



# NATIONAL TERRAZZO & MOSAIC ASSOCIATION

[www.ntma.com](http://www.ntma.com)  
800.323.9736

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## CRACK ISOLATION MEMBRANES & THERMAL EXPANSION

### OVERVIEW

Membranes have been used to minimize epoxy terrazzo fissures due to concrete crack propagation caused by substrate moving and cracking. Other issues, such as thermal changes below or even above the slab as in the case of solar exposure through window walls, may contribute to heaving and shrinkage in the terrazzo independent of the substrate.

To aid in diminishing the conditions noted above, the epoxy terrazzo should be directly bonded to the slab whenever possible.

The use of a membrane and reinforcement should generally be confined to conspicuous cracks in the substrate and to joint treatment.

### CRACK TREATMENT

Cracking of the concrete, mainly due to slabs shrinkage, is inherent with most large area projects. After cleaning the fissures, fill them with an epoxy and then treat them with a liquid-applied membrane and approved reinforcement as a bandage technique. The membrane manufacturer can recommend the installation thickness and suggested width of the applied membrane.

### JOINTS TREATMENT

Control joints and saw cuts should be honored in the terrazzo overlay whenever possible. Refer to the NTMA architectural details for divider strip placement.

Where design issues prevent this, substrate joints are normally filled with a 100% solids epoxy and then treated with a membrane and reinforcement per manufacturer's recommendations.

*Note: Floor slabs that manifest excessive cracking may require full coverage of the membrane, with or without reinforcement, per manufacturer's recommendations. When doing this, it is important to have appropriate joints incorporated in the terrazzo to accommodate potential movement in the slab.*

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