

Laying & Oiling Terracotta: An Introduction

There seem to be quite a few myths out there about how hard it is to both lay terracotta tiles and sealing and maintaining terracotta tiles. In fact, I (Guy from Middle Earth Tiles) have found laying our tiles incredibly easy. It must be noted that we make tiles, never lay them so it is not as if I have years of experience behind me. What I found was that it is the preparation that makes all the difference. Marking your floor and wall before you lay should guarantee perfect results, and the bonus is that you will find laying the tiles is so much quicker too.

Grouting and sealing terracotta is a piece of cake. Stories about terracotta being hard to clean seem to be from issues not related to the tiles. I personally have hammered my terracotta kitchen floor for over three years now in an attempt to how much abuse the terracotta can take, and also to see how easy it is to age up the tiles. I have found that by following the instructions below I have a virtually bulletproof kitchen floor. I have no stains what-so-ever on the floor (no matter how long I leave them there) and a standard clean using a mop and commercially available floor cleaner I bought from the supermarket returns to the floor to a beautiful finish.

How to lay handmade tiles:

We get a lot of people who are planning on tiling their own places or tilers who have not laid hand made tiles before asking us advice on how to lay our terracotta tiles. The following is a guide to laying hand made tiles on floors. We used the principles shown below on our own showrooms in Newmarket and Grey Lynn in Auckland.

Note: This guide is going to skip over the parts about finding a floors midpoint, and other pre-laying prep work as that is a separate issue from hand made tiles.

Introduction:

Laying hand made tiles is done using a grid system which requires a little more prep work but which means that the laying process is faster. When we laid our showroom in Grey Lynn we were averaging over 20 sq.metres a day (1 tiler)

This guide will primarily focus on laying 250x250 tiles but will use photos of 310x150 tiles as well as the principles described cover a multitude of sizes.



Stage 1: Tile Sized and Grout Lines

You need to find out the average width of three tiles laid with grout joints + the grout joint between these three tiles and the next three tiles.

Here you see this principle being used with 310x150 tiles. It is acceptable that hand made tiles can vary up to 5mm within batches, so it is advisable to do this for a few times before you settle on an average width.

Stage 2: The Midpoint

Finding your midpoint and free laying the tiles.

This is the simple process of finding the middle of the room and then free laying tiles to figure out the best way of laying the tiles, so that the cut tiles on the outside of the room mirror the size of the tiles on the other side of the room.



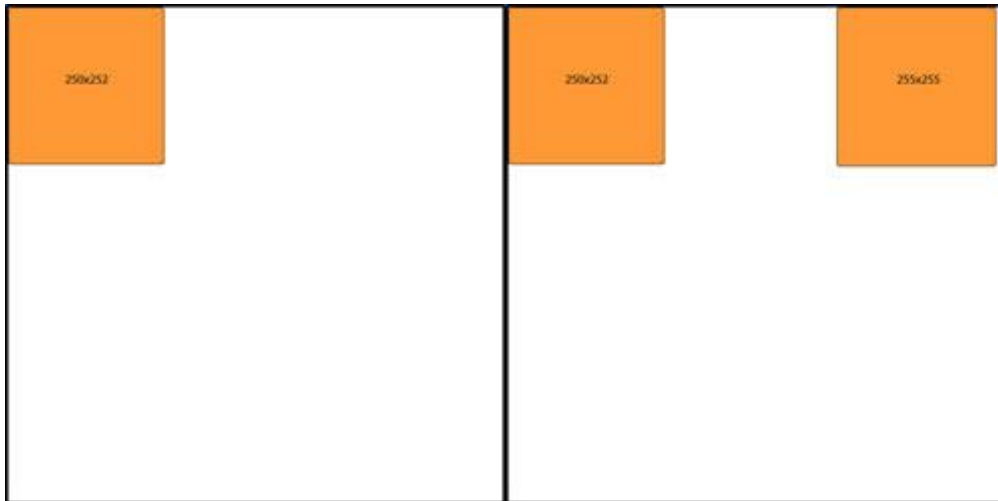
Stage 3: Gridding the Floor

Once you know how the tiles are going to be laid you need to grid the floor. Marking a grid on the floor Gridding the floor is a simple process and the benefit is that significantly less time is spent laying the floor.

