

## NATIONAL TERRAZZO & MOSAIC ASSOCIATION

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## TECHNICAL BULLETIN #T-2

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## **RIDGES IN EPOXY TERRAZZO**

The NTMA office is occasionally informed of a terrazzo installation demonstrating an interesting phenomenon that the industry has labeled "mole trails." This condition is typically noticed well after thin-set epoxy terrazzo has been installed and the building is occupied.

Some of the areas where this phenomenon may occur include:

- A slab with saw cuts type control joints, typically at column lines.
- An artistic terrazzo where the saw cuts do not purposefully align with the terrazzo divider strips.
- Other random substrate cracking.

A common installation practice would be as follows:

- Saw cuts and/or cracks are cleaned out and filled with a rigid epoxy.
- Saw cuts and/or cracks are then bridged with a fiberglass reinforced specialty flexible epoxy crack suppression membrane system per manufacturer's directions.
- The thin-set epoxy matrix terrazzo system is finally installed normally over the crack suppression membrane with the rest of floor areas.

Epoxy terrazzo has a greater coefficient of thermal expansion than the concrete. Depending on the direction of temperature change the epoxy terrazzo will move to a greater degree than the concrete. If the temperature is rising, the result is a ridging of the terrazzo. This typically but not always occurs at the saw cuts, cracks or other breaks in the concrete resulting in a ridging of the terrazzo. This condition is so minute that it often is barely detected with a straight edge. Certain critical lighting conditions might show a line through the terrazzo that appears as a mini-crease or as if a mole is burrowing under the terrazzo. Thus, the NTMA has given the name "mole trail" to this condition.

This condition should not be recognized as a defect in the terrazzo. By reviewing the installation procedures demonstrated by terrazzo contractors, it would be concluded that the crack suppression membrane is working as intended, bridging the moving joint in the slab, and keeping the joint from reflecting up though the terrazzo as a fissure.

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