



646 WINSLOW STREET  
 FAYETTEVILLE, NC, 28306  
 PHONE (910) 485-2119  
 FAX (910) 484-4381  
 www.tileinc.net

JANUARY 2010

# COMMON TILING QUESTIONS

Answers from TCNA Tile Technical Reference Library

## INSIDE TILE INC

Tile Inc. will also be closed  
 New Years Day  
 Friday January 1<sup>st</sup>, 2010.

We will reopen  
 Monday, January 4<sup>th</sup> 2010.



**DISCONTINUED & SALE TILES:**  
 CALL FOR AVAILABLE  
 QUANTITIES & PRICE

- American Olean, Vallano, VL01Macadamia, 12x12
- Azuvi, Carzola Crema, 20x20, 12x12, 8x12
- Azuvi, Genova Noce, 12x12, 10x16, 3x10 BN
- Azuvi, Genova White, 20x20
- Marazzi, Africa Slate, Senegal, 20x20
- Marazzi, Africa Slate, Madagascar, 20x20
- Marazzi, Artea Stone, Antico, 6.5x6.5, 6.5x13, 3x13 BN
- Marazzi, Pietra del Sole, Avorio, 13x13, 2x2, 3x13 BN
- Marazzi, Sierra Madre, Durango 12x12 or 18x18
- Marazzi, Sierra Madre, Chihuahua 12x12
- Stonepeak, Marble, Bone Polished, 12x12, 3x12 BN
- Stonepeak, Slate, Sand, 12x12, 3x12 BN
- Stonepeak, Slate, Everglades, 12x12, 3x12 BN
- Stonepeak, Slate, Earth, 12x12, 3x12 BN
- Stonepeak, Slate, Lava, 12x12, 3x12 BN

### CONTACTUS

- Winston Olive  
winstonolive@earthlink.net
- Renee Olive  
reneeolive@earthlink.net
- Woody Cox  
woodycox@earthlink.net
- Julie Machak  
juliemachak@earthlink.net
- Stacy Covington  
stacycovington@earthlink.net
- Sean Aul  
seanaul@earthlink.net
- Susan Martin  
susanmartin321@earthlink.net

## Tiling over new concrete:

### How long does concrete need to cure before tile can be installed?

While this seems like a simple question, in fact many issues must be considered. We understand from the PCA (Portland Cement Association) and the ACI (American Concrete Institute) that many variables affect the length of time a slab needs to cure and the length of time during which curling can be expected. Some of the more common variables are:

- |                               |                                    |
|-------------------------------|------------------------------------|
| 1) Cement - water mix ratio   | 2) Cement - sand ratio             |
| 3) Particle size distribution | 4) Presence of accelerators        |
| 5) Curing compounds           | 6) Environmental conditions        |
| 7) Location of vapor membrane | 8) Exposure to water during curing |

You can see that it is not possible to definitively state how long the concrete should cure before tiling.

### Although it may not be possible to say for sure, what is a typical period for the concrete to cure?

Many people suggest a minimum cure of 28 days under normal conditions, although, most thinset manufacturers say you may get away with 14 days using a premium latex modified thinset. There are risks though to tiling too soon. As the slab continues to cure, it will continue to shrink as it hydrates and the excess moisture evaporates. This places the tile and thinset under compressive stress. A premium thinset can better accommodate this stress and compressive force.

### What are the benefits to allowing a sufficient cure time for the concrete?

Clearly, the longer you can wait before tiling, the less stress that will be applied to the tile by the concrete. Also, should the concrete crack, the crack can be treated (with an anti-fracture membrane) before it is tiled. If curling occurs (and it often does), the concrete can be ground before it is tiled. Tiling before the curling occurs can cause undesirable debonding of the tile and lippage between adjoining tiles.

### What if I can't wait 14 to 28 days for the concrete to cure?

If you really can't wait 14 to 28 days, you may want to consider a vapor equalization membrane. Reportedly, this membrane isolates the tile layer from the concrete layer but still allows for the vapor to leave the system. This is different from a crack isolation layer that may not allow the "green" concrete to breathe.

[http://www.tileusa.com/Concretecuring\\_faq.htm](http://www.tileusa.com/Concretecuring_faq.htm)

## Can I tile over vinyl?

We are often asked if it is OK to tile over sheet vinyl. The answer requires more than a simple yes or no.

Most manufacturers' of tile cement (thinset) have developed a specialty thinset for setting tile that bonds well to sheet vinyl. However, as with all tile installations, the entire subfloor below the tile is important – not only the layer to which the tile is bonded.

To tile over sheet vinyl the following is generally recommended by most mortar manufacturers:

- 1) The sheet vinyl must be clean and free of wax or other bond breakers
- 2) The sheet vinyl must be single layer only and well attached
- 3) It should not be perimeter glued (it often is!) and it should not have a cushion or foam back.
- 4) The subfloor below the sheet vinyl must deflect less than the industry standard L/360 deflection criteria.

In all cases, we do not recommend straying from manufacturer's recommendations – you must check with the mortar manufacturer for their specific installation and product advice.

[http://www.tileusa.com/tileovervinyl\\_faq.htm](http://www.tileusa.com/tileovervinyl_faq.htm)