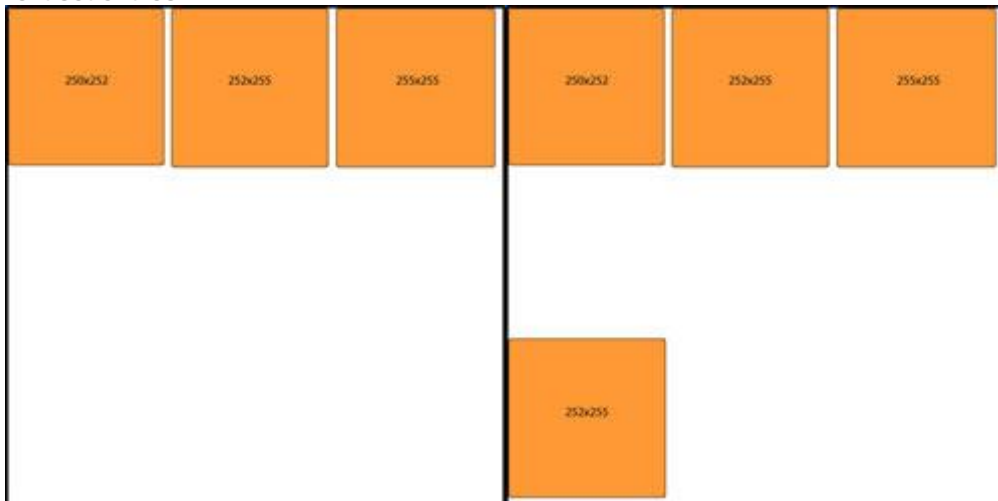
Do make sure you lines are straight and evenly spaced. It can be a help if you mark a piece of straight wood or timber for checking the lines for accuracy before you start laying the tiles.

Stage 4: Laying the Tiles

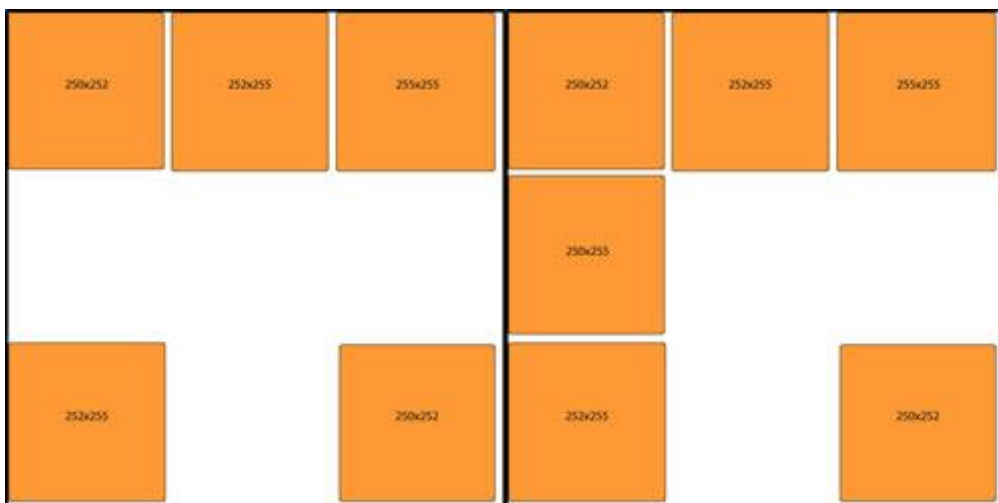
Now you just fill in the grids with the tiles. When you comb the glue onto the floor you will note that the pencil lines are still clearly visible underneath the glue. Now it is just a simple process of laying the tiles. For the demonstration below have used three randomly chosen different tile sizes of tiles. Generally with hand made tiles you get a uniform size inconsistency.



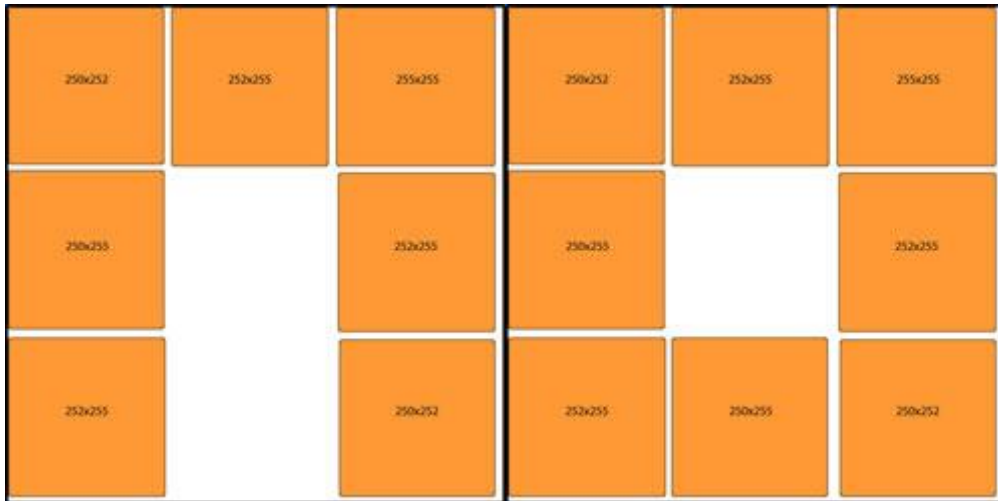
1. You lay your first tile in line with the guide lines
2. You lay the second tile in line with the first leaving a gap on the right for the grout joint for the next set of tiles



