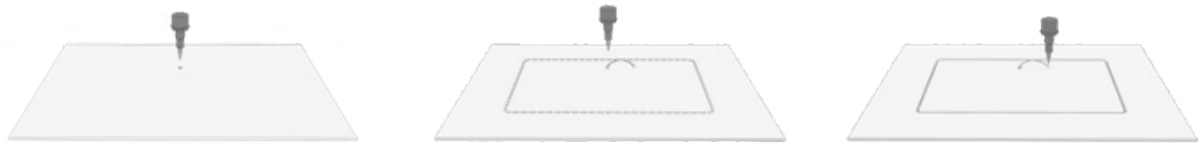


# From Start to Set **Essential Tile Laying Steps**



A PURE EXPRESSION

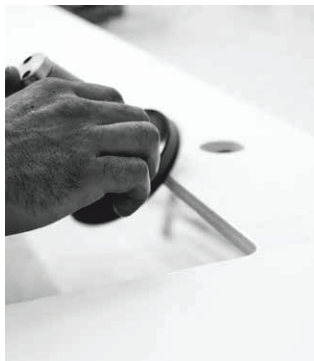
## WATER CUTTING MACHINE (BRIDGE TYPE)



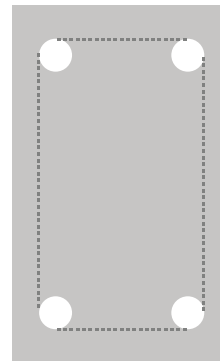
The use of a water jet cutting machine lets us make any type of cut or drill with a high precision level. The quality of the cut finish will depend on the correct combination of the parameters recommended on the table. This combination can be slightly different depending on the available machinery. As with the CNC cutting machine, we shall always start with an initial drill inside the opening space, located preferably in the farthest part from the edge of the piece, when cutting an inner opening. From here we shall cut along the cutting perimeter getting to it with a curved movement. If the edge finish needs to be polished, we recommend reducing to half the speed for a smoother and easy to work finish.

Abrasive	Speed
300-380 g/min	white 0.4 m/min
	other colours
Initial pressure	Maximum pressure
700-800 bar	3500-3800 bar

## MANUAL WORK



Some stonemasons or Counter top workers work in a traditional way making cuts and holes in the pieces manually. We thus recommend always using wet operation, with suitable tools for porcelain tiles, always in good condition.



When making rectangular spaces inside the plate, we shall previously drill out holes on the rectangle's four corners, thus observing the recommended radii, and then making straight cuts joining the four drills.

## CIRCULAR SAW CUTTING MACHINE



For making straight cuts with the bridge-type cutting machine we shall use diamond cutting blades suitable for porcelain tiles (eg. Italdiamant, Luna Abrasive, etc.), always in good condition, and follow the blade manufacturer's recommendations. The water flow shall be at its maximum while cutting to ensure the correct cooling of the blade.

Diameter	RPM approx.	Speed
300mm	2100-2800	white 0.5 m/min
350mm	1900-2500	
400mm	1700-2300	other colours
450mm	1400-2000	1 m/min
500mm	1200-1600	

values recommended by Porcious

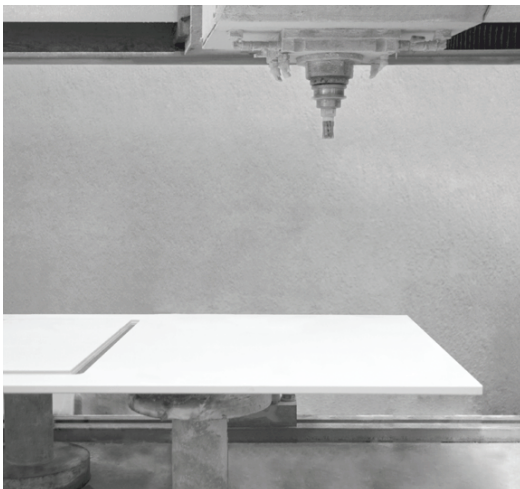


# NUMERICAL CONTROL CUTTING MACHINE (CNC)



It is possible to cut holes and inner openings with a numerical control machine and the suitable tools (crown, diamond coated drill bit, etc.). To do this, we shall always start with an initial drill inside the opening space, located preferably in the furthest part from the edge of the piece. From here we shall cut along the cutting perimeter getting to it with a curved movement.

