# **Concrete and Tiling: 9 things you should know**

Preparing the concrete surface before tiling is highly recommended because it provides you with the effective and best results at the end. Tiling the concrete floor does not requires a lot of professionalism or experience, but it does requires a complete knowledge of preparing it for tiling.

In this article, you will learn the importance of cleaning the concrete floor before tiling it. You will also learn the complete guide after which you will be able to prepare and repair your floor for tiling.

## **How Clean does concrete need to be before Tiling**

**Just exactly how clean should the surface of the concrete floor be before you tile over it. So before tiling the concrete floor, everything on the top of it must be removed like glue, adhesive, tar, resin, paint because it creates an extra layer between the thin-set and the floor that can affect the grip or the bond of the tiles with the floor.**

Removing paint from the surface is very much important because of the chemicals in the paint that react with the chemicals of the thin-set and this thing affects the stickiness of the tiles.

If the paint on the surface is well adhered and it is old then there is no need to get it off but make sure to take off the new paint. The reason is that as the paint gets old, it loses the chemicals to react with the thin-set. Also I would recommend you not to use the chemical stripper because of the same reason. They will lose chemicals on the concrete floor that will affect the bond between the tiles and the grip. So wet the floor because concrete will soak that water in and any paint that will not be well adhered will be easy to remove.

## **How to clean concrete before Tiling**

**In order to clean the floor, sweep over it thoroughly using broom to clear it from dust. Then clean the dust or grease stains using wet mop or sponge. Wait until the floor gets dry and then move towards the next step.**

Before tiling the concrete floor, you must follow some necessary steps for an effective results and cleaning is one of them. So first of all, sweep the floor to clear it from all the dust and debris. For this purpose, you can use the broom and sweep it over the entire surface. Ensure that you have removed all the dust and debris from the floor and then throw it away by gathering it in the dustpan.

In the next step, clean the floor with the wet mop to clear any stains or dirt marks from the surface. Prepare a cleaning solution by pouring a little amount of degreasing cleaner in the water and scrub the floor completely to clear all the oily areas or grease stains.

After cleaning the floor, it’s time to dry it completely before moving further. You can use some dry towel or cloth to clear the humidity and moisture from the floor. If there is still humidity left on the surface then wait for at least 24 hours and the by blowing the surface with the warm air you can get rid of the remaining moisture completely.

## **How to rough up concrete for Tiling**

**Roughen up the concrete surface for tiling can be done through acid etching or by the means of angle grinder.**

The most important step for coating over the concrete surface is the texture of the surface and for that purpose, you need to rough up the concrete for an effective tiling. There are many ways to rough up the surface like through acid etching or by mechanical means.

Acid etching is done to remove the laitance and rough up the concrete surface for coating thin-set, primer or for the sealant applications. Acid etching produces a sand paper like surface by dissolving cement but this method is very dangerous and can be health hazardous. Also the acid when comes in contact with the steel or aluminum will affect them like the pipes under the floor.

However, instead of acid etching, you can also use angle grinder to rough up the concrete. Simply float the grinder over the concrete surface and it will allow you to rough up the surface by eliminating the imperfections from the surface. Other than these methods, you can also use mechanical means like needle scaling, shot blasting, water jetting and scarifying for roughening up the concrete surface.

## **Do you need to screed a concrete floor before Tiling**

**Screed is basically the same mixture like concrete but with the less aggregates. It is mostly used to make the uneven and bumpy surfaces flat and preparing it for tiling, coating or wood flooring.**

It is not compulsory to screed a concrete floor before tiling but under certain conditions it is essential to screed the surface. If the structure of your floor is not level then you must use screed before tiling. Generally, if the flatness of the surface is varying more than 5 millimeters during each 3 meters then you must screed the surface to level it for the finished flooring. You also need to use screed to cover the under floor heating and to provide a finished or smooth look to your final layer.

Most of the time screed are only used for house hold purposes like to cover the heating systems. Screed can take on a general variation in the levelness of the foundation on which it is placed because of its thickness. After applying screed on the surface, you must cover it with the final floor finish because it is not projected to act as a wearing surface.

