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**MARINA BAY INSTALLATION GUIDE**

**IMPORTANT**

These instructions are a general guide for installing Marina Bay products. Some jobs may require different or more detailed specifications.

**No claims will be accepted if the products are not installed following these instructions.**

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. Installation will be considered acceptance of product and no claims will be accepted pertaining to defective material afterwards.

If you are installing field tiles in combination with special pieces or decos, make sure that the shade of all products is compatible, taking in mind that there might be slight shade differences that will not affect the final result.

**INSTALLATION**

**Marina Bay products are for indoor wall use only.**

If you have any doubt or concerns, stop laying the tiles and contact us.

**1) Surface of installation**

The installation surface must be completely clean and dry (less than 3% moisture) before starting the laying of the tiles. Any residue that is not eliminated will create weak bonding points that may generate future problems.

The installation surface must be vertical and plane (less than 3mm deviation and 2m length, along any direction).

The surface must be stable without any surface shrinking, expansion or warping as this would be disastrous for the tiles.

Water-sensitive substrates (wood and chipboard, plaster and precast gypsum, etc.) may require a waterproofing primer. If you are installing intermediate layers (insulation or waterproofing), check instructions for these products before start tiling.

**2) Tiling**

**a) Prior to Installation**

All products and tools used for installation must be used according to the manufacturer’s instructions.

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

It is highly recommended to use the **double-bonding method** (apply adhesive to the installation surface as well as the back side of the tiles), so that there is complete coverage with the bonding material.

The laying joints must be at least 1.5 mm wide.

Do not submerge the tiles in water before installation.

**b) General Planning**

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

Check all measurements, including gaps (windows, doors, etc.), and set the movement intermediate joints, if necessary. These joints are essential in large surfaces, for walls being more than 8m long (or 10 m2).

We also recommend the setting of perimeter joints in surfaces greater than 10m2, especially for unstable surfaces (plasterboards, wood, etc.).

**c) Adhesive Preparation**

Prepare the setting materials, always following the manufacturer’s instructions, using an electric low speed mixer, until you get a homogeneous and lump-free paste, without bubbles.

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.

**d) Laying the tiles**

Apply the adhesive on the installation surface using the straight side of the notched trowel, in a small area, for no more than 4-5 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. Refer to the manufacturer’s recommendations for the most suitable notched trowel to use. Usually a U6 (V6 for type D adhesives) is correct. Comb the adhesive to create straight lines, perpendicular to one side of the tiles.

Tiles must be completely covered by setting material to create a solid bond.

Install the tile before the open time of the adhesive finishes (if not, the back of the tiles may not be completely covered by adhesive).

We recommend using the Tarver Method:

1. Apply adhesive on the back of the tile (double-bonding method) with the straight side of the notched trowel.

2. Lay the tile more or less in its position, leaving at least a 1.5 mm wide joint. You can use crosstree pieces.

3. Slide the tile, perpendicular to the grooves of the adhesive, away from the closest tile, about the distance of one adhesive groove.

4. Slide the tile again to its original position, now laying it exactly in its final location, leaving the necessary laying joints.

Using this method you will effectively eliminate air pockets and 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.

Do never force a tile if it is hard to move, the only thing you will get is poor adhesion of the tile.

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

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

**4) Selecting Grouting Materials and Laying Joints**

**Do not use sanded grouting material on Marina Bay products with glossy finishes. The grit from the sand will scratch and damage the surface of the product.**

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, but it depends on the type of adhesive you used to lay the tiles:

• If you used C2 adhesive, use CG2 grouting material.

• If you used cement deformable adhesive (C2), or type D adhesive, use deformable grouting materials (CG S1 or S2).

• For R adhesives, use RG grouting material.

Use waterproof, anti-mildew grouting materials, especially for wet areas (showers, baths, etc.). Joints will be much easier to clean and maintain.

**a) Before you start**

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 (especially for RG materials), 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.

In order to get a uniform color of all grouts once the job is done, try to use all the grouting material from the same production lot (it must all have the same dye lot code and date of production).

**b) Grouting material preparation**

For CG materials, use exactly the amount of water indicated by the manufacturer, and pour powder on water (not water on powder).

For RG materials pour liquid (minor ingredient) on paste (major ingredient).

Mix using an electric low speed mixer, until you get a homogeneous color and texture. 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).

**c) Grouting**

Most manufacturers will show you on their web page how to apply grouting materials. We will describe the most common method.

Using a hard rubber trowel, distribute the material along the surface, always diagonally with respect to the joints. This way you will fill the joints with the grouting material uniformly, avoiding the edge of the trowel to get in the joints, and cleaning the tiles at the same time.

Sometimes RG materials are quite hard, so you might need steel spatulas or even an extruder.

Use the appropriate tool to curve the surface of the joints. For narrow joints this is not necessary, you will get it when cleaning the joints before they harden.

**6) Cutting and Drilling**

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 diamond tipped drill bits, properly cooled by water.

For special pieces (chair rails, pencils, etc.) use always an electric cutter.

**7) Cleaning and Maintenance**

When laying and grouting are finished, 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 cement. 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 always into account the following cautions:

• Never use a concentrated 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.

• **Never use scrubbers or espartos to clean glossy tiles as they may scratch or damage the finish.**

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.**