Urban Floor Tiles Installation & Maintenance Guide

English



Sfera

IMPORTANT

Some jobs may require different or more detailed specifications.

Hardly ever problems in a ceramic surface are due to the ceramic product, they are usually due to a poor laying process, so please read and understand these instructions before beginning to install our products.

If there is any problem related to defective tiles, you should detect it **before installation**, so **it is completely necessary to check all tiles before installation**.

Open and check every box of tiles before laying them, because we will absolutely not accept claims regarding installation costs.

I) Receiving the tiles

If there is any problem related to defective tiles, you should detect it **before installation**, so it is completely necessary to check all tiles before installation.

II) Installation

1) Surface of installation

It is the surface that you will apply the bonding material on.

The surface must be completely **clean** before starting the laying of the tiles. Any residue that is not eliminated will create weak bonding points that may generate future problems.

It is also necessary that the surface is perfectly **dry** (less than 3%), **level and plane** (less than 3 mm deviation and 2 m length, along any direction).

The surface also has to have a good **cohesion**.

Finally, it is essential that the surface is stable, because surface shrinking, expansion or warping would be disastrous for the tiles.

The water-sensitive substrates (wood and chipboard, for example) may require a waterproofing primer.

If you are installing intermediate layers (insulation or waterproofing), or radiant floor heating, check instructions for these products before start tiling.

2) Selecting bonding materials

We recommend to ask to the manufacturer or distributor of the bonding material for the most suitable material to be used.

In general, use C2 materials. If harsh weather is expected (rain, low or high temperatures, wind), use an adhesive with extended open time (E), and do not use type F (fast cement). Consider the possibility of using deformable adhesives (S1 or S2), specially if the laying surface is less than 1 month old

3) Tiling

3.1.- Before you start

All products and tools must be used according to the manufacturer's instructions.

During installation, the better weather conditions are:

- Temperature between 5 and 30 °C.
- Avoid rain or high humidity.

- Avoid risk of frost.
- Avoid strong wind.
- Do not wet the surface until 48 hours after tiling.
- The temperature of the water used to prepare bonding materials is important,
- Check the manufacturer's recommendations.

Do not use the thick-layer installation method, always install tiles following the <u>thin-layer technique</u> (3-5 mm thickness of bonding material layer).

Besides, it is necessary to use the <u>double-bonding method</u> (apply adhesive also to the back side of the pieces), <u>so the back of the tiles is completely covered by the bonding material.</u>

The laying joints must be at least 5 mm wide.

3.2. General planning and stakeout

First of all, check that the laying surface is dry, stable, level, plane and has good cohesion.

Do not start tiling if any of these characteristics is not correct, because the result may be a complete disaster, and very difficult to correct.

Do a thorough cleaning of the installation surface. This is essential. Eliminate all remaining plaster, grease, wax, globs of mortar, organic substances and dust.

Any particle that you do not clean may reduce the

adherence of the adhesive and let tiles fall off in the future.

Usually real measurements are quite different from

dimensions shown in plans (sometimes even some cm), so once the surface is completely clean check again all measurements, including gaps (doors, stairs, etc.), and set the movement intermediate joints, if necessary.

These joints are essential in big surfaces, greater more than 8 m long (or 10 m2).

We also recommend the setting of perimeter joints in surfaces greater than 10 m2, specially for unstable surfaces (metal, wood, etc.). Anyway, **floor tiles must be at least 10 mm away from the walls** or any other element that might reduce its mobility.

3.3. Adhesive preparation

Prepare the fixing material, always following the manufacturer's instructions.

The adhesive manufacturer will inform you about the quantity you will need per square meter.

Do not mix all the adhesive you will need at once, take in mind that, once mixed, adhesives have a limited lifespan. Prepare only the quantity you can use during that lifespan.

3.4. Laying the tiles

Apply the adhesive on the laying surface, using the straight side of the notched trowel, in a small area, for no more than 4 or 5 tiles, according to the open time of the adhesive (maximum time during which the adhesive can be used, from the moment it is applied).

Next, "comb" this adhesive, using the notched side of the trowel. The manufacturer of the adhesive must inform you about the most suitable kind of notched trowel to use. Usually a U6 is correct.

This combing is important to get a uniform thickness of the adhesive layer, and to get a maximum contact of the back of the tiles with the adhesive.

If the back of the tiles is not completely covered by adhesive, you may regret it in the future (tiles that fall off, grouting material that falls off, tiles that broken when hit or drilled, etc.).