## **Do you need to seal concrete before Tiling**

**It is necessary to seal the floor before tiling it and preventing it from affecting the tiles. The reason is that tiles contract and expand when moisture goes through the concrete and affects the tiles. Higher moisture produces the larger spacing between the concrete aggregates thus decreasing its strength and durability. Also under the lack of air circulation, humidity reaches the concrete floor and the PH level as well as the temperature of the concrete increases. This affects the strength of the thin-set that is used to hold the tiles and to maintain the grip between the tiles.**

Elastomeric and crack-prevention membrane are the best sealing mortars to seal the concrete floor because concrete expands differently from thin-set mortar. These sealing membranes blocks the moisture from getting in to the concrete and to affect the thin-set mortar. Thus the sealants act as a water barrier that helps the adhesive to hold the tiles tightly and maintaining its grip over the tiles.

## **Filling holes in concrete floor before Tiling**

**Clean the holes that you want to fill from dust and then provide some moisture to the hole using wet mop so that the concrete cannot affect the compound filler by absorbing the moisture from it after applying. Then fill the holes with compound using trowel and level it with the concrete surface.**

Holes and cracks in the concrete floor can cause cracks in tiles when pressure or weight is applied on them therefore it is essential to fix these holes before tiling over it. Filling these holes can be time consuming but it will save you a lot of time and money for the after effects that it can cause without fixing these holes.

First of all, clear the holes from all the dust and debris. Clean it thoroughly and ensure that no dust remains in the holes because it keeps the compound from setting properly in the hole. Also as we know that concrete is absorbent in nature so it will absorb all the moisture from the filling compound thus affecting its bonding strength. So make sure to wet the hole with some sponge before filling it. It will give concrete enough moisture so it will not suck the moisture of the compound to make it dry.

Then mix the compound according to the manufacturers’ instruction or you can use the pre mixed concrete patch to fill these holes. Then apply the compound filler on to the holes using the trowel and fill it up to the top using the flat side of trowel. Then level the filler with the surface by scraping the excessive amount off the surface using the same trowel.

## **Fixing cracks in the concrete floor before Tiling**

**The procedure for fixing cracks is almost same as the holes. Mix the thin-set and then apply it on the cracks using the trowel or by your fingers depending upon the size of the cracks.**

The strength of the tiles largely depends upon the subfloor on which they are laid so try to repair all the cracks on the surface before tiling it. Because if you install the tile over the cracked concrete surface then eventually crack will also appear in the tile as well.

So in order to repair these cracks, firstly mix the thin-set according to the instructions and apply it on the small cracks with the help of your finger. Wear the gloves to protect your skin and run your finger over the filler. In case of bigger and larger cracks fill them using the trowel and remove the excessive filler off of them. Then smooth the filler flat using the flat side of trowel. Then leave the filler for some time until it dries off and if it appears to be dripping from any area, apply more filler to that area and allow it to dry. After the cracks are repaired and dry, cover them with polyurethane sealant to prevent against the extra moisture and humidity.

## **Repair concrete floor before Tiling**

**Repairing concrete floor before tiling is highly recommended and it can be done as follows:**

Before tiling, you need to prepare the concrete surface to make it suitable for tiling. So first of all, remove all the adhesive residue from the surface and completely clean it from dust and debris. Before tiling any surface, it is recommended that you seal it to prevent it from getting moisture and humidity so that it does not affect the adhesive used to maintain the grip between the tiles and the surface.

Next mark all the cracks and holes on the surface and fill them using a compound filler. Fill the holes up to the top using the trowel and then with the flat side of trowel, smooth the filler flat with the surface. Then fill the small cracks first using your finger and then move towards the bigger cracks.

## **How to screed a concrete floor for Tiling**

**In order to separate the screed from the floor, lay the PVC sheets on the concrete surface. Overlap the sides of the sheets with each other using the tape. Then prepare the screed by mixing water and spread it on to the surface using trowel. I would recommend you to make equal quadrants and put the batten between the two quadrants. After spreading enough screed on the concrete surface, level the screed using the straight edge then remove the batten and fill in the gap.**

Installing screed over the concrete floor provide a smooth and strong surface for the tile installation. It protects the surface from moisture and other issues. Begin your project by cleaning the concrete surface and removing all the dust from the surface so that the screed settles on the floor perfectly and then follow the steps as discussed earlier.

## **Final Words**

Through this article’s information, you have understand the importance and method of repairing your concrete floor before tiling over it. Since tiling over the uneven floor can results in tile cracking so you must screed the concrete floor as discussed above. Also because of the moisture tiles undergo expansion or contraction that results in uneven tile joints so through this article you have also learned how to seal the floor to keep your tiles safe from these problems. Then lastly, you learned about repairing the cracks and the holes on the surface and preparing it for tiling.