

FLOORSTONE

Cementitious Leveling Underlayment

03540

CEMENTITIOUS UNDERLAYMENT
CONCRETE

TAMMS INDUSTRIES
NOVEMBER 2003 (Replaces 1/00)

1. **DESCRIPTION:** The FLOORSTONE products are high compressive strength materials used to fill and level low areas and to patch floor surfaces before traffic bearing floor coverings are installed. There are two versions of FLOORSTONE. FLOORSTONE SUPREME is used for skim coats and thin fills up to 1/4 inch (6.4 cm). FLOORSTONE SUPREME is mixed with LAS-TEX - a liquid polymer binder. FLOORSTONE N.I.F. is mixed with water and is used for fills beginning at 1/4 inch up to a maximum of 2 inches in thickness (5.1 cm).

FEATURES AND BENEFITS

- *Compatible with most floor coverings, adhesives and mastics*
- *Excellent flow and leveling characteristics*
- *Yields a smooth, level and hard surface*
- *Floor coverings can be applied after 72 hours*
- *Properties similar to concrete*
- *Pump or pour application*

APPLICATIONS

- *Repair, fill and level surfaces*
- *Interior use over properly prepared concrete, wood, plywood, metal, and other rigid substrates*

Material Properties @ 75°F		
Test Method	Criterion	PSI
ASTM C109 Compressive Strength	1 day	4,090
	7 days	5,915
	28 days	8,465
ASTM C78 Flexural Strength	3 days	501
	7 days	635
	28 days	810
ASTM C190 Tensile Strength	7 days	240
	28 days	410
Shear Bond Strength	sand/cement	75
	FLOORSTONE	223
ASTM C157 Shrinkage 50% RH	<u>Criterion</u>	<u>Chg Length</u>
	7 days	-0.060%
	28 days	-0.093%

Data presented are typical laboratory values.

2. **COMPOSITION AND MATERIALS:** FLOORSTONE is a proprietary blend of cements, finely processed aggregates, iron oxide pigments and other chemicals. LAS-TEX is a formulation of liquid latex polymers.

3. **COLORS:** Pigment is used in order to help easily identify FLOORSTONE SUPREME and FLOORSTONE N.I.F. FLOORSTONE SUPREME is a reddish brown color while FLOORSTONE N.I.F. is yellowish brown color. LAS-TEX is a milky pink liquid.

4. **SURFACE PREPARATION: Concrete Substrates** must be cured, structurally sound, free of dust, dirt, curing and release agents, and other contaminants. Abrade dense or smooth concrete. Using a bonding agent such as HORNWELD is recommended to ensure maximum bond. If the surface is porous, prewetting with potable water may be sufficient. If water is used, excess moisture and puddles must be removed to prevent dilution of the FLOORSTONE. **Metal Surfaces** must be thoroughly cleaned to remove rust, oil, grease, paint and other contaminants. For metal surfaces use DURALBOND as a bonding agent before applying FLOORSTONE. **Wood Surfaces** must be structurally sound, free of dust, dirt, wax, oil, paint, mastic and other contaminants. Wood floors must be fully braced and nailed so that the surface is stable and non flexible. Apply wire mesh over the floor as an artificial key. Prewet the surface with HORNWELD before applying FLOORSTONE.

5. **MIXING INSTRUCTIONS: FLOORSTONE SUPREME:** LAS-TEX is used as the mixing liquid for FLOORSTONE SUPREME. One gallon (3.8 liters) of LAS-TEX will be required for each 40 to 50 pounds (20.5-22.7 kg) of FLOORSTONE SUPREME. Pour the required amount of LAS-TEX into a clean container. Use a slow speed motor and mixing blade to mix materials. Start mixer and slowly add the FLOORSTONE SUPREME. Do not aerate mixture. Continue adding **FLOORSTONE SUPREME** to bring the mixture to the consistency of a smooth, heavy pancake batter. Mix no more material than can be used in 10 to 15 minutes. Small quantities may be mixed with a hand trowel. Clean mixing and application equipment between batches. **FLOORSTONE N.I.F.:** Potable water is used