We recommend reducing the speed as the tool comes out. To prevent breakage of the plate during the machining process, the suction cups need to be correctly distributed and at least a couple of them shall be placed so that they prevent the scrap piece from rotating when we finish cutting. We shall avoid blocking the piece with clamps.



	<b>Diameter</b>	<b>rpm approx</b>	<b>Speed</b>
Drill	23mm	3700-4100	0.2m/min
	15mm	3900-4000	
	20-22-23mm	3500-4000	
Crown	25mm	3000-4000	0.15m/min
	30-35mm	3000-3500	
	68-70-75-105mm	1000-1500	

values recommended by Porcius

# INSTALLATION

## CLEANING & MAINTENANCE

After each cutting operation on waterjets, disc cutters, or numerical control machines, clean the slab surface with plenty of water to remove any processing residues, then dry with a squeegee or similar. To eliminate any residues of dust after fabrication, we recommend washing the product using a mild acid based detergent. After installing the material, clean the surface to remove any contaminants (glue or other adhesive residues...) which is present.

TYPE OF STAIN	CHEMICAL PRODUCT	EXAMPLE
Grease	Alkaline - Solvent	Detergent
Oil	Solvent	Ammonia, Baking Soda
Ink	Oxidant - Solvent	Alcohol, Liquid Bleach, Nail Paint Remover
Rust	Acid	Hydrochloric Acid, Vinegar, Red Harpic
Lime	Acid	Descaling Reagent, Hydro Chloric Acid
Cement	Acid	Hydro Chloric Acid
Wine	Alkaline	Ammonia, Liquid Bleach
Coffee	Alkaline - Solvent	Ammonia, Liquid Bleach
Rubber	Solvent	Alcohol, Thinner
Plaster	Acid	Hydro Chloric Acid
Candle Wax	Solvent	Alcohol, Thinner
Iodine	Oxidant	Liquid Bleach
Blood	Oxidant	Liquid Bleach
Ice Cream	Alkaline	Liquid Bleach

### NOTE:

Clean the affected areas using a soft cloth dampened with acetone or solvent, as indicated by the adhesive manufacturer. If necessary, we recommend protecting the surface of the slab before applying adhesive, with a plastic film or masking tape. Moreover, clean the slab surface after installation with water and neutral detergent using a sponge or damp cloth.

Do not use abrasive sponges or detergents containing abrasives.

Clean liquid spills such as coffee, tea, cola, etc. quickly off the surface with an absorbent cloth. For everyday cleaning of the **Porcelain tiles** use hot water and neutral detergents if required, with a soft cloth.

## INSTALLATION

Install the Counter top at a distance of 2-3 mm the Joint.

Porcelain Slab can fix same as natural Stone and other engineered stone with suitable Bond adhesive and epoxy.

In the design of a kitchen top, maintain a minimum distance of 50 mm (2 inch) from the outer edge with holes and grooves. The same minimum distance must be maintained between adjacent openings.

The counter top edge can be finished using automatic machinery or by hand, depending on the visual desired.

The flat edge is the finish that keeps the body edge of the slab visible. It can be used as a perimeter edge for tabletops and kitchen tops, or to finish the sink hole when the sink is fitted beneath the top. Subsequently, where required, it is possible to polish the edge using a sequence of abrasive diamond grinders, with increasing grit size, on numerical control machines. To guarantee the durability of the edge over time, the straight edge must end with a chamfered angle of at least 1 mm. Generally, only the upper corner must be chamfered, but in some cases, it may be necessary to chamfer on both sides: in this case, use a tool that can perform the operation in a single passage.

To join Marble-Esque Slab edges, use a color matched 2-part epoxy, polyurethane or equivalent. We also recommend that a mock-up be prepared for the first bonding, testing the sample under the most severe conditions, according to the final application, to assess the stability of the support panel.

A Good Craftmanship is always Recommended.

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