

# Making a **Weather Resistant** Stepping-Stone

Creating a stepping-stone that will endure rain, freezing and thawing.

## Tools List:

- Hammer
- Wooden board, any size (surface for Breaking tile)
- Towels (1 old)
- Tile nippers
- Tile file
- 2 small Plastic or rubber bowls
- Rubber gloves
- Rubber spatula and/or plastic grout spreader
- Glass cutter (for mirror & stained glass)
- Wax pencil or chalk
- Small metal spatula
- Bucket & grout sponge
- Stiff scrub brush

## Materials List:

- Mapei Ultra Flex 2 White Tile Mortar with Polymer
- Sanded Grout with Polymer
- StoneTech Professional Grout Sealer
- Mosaic Materials can be scraps from:
  - Porcelain Tile (tile must be high fire) Test with water in spray bottle
  - Porcelain dishes
  - Mirror glass
  - Stained glass (this is why we need WHITE mortar)
  - Granite
  - Marble
  - Pebbles from granite (cannot be sandstone)
  - Glass gems
- Cement paver step-stone any size that you can lift.

## Setting Mosaic Materials

1. Start by cleaning the cement step-stone. If it has been used scrub & allow to dry. If it is a new one brush off any dust and cement crumbs.
2. Break enough material into pieces that suit your project.
3. Draw your design on the step-stone.
4. Mix  $\frac{3}{4}$  cup or less of the mortar with water by slowly adding small amounts of water until it's the consistency of creamy peanut butter. Let stand for 10 minutes & mix again. (Stir mortar intermittently while your working.)
5. Spread or scoop a small amount of mortar on mosaic pieces & press into position leaving grout line spaces  $\frac{1}{8}$  inch to  $\frac{1}{4}$  inch wide. If the mortar bulges out above the level of your mosaic material you are using too much. If it doesn't lightly ooze out from under your mosaic material you don't have enough.
6. Along the edges of the step-stone set your mosaic material  $\frac{1}{4}$  inch away from the edge so you will have a space for a grout line.
7. If you don't finish setting the entire mosaic step-stone in one sitting remove excess mortar along edges where you will start working at next the sitting.

Rinse and clean your tools in a bucket not in your sink and **NEVER RINSE OR POUR LEFT OVER MORTAR OR GROUT DOWN YOUR DRAINS.** Leave rinsing water in the bucket overnight and allow the water to settle, then gentle and slowly drain off the water and scrape the sludge in the bottom of the bucket INTO THE GARBAGE.

## Grouting the Step-Stone

Allow mortar to dry for 24 hours before applying grout.

1. Brush any loose material from between mosaic pieces with a stiff scrub brush.
2. Mix an amount of grout depending on the size of your step-stone the same way as the mortar. See step 4 above. (You are better off mixing another batch than throwing away a giant pile of grout)
3. Using the plastic grout spreader or spatula spread and smash the grout into the cracks and down along the side of the step stone. Don't worry about perfection at this point just make sure the cracks are tightly filled.
4. Allow the grout to sit for about 20 to 30 minutes OR when the grout that is on top of the mosaic material starts to look dusty.
5. Using your hands in rubber gloves smear and press the grout into the cracks and down the side of the step-stone. Keeping palms flat moving in a circular motion rub and push crumbs off the surface of the mosaic material.
6. Allow the grout to dry for another ½ hour.
7. Fill ½ a bucket with water, rinse a grout sponge and wring as much water as possible out of sponge then clean the mosaic surface wiping very gentle with the sponge as flat as possible. Wipe once across the surface, flip the sponge, and wipe once more then rinse the sponge in the bucket. Keep cleaning the sponge and wiping until the surface of the mosaic material is clean. Too much water in your sponge will make the grout soggy. Keep the sponge as dry as possible.
8. Allow the grout to dry overnight then wipe the mosaic surfaces clean with a dry towel until any dusty looking residue is removed from the surface.
9. Wait 24 hours and apply grout sealer to the top and sides of the step-stone as per the containers instructions. You will notice the grout darken when the sealer soaks in, this will lighten when it dries. Apply a second coat as per containers instructions.
10. Wait 24 hours and flip the step-stone over and apply grout sealer to the back of the step-stone.
11. Allow to dry another 24 hours before placing the stone outside.