

WATERJET  
SHAPING

LEVEL

ITALIAN PORCELAIN SLABS



## **WATERJET SHAPING**

- The worktable must be flat, in good condition, and clear of debris from previous processing.
- The slab must be solidly secured to the table to prevent it moving during cutting.
- The table's blades must be in perfect condition and set to minimal clearance so that the slab is perfectly supported by the table.
- We recommend keeping the water level around 3 mm over the table's blades. It is best to make continuous cuts, with the piercing starting cuts outside the slab itself.
- Start with the perimeter cut, removing around 20 mm from all edges when starting with a complete slab.



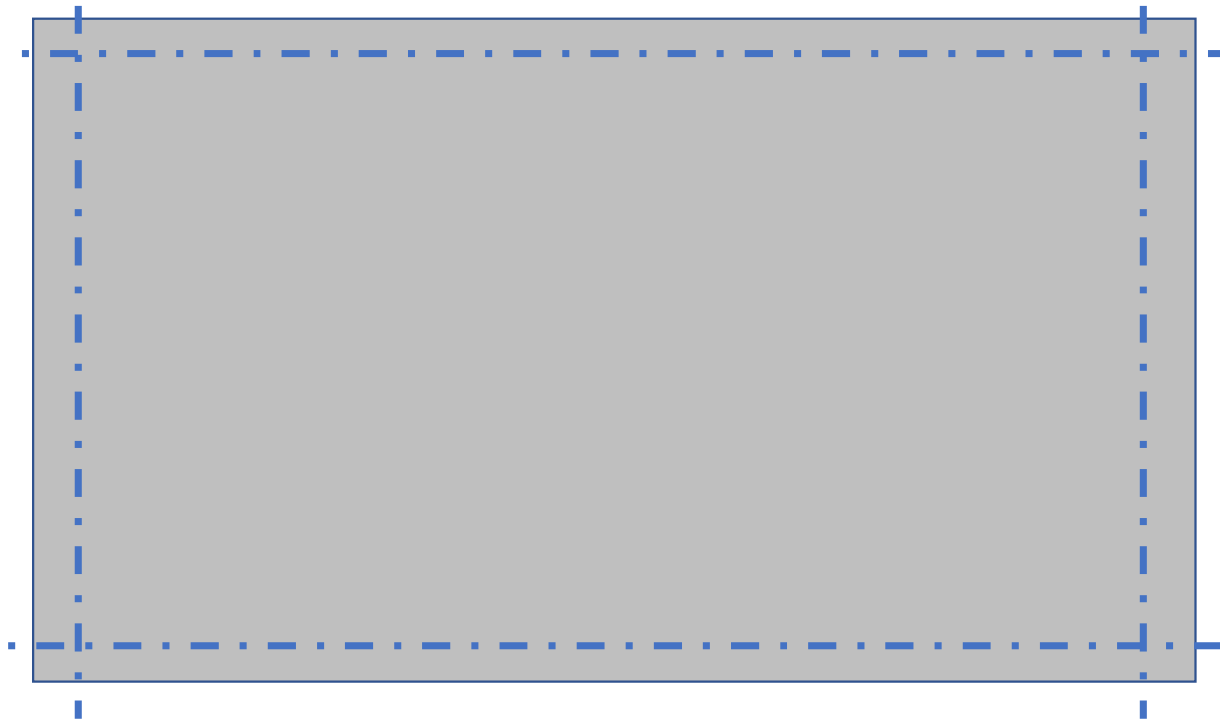
## **WATERJET SHAPING**

- All internal corners must be radiused by at least 3-5 mm.
- Reduce the pressure and abrasive flow when boring holes or cutting 45° corners.
- When making cutouts, start by boring a hole inside the area and then cut along the perimeter of the cutout itself.
- Wash the finished slab thoroughly after cutting.

