



LAYING AND MAINTENANCE INSTRUCTIONS

I _ RECEIVING THE TILES

If there is any problem related to defective tiles, it should be detected **before installation**, so it is completely necessary to check all tiles before installation. **We will not accept claims regarding installation costs.**

If you are installing filed tiles and special pieces, make sure that the tone of all products is compatible, keeping in mind that there might be slight shade differences that will not affect the final result.

ATTENTION: if you have any doubt, stop laying the tiles and contact your tile supplier. Problems are always much easier to solve if the tiles have not been installed yet. Do not use white body tiles for floor or outdoor.

II _ INSTALLATION

1 - Surface of installation

Before starting the laying of the tiles, the surface must be completely clean, perfectly dry, and plane (less than 3 mm deviation y 2 m² length, along any direction). The surface also has to be stable and must have a good cohesion. The water-sensitive substrates (wood and chipboard, plaster and precast gypsum, etc.) may require a waterproofing primer.

If you are installing intermediate layers (insulation or water-proofing), check instructions for these products before the start of the tiling.

2 - Selecting bonding materials

Usually, cement bonding materials C2 are to be used. If wall tiles are being installed, it is better to use reduced vertical displacement (T) materials. Anyway, it is always a good idea to ask to the manufacturer or distributor of the bonding material for the most suitable material to be used.

3 - Tiling

3.1 Before you start

All products and tools must be used according to the manufacturer's instructions. Do a thorough cleaning of the installation surface. Do not submerge the tiles in water before installation. Always install tiles following the thin-layer technique. The laying joints must be at least 1.5 mm wide for white body tiles, and 2 mm wide for porcelain tiles. Set the movement intermediate joints, if necessary.

1. For tiles that have a 30 cm long side, it is highly recommendable to use the double-bonding method.
2. For locked laying of tiles 40 cm long, displacement between tiles must be 1/3 maximum. Do not lay tiles with the joint in the middle of their length.
3. Floor tiles must be at least 5 mm away from the walls or any other element that might reduce their mobility.

3.2 Laying the tiles

Apply the adhesive on the surface, using the straight side of the notched trowel, in a small area, according to the open time of the adhesive. Next, "comb" this adhesive using the notched side of the trowel, creating straight lines, perpendicular to one side of the tiles. This combing is important to get a uniform thickness of the adhesive layer, and to get maximum contact of the back of the tiles with the adhesive. Then, it is time to lay the tile. Make sure that you do it before the open time of the adhesive finishes, considering the atmosphere conditions you are working in.

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

The best way to lay tiles is the so-called Tarver Method:

- Lay the tile more or less in its position.
- Slide the tile, perpendicular to the grooves of the adhesive, away from the closest tile, about the distance of one adhesive groove.
- Slide the tile again to its original position, now laying it exactly in its final location leaving the necessary laying joints.

With this method, let the air in the adhesive grooves get away, eliminating bubbles. Once the tile is in its position, check that it is in the same plane as 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. Clean the excess of adhesive that accumulates in the joints in the glazed side of the tiles before it hardens.

4 - Selecting grouting materials (laying joints)

The kind of grouting material to be used 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. Use waterproof, anti-mildew grouting materials. White grouting materials are usually used, but you can also use coloured grouts, matching the colour of the tiles or opposite to it. In any case, do not ever use materials coloured with black smoke (micronized coal), they are very difficult to clean.

5 - Grouting (laying joints)

Wait for the time indicated by the adhesive manufacturer before starting grouting. Use all products and tools according to the manufacturer's instructions. Check that joints are empty and clean of bonding material, dry, and that they have a uniform depth, equal to the thickness of the tiles. If you installed crackle tiles, apply a sealer before grouting them. Wait for the time indicated by the manufacturer of the grouting material before cleaning the joints.

6 - Cutting and drilling

There is a wide range of tools to make cuts and drilling to install tiles. The manual cutter is useful for flat tiles. Drilling for water intakes or drains should be done with electric drills, without striker, equipped with diamond-tipped drill bits, properly cooled by water. For special pieces and relief tiles use always an electric cutter.

III _ CLEANING AND MAINTENANCE

1 – Cleaning after finishing laying works

If tiles have been laid on the floor, they will probably have a lot of dust over them, so the first thing you should do is to carefully sweep the surface. The ceramic surface may have a cement film on it; in most cases, using a diluted acid solution (vinegar, for example) is enough to remove it. There are also 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 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.
- Never use scrubbers or espartos to clean shiny tiles or grouts.
- Change cleaning water every 15 m² approximately.

If you used a porous grouting material, non-waterproof, you may want to protect it with a grout sealer, especially if grouts are white or have a light colour. To remove the protective wax in the glazed surface of tiles, use only warm water and a damp cloth. Do not use scrubbers, blades or sharp objects that could scratch the surface of the tiles. If you installed crackle tiles, use also a sealer for the tiles.

For **Metallic and Madreperla** colour tiles, do not use energetic cleaning products, or dilute them with water, and check their effect on the tiles before applying them.

2 - Daily maintenance

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