

TERA-GEM III Flex Flooring System Troweled

PRODUCT DESCRIPTION

Tera-Gem III troweled Flex Flooring System is a tough wearing, 100% solvent free, seamless epoxy - aggregate composite designed for use as an overlayment for commercial and industrial environments. The Flex system is designed for areas readily exposed to rapid thermal changes and elevated temperatures. This product has excellent adhesion to concrete, steel and wood substrates. The Tera-Gem III Flex system is a nominal 1/8" or 1/4" thickness composite consisting of the following:

PRIMER: A two component, damp tolerant epoxy primer

BASE COAT: A three component, troweled polymer composite consisting of epoxy resin, curing agent and selected blend of aggregates.

SEALER: Consists of the Tera-Gem III Flex clear liquid components. Other sealers may be substituted depending upon application demands.

PHYSICAL PROPERTIES

Compressive Strength	(ASTM C-579)	8,000 psi. AFTER 7 DAYS
Tensile Elongation	(ASTM C-638)	35% min
Tensile Strength	(ASTM C-307)	2,200 psi.
Flammability	(ASTM 635)	Self Extinguishing
Fungus Resistance	(Mil D-3134F Sec 4.7.3)	None TT-P-34
Water Absorption	(ASTM C-413)	0.30%
Bond Strength, Primer	(ASTM 4541)	>400 psi
Hardness	ASTM 4060	70

Application Properties

Mix Ratio	1A : 1B by volume
Pot Life (minutes)	25-30 @ 77 deg. F
Application Temp.	(F. Min) 50 deg .F

When placed by trained applicators, Tera-Gem III Flex will provide a long lasting, easy to maintain floor that will stand up even in the most demanding of environments.

SUGGESTED USES

Suitable for process areas, warehouses, food process plants, beet and beverage plants, distilleries, dairies, electronics plants, clean rooms, hospitals, commercial and restaurant kitchens, sanitary facilities and areas that are subject to thermal differentials.

CHEMICAL RESISTANCE (PARTIAL LIST)

<u>Reagent</u>	<u>Film Integrity</u>	<u>Reagent</u>	<u>Film Integrity</u>
30% Nitric Acid	No Effect	Urine	No Effect
30% Phosphoric Acid	No Effect	Household Cleaner	No Effect
20% Hydrochloric Acid	No Effect	(Non-Dye Containing)	
70% Sulfuric Acid	No Effect	Beer/Wine	No Effect
10% Acetic Acid	No Effect	Rubbing Alcohol	No Effect
50% Sodium Hydroxide	No Effect	Bleach	No Effect

NOTE:

- The end user should supply information regarding chemical concentrations, service temperatures and cleaning procedures to verify correct use of product. Review full chemical resistance charts for additional chemical information. Contact TL technical department for information regarding specific applications.
- Staining or a white blush will occur if the new floor is not allowed to cure fully (7 days) prior to allowing water, chemicals, etc. to stand on the surface.

SURFACE PREPARATION

Concrete surfaces must be free from surface contaminants, laitance, curing compounds, oils, greases, dirt, chemical contaminants, unbounded coatings, etc. The surface must be sound, without delamination. Concrete compressive strength must be a minimum of 3000 psi. New concrete should be cured for a minimum of 28 days. Wet curing is the preferred method. User must notify manufacturer for different conditions.

To properly clean concrete surfaces, the concrete may be sandblasted, steel shot-blasted, scarified, water blasted, or other approved technique. Steel surfaces must be sandblasted to a minimum gray-metal finish prior to application.

SYSTEM APPLICATION

PRIMER:

Use Tera-Gem III Flex liquid components as primer. Use a clean bucket and mix 1 part of A to 1 part of B by volume. Stir with a mechanical agitator for 1-2 minutes. Distribute mixed material evenly over the floor surface using rollers, squeegees or spray. Spread rate will vary from 70 to 150 sq ft per gallon. If surfaces have been damp for a period of time, application rate should be 80-100 sq ft per gallon. Do not apply over standing water or let primer set before applying next coat.

BASECOAT (aka Body Coat, Troweled Coat):

Use a clean container and mix Tera-Gem III Flex liquid components at a ration to 1 part A to 1 part B by volume. To one weight equivalents of mixed liquid components add approximately 7 weight equivalent of aggregate. Mix all components using an electrical drill motor agitator or a plaster mixer. Mix all components for 2-3 minutes or until uniformly wetted. Transfer to installation area and trowel to a thickness of 1/8" to 1/4". Other thickness are possible with compromises in impact resistance and service life. 1/4" thick flooring has been an industry standard for 30+ years

SEALERS/ANTI-SKID:

To seal the epoxy/aggregate composite for easier cleaning and to assure non-skid property, apply two seal coats using the base coat liquid components. Mix in the same manner as described in previous steps. Apply the first seal. Let the surface set. Mix and place the second seal coat similarly to the first coat, application rate is approx 125 sq ft per gallon. During the second seal coat process broadcast a graded silica aggregate for anti-skid effects. The most commonly used anti-slip texture is achieved with silica sand. Other aggregates and spread rates can be used to achieve anti-slip properties in the most demanding environments.

MATERIAL HANDLING

Epoxy resins and curing agents have certain handling hazards. Users should become familiar with the information contained in the MSDS sheets for each formulated systems. Observe warning indications on the labels for each component.

PACKAGING

Tera-Gem III CRS epoxy system is available in pre-measured gallon, 3 gallon kits, 15 gallons kits and 165 gallon kits. Aggregate and anti-skid silica is supplied in 50lb and 100lb bags.

NOTES

The following information is available online at www.teralite.com:

- Material Safety Data - Color Selection - Anti-Skid Recommendation -Maintenance Suggestions
- Chemical Resistance

The technical data furnished is true and accurate to the best of our knowledge. However, no guarantee of accuracy is given or implied. We suggest that the user evaluate these recommendations and suggestions in conjunction with their specific application. Tera-Lite, Inc. / Revolan Systems warrant its products to be free from manufacturing defects conforming to our most recent material specifications. In the event of liability, we will be limited to the replacement of material at the material value only and at the sole discretion of Tera-Lite Inc. /Revolan Systems. We assume no responsibility for coverage, suitability of application, performance, or injuries resulting from use.

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