## WATERJET SHAPING

**STEPS: 1** Cut around the perimeter, at least 20 mm

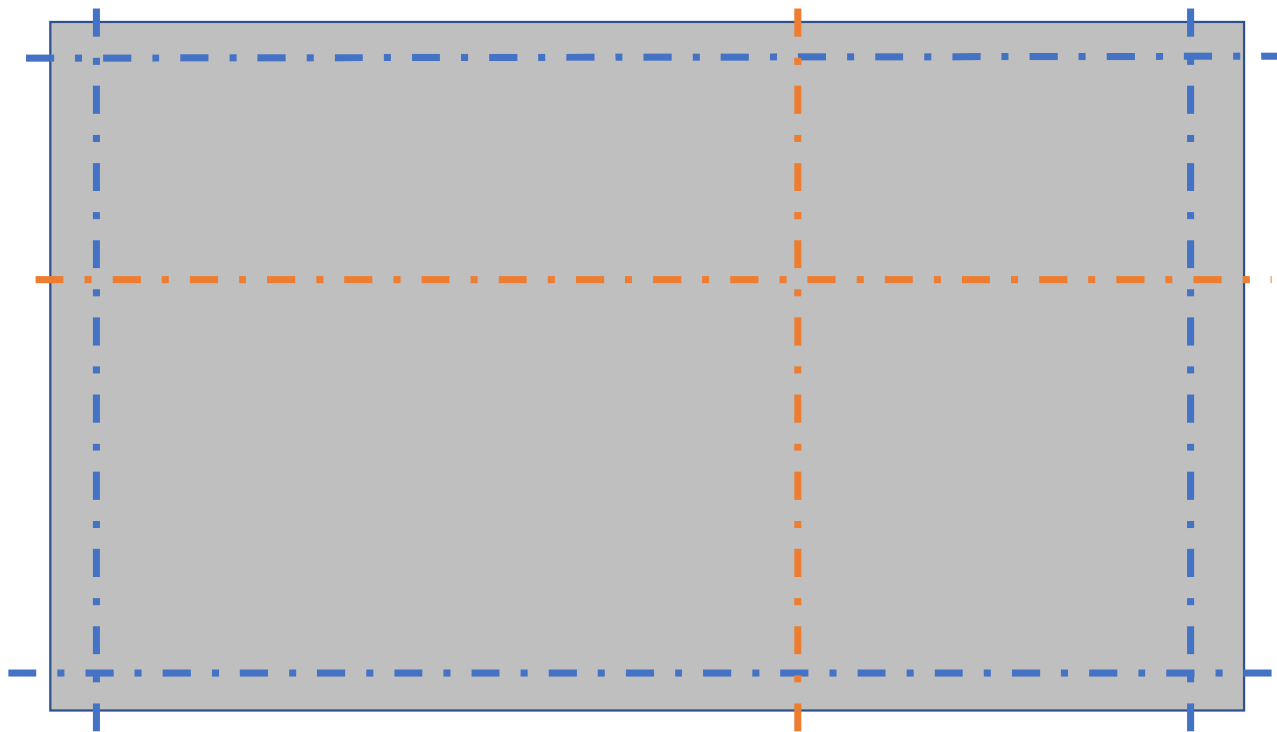
Note that the perimeter cut to release the tension can also be used as the final cut.