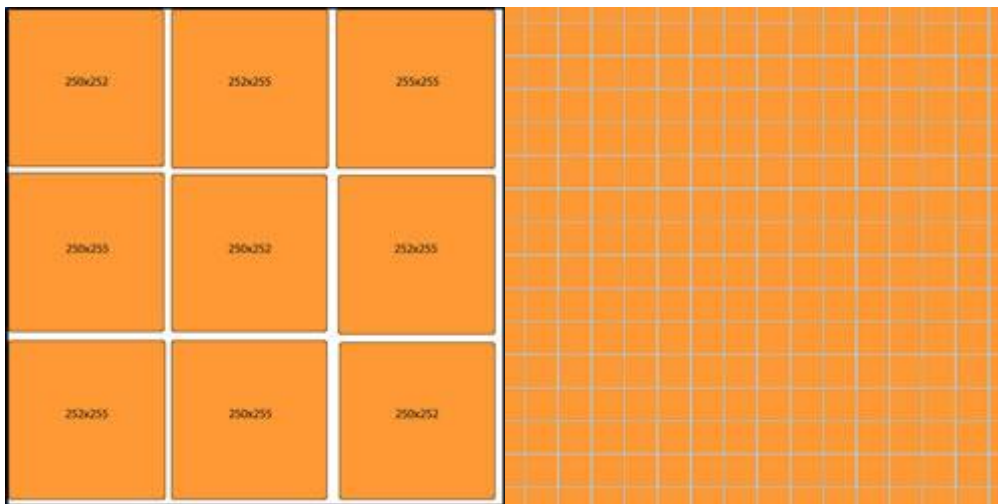
3. You lay the third tile in between the 2
4. The fourth tile is laid using the same principle as the second tile



5. The fifth tile is laid mimicking the first row
6. By now you should be getting an idea on how this works.



7. The eighth and ninth tile can be in reverse if you are not confident in your skill of placing a tile in the middle of a pattern

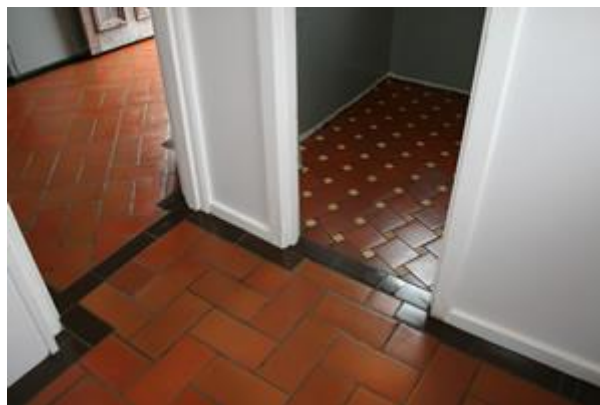


8. So now it is just a matter of following this pattern over and over again.

Because you gridded the floor you know already that they grout lines will follow a straight line. Notice that although the lines go in and out they are straight, and that is the overall effect you get.

Some examples?





The above photo also shows off the finish you can achieve inside your home if you treat your tiles with NZ Made Java Oil and MicroWax from Natural House in Nelson (who we highly recommend). This finish has been enabling New Zealanders to have the same classical terracotta floors that have graced the finer homes of Europe for centuries.



This terracotta floor is from a house that was featured on the Living Channel's TV show "Best of New Zealand Home Design"

How to Grout, Clean & Oil Terracotta Tiles

Here is an article I have written on how to grout, clean and oil/seal terracotta tiles as there seems to be a lot of false stories about how it is hard to do. For the article I photographed both my own kitchen, bathroom, laundry floor & the showroom floor in Grey Lynn.

Grouting

I had been told that terracotta is a nightmare to clean grout off so I decided to see how bad it was by making the grout cleaning as hard as possible.