Now it is time to lay the tile. Make sure that you do it before the open time of the adhesive finishes (if not, the back of the tiles may not be completely covered by adhesive).

Do not trust the open time given by the manufacturer, because it might change depending on the real weather conditions you are working on. Check it from time to time, pulling up the last tile you just laid to see if its back is really 100% covered by the adhesive.

Check every tile before laying it, to make sure it does not have any defect.

Once the tile is in its position, check that it is in the same plane than the others, with no low or high corners. If necessary, use a clean rigid rubber plate, and hit it with a rubber hammer.

Do any needed correction of the position of the tiles during the **adjust time** of the adhesive.

Do never force a tile if it is hard to move, the only thing you will get is a poor adhesion of the tile, so it will easily fall off in the future.

Clean the excess of adhesive that accumulates in the spaces of the joints before it hardens, and also the adhesive in the glazed side of the tiles.

It is also important to remove the crosstree pieces before the bonding material hardens.

4) Selecting grouting materials (laying joints)

The kind of grouting material to use depends on the final use of the ceramic surface, and on the width of the joints. It is a good idea to **ask the grouting material manufacturer** about the more suitable product.

The most commonly used grouting materials are type GC2.

We recommend to use waterproof grouting materials. Joints will be much easier to clean.

White grouting materials are usually used, but you can also use coloured grouts, matching the colour of the tiles or opposite to it. We recommend to spend some time trying different options, you will see how it substantially changes the final look of the ceramic surface.

In any case, do not ever use materials coloured with black smoke (micronized coal), they are very difficult to clean.

5) Grouting (laying joints)

5.1. Before you start

The grouting operation deserves as much care and skill as the laying of the tiles. The durability and aesthetic quality of the ceramic surface largely depends on this operation.

Use all products and tools according to the manufacturer's instructions.

Check that **joints are empty and clean of bonding material**, that they are dry, and that they have a uniform depth, equal to the thickness of the tiles.

Wait for the time indicated by the manufacturer of the adhesive you used before starting grouting.

5.2. Grouting material preparation

For CG materials, use exactly the amount of water indicated by the manufacturer, and, as you did when preparing the adhesive, pour powder on water (not water on powder).

As you did when preparing adhesive, do not prepare all the quantity of grouting material you will need at once (these materials also have a lifespan).

For CG materials, wait as indicated by the manufacturer once the mix is done before using it.

5.3. Grouting

The manufacturer of the grouting material will show you how to apply its products.

5.4. Cleaning and finishing

Once all joints are filled, clean them with water. Wait for the time indicated by the manufacturer before cleaning the joints.

Use a wet but well drained rigid sponge (it is better if it is attached to a trowel), rubbing the surface in circles.

Clean the sponge with water and drain it as many times as necessary, and change the cleaning water when it starts to be turbid.

It is very important that the sponge is always well drained, to avoid different shades of the grout and future efflorescences.

You may need to do a second cleaning of the joints. If the first cleaning was done efficiently, this second cleaning can be done using just a dry cloth or suede.

6) Cutting and drilling

There is a wide range of tools to make all cuts and drilling you will need to install the tiles.

In general, it is advisable to lay the cut pieces in the position where the cut is less visible.

Drilling for water intakes or drains should be done with electric drills, without striker, equipped with diamondtipped drill bits, properly cooled by water.

For square holes use an electric cutter.

III) Cleaning and maintenance

1) Cleaning after finishing laying works

When laying and grouting are finished, the ceramic surface may have a cement film on it.

The first thing you should do is to carefully sweep all the surface.

There are specific commercial products for cleaning cement, but they should be used with caution as they usually have higher acid concentrations.

As a general rule, take always into account the following cautions:

- Never use an acid product on recently installed tiles.
- Carefully read and observe the instructions and recommendations given by the manufacturers of cleaning products.
- Before using a cleaning agent, test its effect on the ceramic tiles and grouts.
- · Protect the surfaces where there are no ceramic tiles,

they may be affected by the cleaning product.

• It is important to **always use clean water.** Change cleaning water every 15 m2 approximately.

2) Daily maintenance

It is very easy to maintain our tiles. Just clean them usually with warm water or a dilute solution of a common detergent.

It is important to always use clean water. Change the cleaning water every 25 m2 approximately.

If green or dark stains appear, it is usually due to humidity and fungus. Clean the tiles or grouts with bleach, and try to eliminate the source of humidity.