

INSTALLATION MANUAL – RECOMMENDATIONS BASED ON ISO STANDARDS

1. How to start the ideal installation of floor tiles

For optimal installation of the floor tiles some care should be taken, so this will avoid potential problems and make service faster and better done.

**TIP: HIRE QUALIFIED LABOR
FORCE**

1. Verify that the tiles are intended for use at the location to be installed as per specification and technical characteristics.
2. The consumer has an obligation to read the instructions written on the packaging and ask for information before installing the tiles. Check that the reference, caliber, shade and quality indicated on the packaging are the same.
3. For each open package, check for defective parts. Separate them for cutouts.
4. Before laying for the coating process, it is advisable to mount a panel on the floor with the tiles, using pieces of 3 or 4 boxes. This way you can see what the environment will look like after installation.
5. Plan for the best distribution of parts for ease of service, avoiding cutouts by saving time and saving materials.
6. Verify the quality of the previous jobs performed by the professional you hired for the installation, whether he uses grout lines, install the tiles in good alignment and that all necessary tools he uses are in good condition.
7. Purchase 10% more products considering possible breaks, cutouts and technical reserve of products for any future needs.
8. Prior to installation of tiles, hydraulic and electrical installations must be completed and tested.
9. Installation of tiles should be performed under appropriate weather conditions. Room temperature and materials higher than or equal to 41°F are recommended.
10. Check that the mortar/grout purchased are recommended for the environment and for the product to be installed and it is advisable to consult the manufacturer in case of any doubt.

INSTALLATION TIP: After brief inspection of the materials, wipe off any dirt and dust that may be on the subfloor and on the back of the tiles (use a soft brush to remove dirt and dust).

2. Mortar Preparation and Application

Mortar types

- ACI - Mortar with characteristics resistant to mechanical stresses typical of internal coatings, except those applied in special areas, such as saunas, grills, greenhouses and others.

- ACII - Suitable for outdoor use. It has properties that reduce the interference of temperature and humidity variations typical of outdoor work.

RECOMMENDATION OF STICKY MORTAR TYPE				
Type of flooring	Environment	Surface Area of Tile		
		< 400 cm ²	(400 < A < 900)cm ²	> 900cm ²
Ceramic tiles	Indoor	AC I	AC II	AC II
	Outdoor	AC II	AC III	AC III



Mix only enough to be used within 30 minutes.



Apply the mortar (thickness 3mm to 4mm) with the smooth side of the trowel. Roll out one small area at the time to prevent the mortar from drying out. See manufacturers information.



Pass the toothed side of the trowel (8mm x 8mm x 8mm) at an angle of 60 ° to the base, forming parallel cords and grooves.



Apply the mortar to the back of the ceramic tile with the smooth side of the trowel forming strands parallel to the notched part of the band.

3. Installation of tiles

Using the leveler and spacers:

- **Spacers** - These are used to provide an aligned installation. Reduces installation time. It works as an anti-dilator, avoiding the possible displacement of ceramic tiles.

- **Levellers** - Large format tiles requires greater care during installation, and often take longer time from the settler due to difficulties in handling, adjust leveling on the tiles. This system consists of three elements, which are sold in separate packages:
 - ✓ Leveling Clip
 - ✓ Wedges (can be reused up to 10 times)
 - ✓ Traction pliers: used to adjust the pressure of the wedges, pressing them to ensure the perfect leveling of the plates evenly

The use of this system combines productivity with impeccable finish. Advantages of using the floor leveler:

- ✓ · Higher installation productivity
- ✓ · Reduction of equipment traffic noise
- ✓ · Minimizes warping effects
- ✓ · Simplicity of use



DO NOT WET CERAMIC TILES BEFORE INSTALLATION.

This process can saturate and make it difficult to grip the mortar on the ceramic tile.



Apply the tile piece slightly out of position, crossing the strings of the back of the tile and the subfloor. Drag the tile piece to its final position by finger-pressing and tapping with a rubber hammer to knead the mortar strands.



During application, randomly remove some tiles and check that the mortar strands are being broken.

Grout application

The place where the grout will be applied must be clean, free of residues of dust, grease, oil or any other material that makes it difficult for the grout to adhere to the base. Note: Grout only 72 hours after installation.



Spread the grout on the grout lines using a rubber spatula.



Pass the spatula in the opposite direction to remove excess grout.



Finish with clean, slightly wet sponge no later than 30 min after grouting.



When cleaning, use only mild soap, water or detergent. Do not use chemicals, steel wool etc.

GROUT JOINT RECOMMENDED BY CERAMICA CARMELO FIOR
RECTIFIED: 3mm | NON-RECTIFIED (PRESSED): 5mm

4. Tile Protection

The ceramic surface is composed of protective layer whose hardness varies according to the brightness, for example, the brighter the product, the more easily it scratches. The sand, present in all works is the number 1 enemy of the floor, so when finishing the installation and grouting, cover the floor with cardboard.



5. Post Installation Cleaning

Post-work cleaning should be done with extreme care as there may be abrasive materials, paint and varnishes adhered to the surface. Therefore, one should:

1. Remove loose debris with vacuum cleaner or broom;
2. Clean the surface with a sponge or cotton cloth moistened with clean water;

Do not use metal bristles (such as steel sponges). They can scratch and damage the gloss of the tile and even if not removed properly can cause rust stains.

3. Use neutral detergents.
4. Finish cleaning with plenty of water and a clean, dry cloth.
5. To remove paint and varnish adhered to the floor use a plastic spatula.

If complete removal of waste with water and detergent does not occur, we suggest:

1. Spread the surface with Soap Cleaner or Active Chlorine, diluted as indicated on the product packaging. Always dilute in a bucket for later application to the coating.
2. Let the mixture act for 15 minutes on the floor.
3. Scrub the surface with broom or soft brush.
4. Rinse the floor to completely remove debris. Total removal of the mixture (solution + dirt) within the allotted time is critical, as if it dries on the tile, it can form film hard to be removed.
5. Finish cleaning with a clean and dry cloth.

Attention: Do not use products that contain hydrofluoric or muriatic acid, fluorine and its derivatives. These components are found in the clothing rust strip, Aluminum Cleaner, Stone Cleaner, Stone Shampoo, Glass Cleaner, and more. Products that have high concentration hydroxides (potassium, sodium etc.) and acids can cause changes in the surface gloss of ceramic tiles if exposed for more than 10 minutes. Do not use waxes or waterproofing on the ceramic without indication and professional supervision.