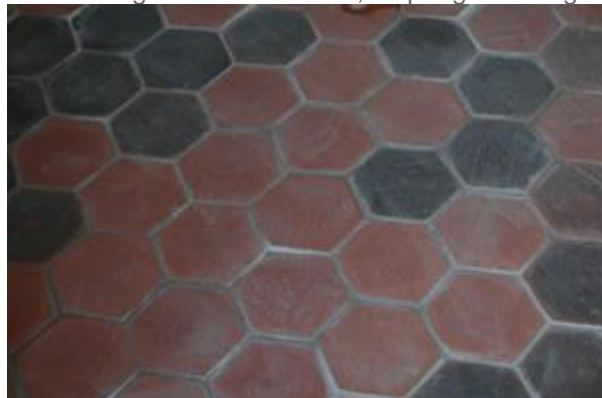


As you can see I let the grout dry on the tiles

I then dragged a wet towel over it to pick up as much of the excess grout as possible



I then cleaned the tiles using a bucket of water, a sponge and a green scrubbing pad



Once the floor had dried it looked like this

If you want so see how it should look if you are not going overboard with the cleaning the grout, the following photos are from one of my bathrooms.



Grouting



Letting the grout dry and cleaning the grout with a sponge and clean water (and nothing else)

Acid Washing Terracotta Tiles

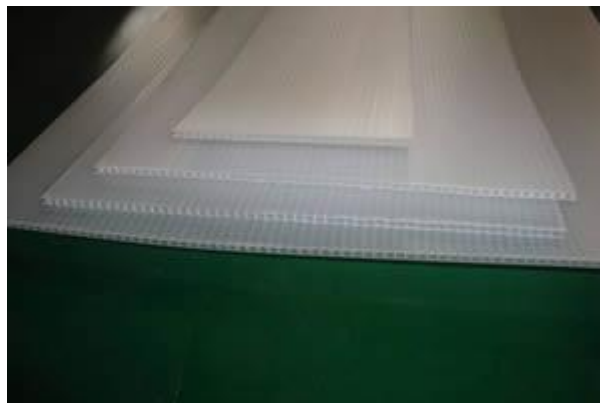
Before you acid wash the floor it must be wet mopped with clean water. This stops the acid from getting into the grout joints too much and damaging them.

Important: Read the instructions on the back of the bottle of acid to get the mix right. I know that sounds stupid but it is one of the most common problems we have.

Extremely Important: Do NOT use Spirits of Salts or Sulphuric Acid inside a house. There is a very high risk the fumes will attack the stainless steel fittings in your house resulting in rusting and other problems.



Once the tiles are wet with clean water, you can then wash them with the acid/water mix. You need a big commercial green pad to do this as shown in the photo above.



Hint: If you want to stop the mixture flicking up on the walls buy a couple of sheets of core flute plastic like this.

It can be leaned against the wall and moved from area to area easily as you clean the floor. The acid/water mixture will start bubbling on the tiles. This means it is lifting the grout off the tile. You should not let the acid dry on the tile in any circumstances so it is best to acid wash sections when you are doing large areas.

If it is a tiny area you are washing you need to mop up the acid/water mix before it dries. If it is a large area it is worth hiring a wetvac from hirepool etc to suck up the mixture.

The washing process goes:

1. Wet Floor with clean water
2. Scrub floor with acid/water mix
3. Wetvac or mop up acid/water after about 15 minutes
4. Wet down floor with clean water (do not reuse the old water)
5. Wetvac or mop up water (do not leave any puddles or standing water)
6. Repeat steps 4 and 5 if you didn't do a good job.



The photo shows the difference between a clean tile & unclean tile. Your terracotta should look brand new once it has been scrubbed and cleaned. If it still looks grey then either the mix was too weak, or the scrubbing wasn't hard enough. You can check this by doing a little patch (about a metre) first and see if the tiles come up clean enough when dry.

When we did the showroom it took 1.5 hours to do 40 square metres by scrubbing the floor by hand and using a wetvac (including cleaning with clean water). So it is not a hard or particularly complex process.

Oiling/Sealing Terracotta Tiles (Inside)

When it comes to oiling our tiles we highly recommend [Natural House's](#) range of oils & waxes.



Oiling the tiles should only be done when the tiles & grout are bone dry. This means that it is faster to do in summer than winter. Inside the tiles should be dry within a week, but it is best to leave the tiles for 2-3 weeks if possible.

Oiling is actually one of the easiest parts of the job. To oil the floor the tools you need are a painter's tray or icecream container and a thick sponge (sometimes known as a bailer sponge) thick sponges are better than thin sponges as they make the job quicker, more consistent and the oil easier to apply. Plus they only cost a couple of dollars so don't even think about using a thin sponge even if it is a small job you are doing.

