GENERAL INSTRUCTIONS

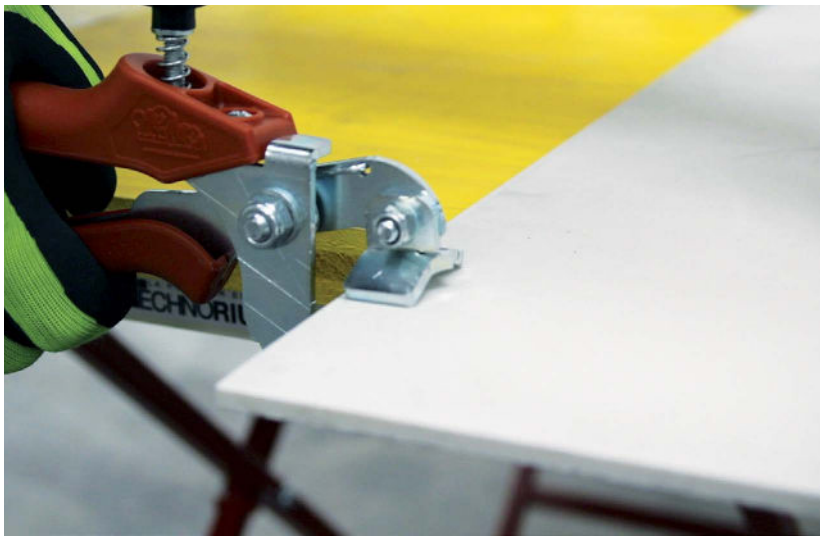
Porcelain Slabs Cutting & Installation Guide

COSMOS SURFACES

FULL CUTS, CUT OUTS, & MITERED EDGES

• The “score and snap” is the preferred method for straight cuts (from one end of the panel to the other) using a recommended tool.
(See page 63-65 for recommended tool providers)

• When planning a cut that will be the full length of the panel, either with a plunge cut, or starting at the edge, mark and drill a relief hole at the termination point of the cut, then cut towards the relief hole. Properly support piece equally across entire surface of the piece when setting in mortar and prior to handling for installation.



• When planning a plunge cut, drill a relief hole with a electroplated core bit at the termination point of the cut, prior to beginning the cut. Always cut towards the relief hole.

• When planning a “U” shaped cut, mark, and drill relief holes where the cut lines will intersect. Always make the shortest cuts first, leaving your waste/drop-out attached to the largest part of your desired piece for the final cut.

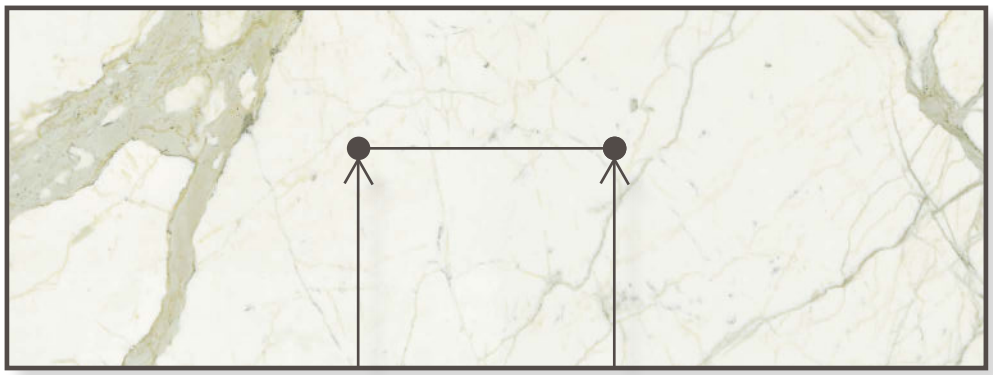
• When planning an “L” shaped cut, mark and drill relief holes where the cut lines will intersect, always cut the shortest length first, and cut towards the relief hole.
(See page 58 for cutting diagram)

• When manipulating large porcelain panels, a variable speed right angle grinder is strongly suggested to reduce vibration. Electroplated diamond blades or electroplated diamond drill bits should be used for various cuts and manipulations.

(See page 63-65 for recommended tool providers)

IMPORTANT: Always cut towards the relief hole.

When cutting a “U” shaped piece, mark, and drill relief holes where the cut lines intersect. Always make the shortest cut first.



When cutting an “L” , drill relief holes where the cut lines intersect, always make the shortest cut first.

Color matched or tinted polyester, epoxy compounds or equivalent are often used to fill edges and bring the pieces together to form a smooth transition.

DANGER

ALWAYS PROPERLY SUPPORT EACH PIECE PRIOR TO INSTALLATION

FULL CUTS, CUT OUTS & MITERED EDGES

• For circular cut outs, a circular electroplated diamond core bit must be used with a variable speed grinder or drill.
(See page 63-65 for recommended tool providers)

• For straight line cut outs, a variable speed grinder with electroplated diamond blades must be used. Relief holes or cuts before planning a square or rectangular shape are necessary.