## WATERJET SHAPING

### 2 Cutting method.

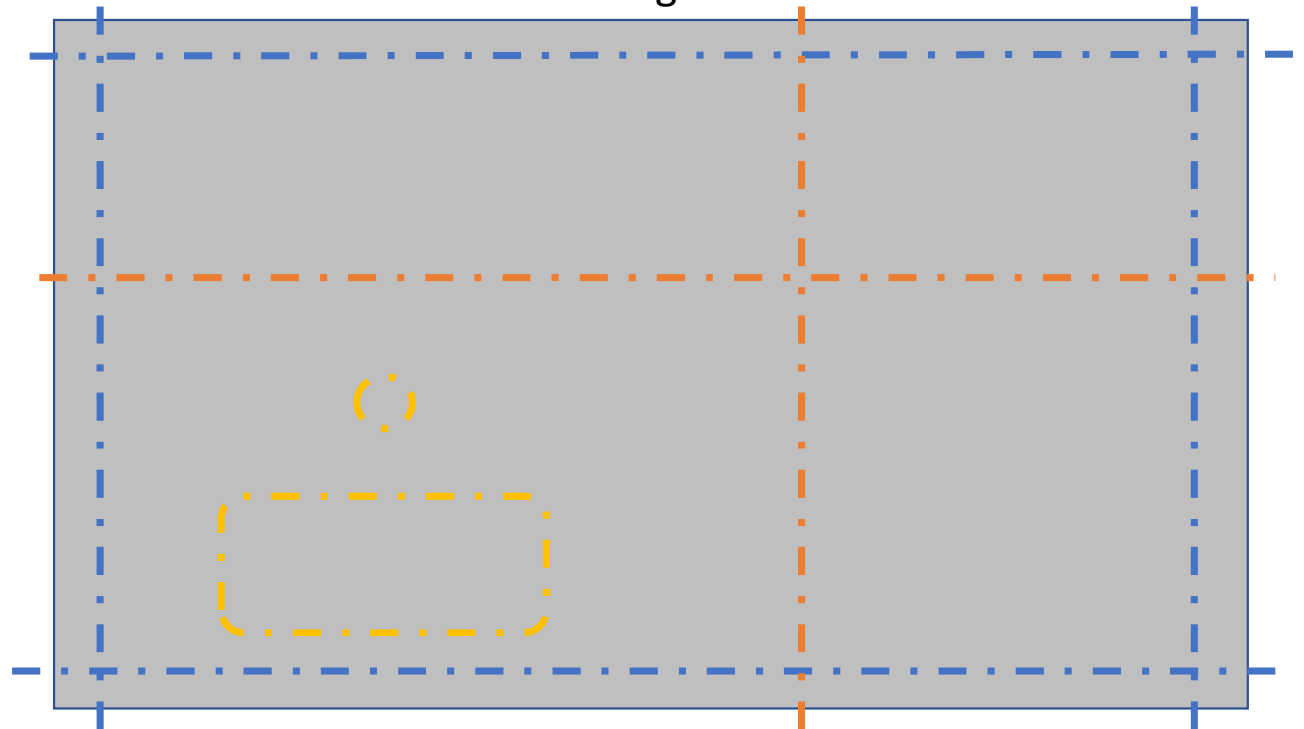
It is best to make continuous cuts, with the piercing starting cuts outside the finished area of the slab itself.



## WATERJET SHAPING

### 3 Making cutouts.

All internal corners must be radiused by at least 3 mm. Use a radius of more than 3 mm when the design of the kitchen allows you to do so: this makes the surface more rigid.



## WATERJET SHAPING

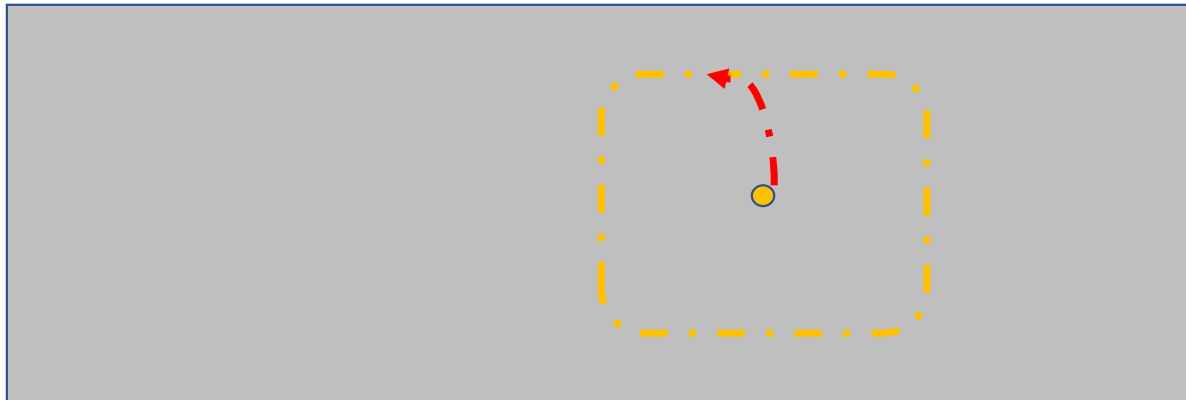
Use lower pressure when cutting holes.

