There have occasionally been some problems with thin-set installation of ceramics and mosaics. Sometimes a few tiles or a section of tile will blister or lose bond with the substrate.

A study of current practices indicates that in the need to increase production, and with the ease of application of portland cement thin bed mortars, some workmen have adopted fast installation procedures for ceramic tile and mosaics similar to those using organic (mastic) adhesives.

**THIN-SET PORTLAND CEMENT MORTARS DO NOT WET OUT THE BACK OF TILES AS READILY AS ORGANIC ADHESIVE.**

Therefore, it is possible that poor bond is resulting only because the basic fundamentals related to portland cement installations are being disregarded.

1. All face mounted ceramic mosaics should be back-buttered to improve adhesion. Back mounted mosaics should be installed with a trowel size designed to ensure that sufficient setting material will be forced up slightly into the joints to completely lock tiles into place.
2. Ceramic mosaics must be beaten in, to fully wet out and imbed tiles.
3. Larger tiles (>8” x 8”) must be back buttered before placing into the adhesive layer.
4. The more you beat in, the stronger the bond.
5. Use face mounted tiles in wet areas such as pools, fountains and exterior exposures to increase the amount of tile exposed to the thin-set.

The basic rules listed above will greatly reduce the incidence of complaints with ceramic and mosaic installation made with thin portland cement mortars.

The advantages of portland cement thin-set mortars over organic adhesives can be realized if these five key points are observed.