14 pounds of TAMMS SBC per square yard will generally result in a finished coating 1/8 - 1/4 inch thick. (5.9-7.4 kg/sq.m).

12. **CLEAN-UP INSTRUCTIONS:** Clean mixing and application equipment with water immediately after use. Clean splatter or spills with water before material sets. TAMMS SBC with AKKRO-7T in the mixing liquid becomes extremely difficult to remove if allowed to dry on a surface.

13. **CAUTIONS:** Do not retemper TAMMS SBC. Use only high production plaster spray machines or hopper type texture spray guns for spraying. Do not use high pressure or airless spray equipment. Spray applications should be performed only by experienced applicators. Protect application surface during weather extremes. Do not deviate from curing recommendations.

14. **ENVIRONMENTAL AND SAFETY PRECAUTIONS: Industrial Use Only.** TAMMS SBC contains portland cement and is alkaline on contact with water. Provide adequate ventilation. In dusty conditions, use respirators. Irritating to eyes and skin. Avoid splashing into eyes or contact with skin. Wear goggles, use barrier creams, and wear protective clothing. In case of eye contact, flood eyes repeatedly with water and call a physician immediately. **DO NOT RUB EYES!** Wash skin thoroughly with soap and water after handling or before smoking or eating. Do not take internally. If ingested, drink plenty of water or milk, do not induce vomiting, and contact a physician immediately. **KEEP AWAY FROM CHILDREN AND ANIMALS.** Consult Material Safety Data Sheet for further information.

15. **PACKAGING:** 60 lb poly-lined bags. (Metric: 22.7 kg)

**Storage:** On pallets, protected from moisture.

**Shelf Life:** Minimum one year.

**Freight Class:** Class 55.

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

TAMMS INDUSTRIES

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