• When possible, it is best to fabricate niches and holes after the panel is already installed with thin set on wall or floor. If it is not possible to cut holes or square/rectangular cuts (fireplace, sink, etc.) before the panel is installed, create full support with plywood or MDF panel template with same shapes and cuts to attach and transport the porcelain panel. Support panels should only be detached when porcelain panels are fully bonded to the substrate.

• It is also possible to move panels with proper moving tools made of multiple suction cups to avoid tension of the panel after it is cut.

• Material can be mitered using proper tools. Colored or tinted compounds such as polyester, epoxy, or equivalent are often used to fill edges and bring the 45 degree miter cuts together.

• Material can be bullnosed the same as regular porcelain.

• Large porcelain panels can be installed over concrete or other suitable substrates. You must honor all expansion joints or any defects in the substrate and mitigate prior to installation.

• Substrate should be a minimum of ¼" over 10 feet in flatness.

• The back of the panel and substrate should be spread the same direction at the shortest distance with a modified LFT thin set mortar to achieve 100% coverage.

(See page 63 for recommended trowels)

Example of proper full mortar coverage

• Self-leveling systems are required to achieve desired flatness between joints. Fill any voids with the mortar for complete support.

• Recommended tools and techniques need to be used to ensure full bond of the panel. Recommended techniques should be followed to move air out from underneath the panels.

• The setting material manufacturers have vast experience in the installation of porcelain tiles and large porcelain panels. Accordingly, we strongly recommend that the installer should contact the relevant setting material manufacturers and seek their advice prior to installation of our large porcelain panels.

(See referenced manufacturers page 63-65 for contact details).

• It is very important to spread thin set the same direction on both the substrate and the panel, the shortest direction of panels. Thin set brands we recommend are: LFT by Mapei, Prolite by Custom, 254 Platinum by Laticrete, and x77 Walls & x78 Floors by Ardex Tec.

(See referenced manufacturers page 63-65 for contact details).

• Place tile into the fresh mortar and firmly press to cause the ridges to flatten out and come together into a continuous void free bed. Install desired spacers/levelers of preferred grout joint design width.

• Polymer added sanded and unsanded grout, epoxy grout, silicone, or polyurethane can be used to fill the joints. If using epoxy grout, make sure to follow proper cleaning instruction within the manufacturers' specific time frame.

NOTE: Recommended 1/8" grout joint width should be maintained throughout the entire installation. Countertop seams can be butted.

Maxfine does not accept any responsibility nor does it recommend a particular method of installation. It is the responsibility of the installer/buyer to design the tiling system based on the advice obtained from the setting material manufacturer.

LAYING

1 Installation must be carried out using normal adhesives for porcelain stoneware or specific, high-performance adhesives depending on the size or particular applications.

2 In deciding on the most appropriate adhesive and installation method, we recommend that you follow the adhesive manufacturer's instructions or ask the professional laying contractor for advice.

3 For large slabs and/or areas with heavy traffic or heavy loads, we recommend laying with a double coat of adhesive.

4 Our materials are natural by inspiration, manufacturing technology and raw materials used so any colour variations are natural and desirable. Skilled laying contractors can enhance these features to obtain unique, inimitable results. In order to obtain these results, we recommend following these instructions:

- Spread some pieces on the floor to check the overall effect. When laying the material, select the pieces from different boxes/palettes.
- Do not soak the material in water before laying.
- When cutting, do not mark the top part of the surface with pencil or felt-tip pen, particularly on polished surfaces.
- Wait 48-72 hours before using the floor.

5 If laying with normal-setting adhesives, grout the floor after 24-48 hours; if using quick-setting adhesives, after 4 hours.

6 On polished and gloss materials, use cement-based grout in different shades of the same colours (if possible, avoid dark grout such as black, blue or red on bright materials, and vice versa). If you decide to use grouting with contrasting pigments, make sure you scrupulously follow the instructions on the datasheets and in any case, do a spot test of the grouting on the material before you use it.

7 **NOTE.**
We strongly advise against using epoxy or flexible, synthetic-based mortar or grout with latex additives on these surfaces, particularly for gloss surfaces of slabs, and especially if it contrasts with the colour of the material. This is because it can be extremely difficult to eliminate the residue with normal cleaning products.

8 Use a rubber spatula to spread the grout over the whole surface of the material.

9 Grout small areas at a time and remove excess grout with a sponge or damp cloth (make sure the water is clean water), or use special machines to remove excess when it is still damp.

10 **Adequate initial cleaning is of fundamental importance**, both to enhance the aesthetics and sheen of the material, and to restore its characteristic cleanability and easy care. Therefore, it is extremely important to clean the surface for the first time immediately after the laying procedure, using acid-based detergents, scrubbing the surface hard then rinsing it with plenty of water. This will get rid of all the residue grout, bonding agent, cement etc. Any detergent available on the market can be used for this, with the exception of products containing hydrofluoric acid (and its compounds and derivatives) in accordance with Annex G of standard EN 14411.

11 **We recommend carefully protecting the floor after laying; if the surface is polished/glossed, it is essential to protect the laid flooring.**
If other work such as painting, plumbing or any other job needs to be done after installation, we recommend covering the floor with PVC sheets, AIRBALLS or fabric. In any case, wait 48-72 hours before using the floor normally.