



## TERA-GEM III CQ Roll-Seed-Roll Flooring System (CQ-RSR)

### PRODUCT DESCRIPTION

Tera-Gem III CQ Roll-Seed-Roll Floor Coating System (RSR) is a 100% solids, solvent free (No VOC's – Meets all of California's VOC Requirements), formulated epoxy coating system designed to provide chemical resistance to a broad range of industrial chemicals. The coating system is designed for use as a protective coating for commercial and industrial environments. This product has excellent adhesion to concrete, tile and wood substrates. The Tera-Gem III CQ RSR system is a Colorquartz broadcast system applied at a total thickness of 1/16" – 1/8" consisting of the following:

**FIRST COAT / BROADCAST:** A two-component moisture tolerant clear epoxy resin followed immediately by a broadcast of Colorquartz aggregate until a uniform dry appearance is obtained and it will accept no more aggregate.

**SECOND COAT:** The second coat is a repeat of the first coat without the application of aggregate broadcast. The clear second coat seals the aggregate. This system provides an aggressive anti-skid surface. An additional topcoat can be added depending upon application and texture demands.

### PHYSICAL PROPERTIES

Compressive Strength	(ASTM C-579)	11,500 psi. AFTER 7 DAYS
Flexural Strength	(ASTM C-580)	4,500 psi.
Tensile Strength	(ASTM C-307)	2,500 psi.
Flammability	(ASTM 635)	Self Extinguishing
Impact Resistance	(Mil D-3134F Sec 4.7.3)	No cracking or delamination at 16/ft/lbs
Water Absorption	(ASTM C-413)	0.25%
Bond Strength, Primer	(ASTM 4541)	>400 psi

#### **Physical Properties-Binder Cured 7 days**

Tensile Strength	(ASTM D 638) psi	6,000 psi
Flexural Strength	(ASTM D 790) psi	9,400 psi
Flexural Modulus	(ASTM D 790) psi	3.05 x 10 <sup>-5</sup>
Hardness	(ASTM 2240)	Shore D - 83
Abrasion Resistance	(ASTM 4060) CS10 Wheel	1000 cycles, wt loss (gm) - .034 gm
Water Spot Resistance	72 deg F. 8 hr cure	Pass

#### **Application Properties**

Mix Ratio	2A : 1B by volume
Pot Life (minutes)	30-40 @ 77 deg F
Application Temp.	(F. Min) 50 deg F

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

## SUGGESTED USES

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Tera-Gem III CQ RSR is suitable for service walkways, animal rooms, laboratories, warehouses, restrooms, locker rooms, chemical storage areas, and water treatment facilities.

## CHEMICAL RESISTANCE (PARTIAL LIST)

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<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

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Concrete surfaces must be free from surface contaminants, laitance, curing compounds, oils, greases, dirt, chemical contaminants, delaminated coatings, etc. The surface must be sound. Concrete compressive strength must be a minimum of 3,000 psi. New concrete should be cured for a minimum of 28 days. Wet curing is the preferred method. User must notify manufacturer if conditions differ from above. To properly clean concrete surfaces, the concrete may be sandblasted, steel shot-blasted, scarified, or other approved technique.

## SYSTEM APPLICATION

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### PATCHING IF NEEDED:

Since this is a coating, some patching of spalls, holes, and cracks may be required. Use Tera-Gem III RP45 – Epoxy Patch prior to coating.

### FIRST COAT / BROADCAST:

Use Tera-Gem III CQ RSR liquid A & B components. Use a clean bucket and mix 2 parts 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 or squeegees. Spread rate will vary from 70 to 150 sq. ft. per gallon depending on surface. Do not apply over standing water. Immediately broadcast colorquartz aggregate onto the wet surface until a uniform dry appearance is obtained (no shiny spots) and it will accept no more aggregate. Allow coat to cure fully (typically 8-14 hours depending on temperature). Recoat within 24 hours.

### SECOND COAT/ANTI-SKID:

After first coat has cured, sweep off excess aggregate. Repeat the installation process described in the “First Coat” leaving out the broadcast. The second coat will encapsulate and seal the broadcast aggregate. The rate of application will vary from 160-200 sq. ft. per gallon.

## **MATERIAL HANDLING**

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

## **PACKAGING**

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Tera-Gem III CQ RSR epoxy system is available in pre-measured gallon, 3 gallon kits, 15 gallons kits and 165 gallon kits.

## **NOTES**

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The following information is available online at [www.teralite.com](http://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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