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as the mixing liquid for FLOORSTONE N.I.F. One gallon (3.8 liters) of water will be required for each 45-50 pounds (20.5-22.7 kg) of FLOORSTONE N.I.F. Do not use LAS-TEX for any underlayment which will be applied at greater than 1/4". Pour the required water into a clean container. Use a slow speed motor and mixing blade to mix materials. Start mixer and slowly add the FLOORSTONE N.I.F. Do not aerate the mixture. Continue adding FLOORSTONE N.I.F. to bring the mixture to the consistency of a smooth, heavy pancake batter. Mix no more material than can be used in 10-15 minutes. Small quantities may be mixed with a hand trowel. Clean mixing and application equipment between batches.

6. **APPLICATION TECHNIQUES:** Dampen the surface with either HORNWELD or water prior to application of FLOORSTONE (see surface preparation). Pour the FLOORSTONE onto the surface of the area to be leveled. Work the material into position with a short darby and allow the FLOORSTONE to settle to its own level. Finish the surface with a straight edge steel trowel using a swift smooth troweling action to produce a smooth, dense finish. Do not over trowel, retemper or dilute FLOORSTONE. Place all material within 10-15 minutes of mixing. FLOORSTONE will achieve initial set in around 45 minutes (depending on temperature and relative humidity) and may be opened to light foot traffic in about an hour. Thin films of FLOORSTONE SUPREME should be allowed to cure overnight before installing the overlayment in order to ensure moisture release. Longer curing time may be required for thicker applications of FLOORSTONE N.I.F.
7. **COVERAGE:** One 50 pound bag of FLOORSTONE will yield approximately 0.5 cubic feet.
8. **CLEAN-UP INSTRUCTIONS:** Clean mixing and application equipment with detergent and water immediately after use. Remove splatter or spills with water before material sets. If allowed to dry, the bonding additives in FLOORSTONE will make the material difficult to remove.
9. **CAUTIONS:** FLOORSTONE must not be used as a wearing surface and must not be subjected to moisture exposure. Do not use FLOORSTONE outdoors or below grade. Do not sand or grind cured FLOORSTONE. Do not use LAS-TEX as a bonding agent. Do not use LASTEX on pours greater than 1/4 inch. Do not retemper. Do not add any materials to FLOORSTONE besides the designated mixing liquid. Do not dilute LAS-TEX. Mix only enough FLOORSTONE that can be placed in 10-15 minutes. Do not apply to frozen or frost filled surfaces. Do not apply if the temperatures is below or expected to fall below 40°F (4.5°C) in the next 48 hours. Do not use FLOORSTONE in cracks or joints that are in movement. Do not use FLOORSTONE over radiant heated floors or boiler rooms.

10. **ENVIRONMENTAL AND SAFETY PRECAUTIONS: Industrial Use Only.** FLOORSTONE products contain various cements and are 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 or ophthalmologist immediately. **DO NOT RUB EYES!** Wash 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. EMERGENCY RESPONSE PHONE NUMBER: (800) 862-2667 TAMMS OR (800) 424-9300 CHEMTREC.

11. **PACKAGING:** FLOORSTONE SUPREME is available in 25 and 50 pound poly-lined bags. FLOORSTONE N.I.F. is sold in 50 pound poly-lined bags. LAS-TEX comes in 1 gallon and 5 gallons DOT approved containers. Freight class is 55.

Storage: Store FLOORSTONE in a dry area protected from the weather. Store LAS-TEX at temperatures between 40-90°F. (4.5-32.2°C). Protect from freezing. If accidentally frozen, place in a warm room to thaw. Do not use direct heat to thaw.

Shelf Life: Is one year in protected storage.

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

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