How to Install Ceramic Tile On A Bathroom Floor
(Process Essay)

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It is estimated that the average American spends over two years of their life in the bathroom. (Bath Stats 2018). So if we’re going to dedicate that much of our less-than-immortal lives in this space, we might as well make its environment pleasant on the eyes. Ceramic tile is very much trending, as the preferred beautifying building material, for projects ranging from kitchen remodels to deck remodels (Builder 2018). A bathroom stylishly redone in ceramic tile can add anywhere from $12,000 up to $33,000 to the value of your home (Home Value 2018). Ceramic flooring tiles are not only aesthetically pleasant to look at but they additionally possess a durable shield-like upper layer that makes the tiles repel water and resist staining. (Builder 2018). These are essential characteristics for the heavy traffic and very humid conditions found in a bathroom. In consideration of these facts there is an obvious benefit to being knowledgeable on the protocols associated with the correct installation of ceramic tile in your dwelling. The objective of the remainder of this essay is to delineate the sequence of steps required to properly install ceramic tile in a typical household bathroom.

Selecting and Acquiring the Tiles

The first step of the installation process is finding the color and style of ceramic tile you wish to install. This is of course a subjective personal choice. Some of the color choices available at home improvement stores that I have been to are gray, white, blond and warm brown; with texture styles of wood, marble, stone and cement. Once you make your color choice you will then have to acquire sufficient tiles for the job. To determine how much tile is enough for the job you must measure the length and width of the room and multiply the two measurements. Multiplying the length by the width provides you with the room area in units of square feet. Knowing the room’s area will assist you in determining the needed tile quantity. Typically you have to buy a box of 10 tiles, rather than single individual tiles. Divide the total square footage of the room by the total square footage of the tiles in the box. If each box contains 10 square feet of tile (ten 12 inch by 12 inch tiles) and you need to cover 200 square feet in area, you'll need to buy a minimum of 20 boxes. Be sure to calculate some overage for cuts, waste and mistakes. Extra tile never hurts, especially if later you need to make repairs. Buying the same exact color tile a year later might not be possible. Some styles of ceramic tile might sell out. Or in some cases your original model of tile might be available but the color or style might be slightly different in the newer lots. Once you know which tile type you want and how much tile you require, it will be time to go shopping. Vendors such as Home Depot and Lowe’s will of course have ceramic tiles. But if you want to get a good price you might consider online retailers like “Tile and Stone Express”. All of these suppliers will deliver the tiles to your front doorsteps for convenience.

Prepping and Installing the Tile

The next step requires that you prepare the underfloor of the bathroom. The underfloor being the area that will be directly underneath the ceramic. If there is already existing tile on the floor it will need to be taken out using a chisel, a hammer and a scraper. If the
latter process results in any damage to the underfloor you should make repairs so that the floor surface is unvarying, level and possesses the proper thickness. Next, you may wish to install a foundation layer over the floor. The foundation layer is a film-like rubbery overlay that provides protection and support and permits for expansion below the ceramic. (Membranes for Ceramics 2018) This step is not mandatory but it is highly recommended. It is applied to the floor with a thin layer of mortar.

Floor Grid Application

In the next stage you will use a chalk line cord to create a grid. Using measuring tape, locate the center of two opposite walls and snap a chalk line from center to center. Execute the same procedure for the other two opposing walls. This will create a room-centered cross (+) shape of chalk lines. The tile-grid measurements are based on the tile size. A 12-inch x 12-inch tile usually measures a little bit under at 11 and ¾ inches x 11 and ¾ inches. So in this case each square in the grid line you lay will be 12 inches by 12 inches to accommodate the ¼ inch spacer for the grout joint in between tiles. Measuring 12 inches from one of the 2 centered lines (+) snap a 2nd chalk line that extends between opposing walls. Do the same thing relative to the other of the 2 centered lines (+). Continue to move 12 inches from each new line you make and snap new wall-to-wall chalk lines across the room.

Tile Installation

The next step will be installing the tile in the primary grid domains. First you must prepare mortar of the proper uniformity for tile installation. The right consistency mortar will not slide down the trowel when applied to it but can be easily spread out on the foundation with visible tracks made by the trowel’s notches. Once you have made the mortar, you begin installation by applying mortar to an individual 12 inch by 12-inch floor grid starting in the center (+) of the room where you made your 1st two chalk lines. Try to keep the mortar within the grid marks. After covering the 12” x 12” gridded floor square with mortar, place a ceramic tile down on the mortar staying within the grid lines. Continue to lay tiles down in this sequence, mortar application followed by tiling. In a perfectly square room this process will be relatively simple. In rooms with odd shapes and angles the process can be more involved. The room edges will also require some prep as those pieces must be cut to size and shape before applying to the mortar adhesive. The mortar will need time to set. Once dry you will need to clean the tile surfaces. When done correctly, the addition of beautiful captivating ceramic tile to your bathroom will be awe-inspiring. At a minimum it will make those two years of your life you spend there a welcoming experience. Good luck with your installation.
1) Bath Stats 2018

2) Builder 2018

3) Home Value 2018
   https://www.discover.com/home-equity-loans/blog/how-bathroom-remodel-can-increase-home-value/

4) Membranes in Ceramics 2018
   https://www.youtube.com/watch?v=DVuLkuRUJGE