

# Iso-Crack Epoxy Membrane

# Product Data Sheet

Revision Date: 12/2022

## Description:

Terroxy Iso-Crack Epoxy Membrane is a 100% solid, flexible epoxy membrane designed to suppress reflective cracking in Terroxy Resin flooring systems. The unique bonding and elongation properties of polymer provide extraordinary crack suppression and is recommended for use over interior concrete surfaces prior to the flooring's installation. Iso-Crack Epoxy Membrane is available in clear and gray.

## Product Benefits:

- Crack resistant, provides 140–160% elongation allowing for horizontal substrate movement
- Suppresses reflective and hairline cracking
- Can be used as a Waterproof Membrane
- Insulates noise created by mechanical vibrations
- Excellent shock absorption qualities
- Environmentally friendly, zero VOC content
- Does not require priming in many cases

## Coverage:

Membrane Thickness	Approximate Coverage Per Blended Gallon
40 mils	40 ft <sup>2</sup>
Membrane Thickness	Approximate Coverage Per Blended 3.8 Liters
1.0 mm	3.7 m <sup>2</sup>

## Concrete Substrate Preparation:

1. Concrete slab shall have an efficient moisture/vapor barrier (suggested minimum: 15 mils thickness = .4 mm) directly under the concrete slab.
2. Allow substrate to cure a minimum of 28 days.
3. Sub-floor should be flat (maximum variation not to exceed 1/4" in 10 feet = 6.4 mm in 3.1 m). Surface should be checked for soundness and any "hollow" areas removed.
4. Test concrete substrates according to ASTM F2170 (determining relative humidity in concrete slabs using in situ probes). Do not install terrazzo or terrazzo accessories until test results are less than 80% RH. If 80% RH is not met, consult T&M for additional drying or negative side moisture mitigation methods. (See Terroxy Moisture Vapor Treatment or IC Moisture Guard PDS)
5. Concrete surface shall be prepared mechanically by shot blasting. Surface preparation results should achieve a CSP3-CSP5 profile according to ICRI Guideline No. 03732.
6. A light steel trowel is needed to provide an acceptable surface with minimum laitance.
7. The use of concrete curing agents may prevent bonding. If curing agent present, surface must be shot blasted to remove all contaminates from the floor.

For specific preparation guidelines contact your T&M representative.

## Installation Instructions

### Mixing:

During installation and initial cure cycle, ambient air and slab temperature shall be maintained as per Terroxy Resin Systems' recommendations, minimum 60°F and max of 90°F (15.5°C - 32.2°C). Add Part B Hardener to Part A Resin and mix thoroughly using a low speed mixer to avoid entraining excessive air.

### Application:

**Option 1:** Membrane application for isolated cracking. Route out all cracks, fill with Terroxy Primer, and allow to set for a minimum of 30 min. before applying Iso-Crack Membrane. Apply Terroxy Iso-Crack Epoxy Membrane (spread at 40 mils thickness = 1.0 mm) across the crack allowing a minimum of 6 inches (15.2 cm) on either side. Spread fiberglass scrim into wet membrane.

**Option 2:** Membrane application for extensive substrate cracking or crack mitigation. Route out all cracks, fill with Terroxy Primer and allow to set for a minimum of 30 min. before applying Iso-Crack Membrane. Apply Terroxy Iso-Crack Epoxy Membrane (spread at 40 mils thickness = 1.0 mm) over prepared substrate to produce full substrate coverage in areas to receive terrazzo and Industrial Flooring . Fiberglass scrim is optional for full-membrane coverage. Do not use in temperatures below 60°F (15.5°C), as cooler temperatures delay hardening.

**Technical Data:**

Property	Method	Typical Results
Pot Life	—	30 minutes @ 75°F
Viscosity (Mixed)	—	3,000–4,000 cps @ 75°F
Tensile Strength	ASTM D–412	1,200 psi
		8.27 MPa
Elongation	ASTM D–412	140–160%
Bond Strength	ASTM C-1583-04 / ACI COMM 403, Bulletin 59-43 (pages 1139-1141)	350 psi minimum (100% concrete failure)
		2.41 MPa (100% concrete failure)
Hardness	ASTM D–2240, Using Shore A Durometer	70–80
Impact Resistance	ASTM D–2794	16 ft. lbs.
Hydrostatic Pressure	ASTM C-1306, Standard Test Method for Hydrostatic Pressure Resistance of a Liquid-Applied Waterproofing Membrane	Passed at 45 psig
Flood Testing	ASTM D-5957, Standard Guide for Flood Testing Horizontal Waterproofing Installations (modified)	Passed at 4-in water for 72 hours

**Limitations:**

Terroxy Iso-Crack Membrane was designed to mitigate reflective cracking in the horizontal plane. Any vertical movement, excessive live or dead load deflection, or extensive disbondment of thin concrete toppings would be cause for concern and not suitable without further stabilization. Terrazzo & Marble does not warrant against any potential cracking that may occur due to any movement of the slab in the vertical plane. Tolerates Moisture Vapor Emissions up to 80% relative humidity as measured by ASTM F 2170. If over apply IC Moisture Guard or Terroxy Moisture Vapor Treatment per T&M's written instructions.

**Technical Service:**

Terrazzo & Marble Supply Companies, distributor of Terroxy Resin Systems, provides services and consultations on material selection, specifications and troubleshooting concerning proper thin-set epoxy terrazzo installation. Contact our **Terrazzo Sales Desk at 800.7.MARBLE** or **T&M Technical Department at 708.385.6633** for questions or assistance.

**Precautions:**

Refer to cautionary information printed on the product container. For medical emergencies, contact Chemtrec, the Chemical Emergency Transportation Center, at 800.424.9300.

**Warranty:**

Terrazzo & Marble Supply Companies (T&M) warrants for a period of one (1) year that Terroxy Iso-Crack Epoxy Membrane will be free of manufacturing defects and will conform to published specification when handled, stored, mixed and applied in accordance with recommendations of T&M. If Terroxy Iso-Crack Epoxy Membrane fails to meet this warranty; the liability of T&M will be limited to replacement of any non-conforming Terroxy Iso-Crack Epoxy Membrane only if notice of such non-conformity is given to T&M within one (1) year of delivery of materials. T&M may, according to its discretion, refund the price received by T&M in lieu of replacing the Terroxy Iso-Crack Epoxy Membrane. No customer, distributor or representative of T&M is authorized to change or modify the published specification of this warranty in any way. No one is authorized to make oral warranties on behalf of T&M. In order to obtain replacement or refund, the customer must provide written notice containing full details of the non-conformity. T&M reserves the right to inspect the non-conforming Terroxy Iso-Crack Epoxy Membrane prior to replacement. Except for the expressed warranty stated above, there is no other warranties, expressed or implied, including without limitation, implied warranty of merchantability or fitness for purpose. T&M's obligation shall not extend beyond the obligations expressly undertaken above and T&M shall have no liability or responsibility to the purchaser or any third party for any loss, cost, expense, damage or liability, whether direct or indirect, or for incidental or consequential damages.

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