Here is the floor once it has been grouted, washed, and then the kitchen installed.

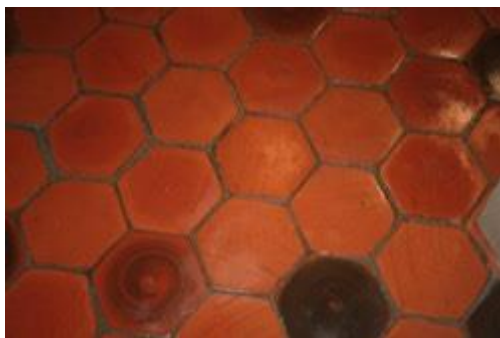


You will note that there are some grey marks on the tiles. This is where the grout wasn't washed off properly and there is also a patch in the bottom right hand corner where the acid was left to dry on the tiles leaving a white mark. I oiled the floor when it looked like this as I wanted to see if the oil could fix up the odd problem. My sacrifice isn't advisable for you to do, but I just wanted to show people that if you can't get the floor perfect the oil will cover up some of the problems.



You rub the oil on with the sponge in a circular motion. You shouldn't drown the tile in oil, but you don't have to be stingy either.

This is the floor after the first coat while it is still wet.



You need to not walk on the floor for the first two hours, so the best time to do the oiling is in the evening either before people leave the jobsite, or before you go to bed if you are doing it yourself.

The next day the floor will look like this:



Notice how the grey marks have gone off the tile. Also note that the grout joints have become discoloured.



When you put the second coat on pay attention to the joints and you will find they go an even colour at this stage.

It is incredibly important that you keep on putting coats of oil onto the tiles until they do not absorb anymore. We have found that it tends to be 3 coats that do the best job.

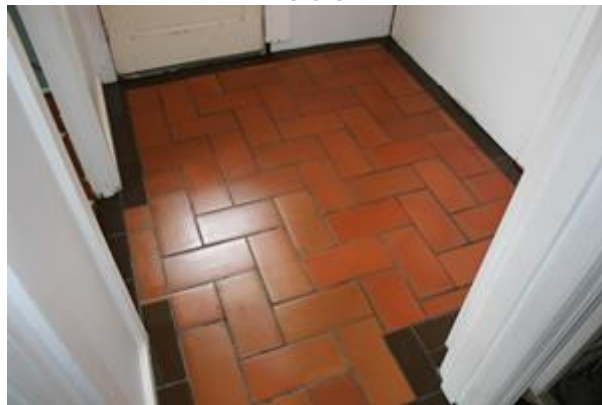
1. First coat is always the heaviest coat
2. The second coat should be a thinner coat. You should start seeing some mottling of the tiles at this stage, this is where the oil has absorbed into the tile at different rates. Lift any excess oil off the tiles with an old towel after 1 hour if it is still soaking wet.
3. The third coat should result in an even smooth finish (lift any excess oil off the tiles with an old towel after 1 hour if it is still soaking wet). If it is still mottled you need to put a fourth coat on. This should be put on very thinly and if it is still wet after 1 hour I would buff the floor with an old towel.

The final treatment is microwax. This should be put on as per the instructions on the back of the bottle. The best applicator we have found for this wax is if you use a micro fibre towel as it gives a beautiful smooth finish. The benefit of microwax is that it helps repel dirt and makes the cleaning of the floor so much easier. We strongly, strongly recommend you wax the floor it significantly cuts down on the maintenance of the terracotta floor. To maintain the floor you just follow the instructions on the bottle and add a little microwax to the water when you mop the floor.

The finished look should be like my laundry which is shown below



Before



After (Using Java Oil & MicroWax)

I hope this has helped you in understanding the process in finishing your terracotta floor. I know that there are more steps involved than just slapping down some grey tiles but the finished result is so much better. You will never convince me that a house with terracotta floors looks worse than a house with porcelain tiles that make it look like a hotel toilet.

Level of Skill required for Grouting/Acid washing/Oil Sealing

If you are concerned that the level of skill is beyond you if you intend to do this yourself please be aware that the bathroom and laundry floor shown above were **my first attempt at tiling**. We make tiles, we do not usually lay them. The kitchen was my very first attempt at grouting and oiling (I had a hand with the laying). So you can see with this guide you should be able to easily do this yourself. And if you are still unsure don't hesitate to come into our showroom in Grey Lynn to see an oiled showroom floor in action.