To cut cutouts or holes, **first make the piercing cut inside the area** of the cutout and then cut out to its perimeter with a slight curve (see image). **First cut the edge of the cutout closest to the centre** of the slab.

Do not cut sharp corners - always radius corners by at least 3-5 mm.

The edge of the cutout must be at least 50 mm away from the edge of the finished slab.

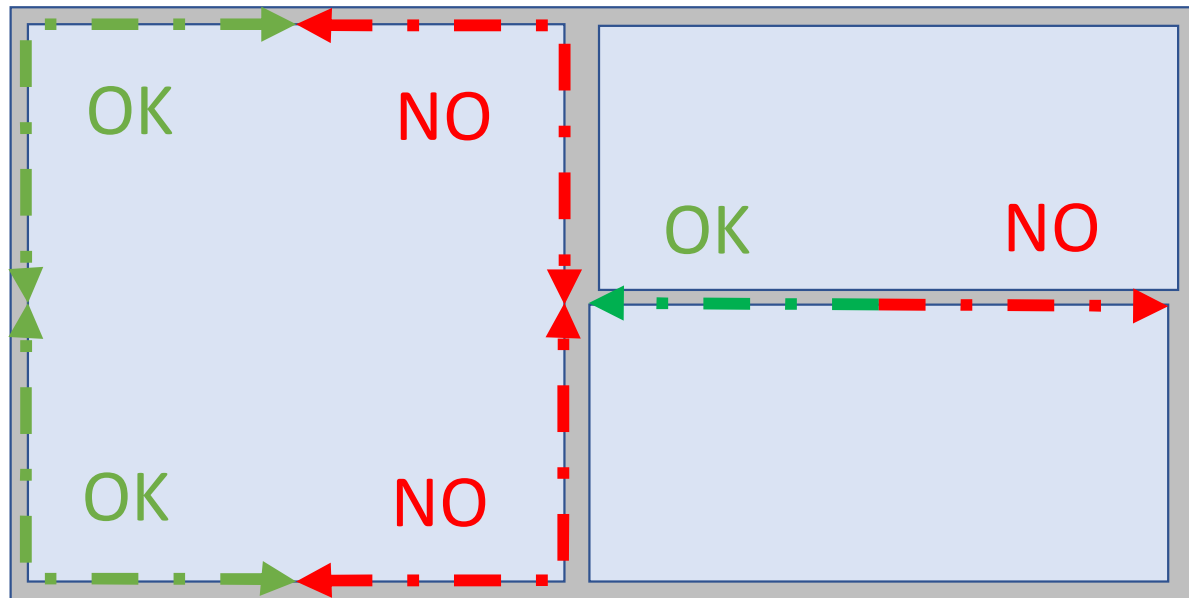
As far as possible, cut holes in the centre of the slab and straight line parts along the sides.



## WATERJET SHAPING

When making cutouts, start the cut inside the cutout area and then move out to its perimeter.

When cutting large cutouts or large pieces, use the following sequence of cuts:



From the initial hole, first cut towards the border of the slab, or parallel to its perimeter, and follow this direction to finish the piece. It is better not to make the first cut towards the centre of the slab.

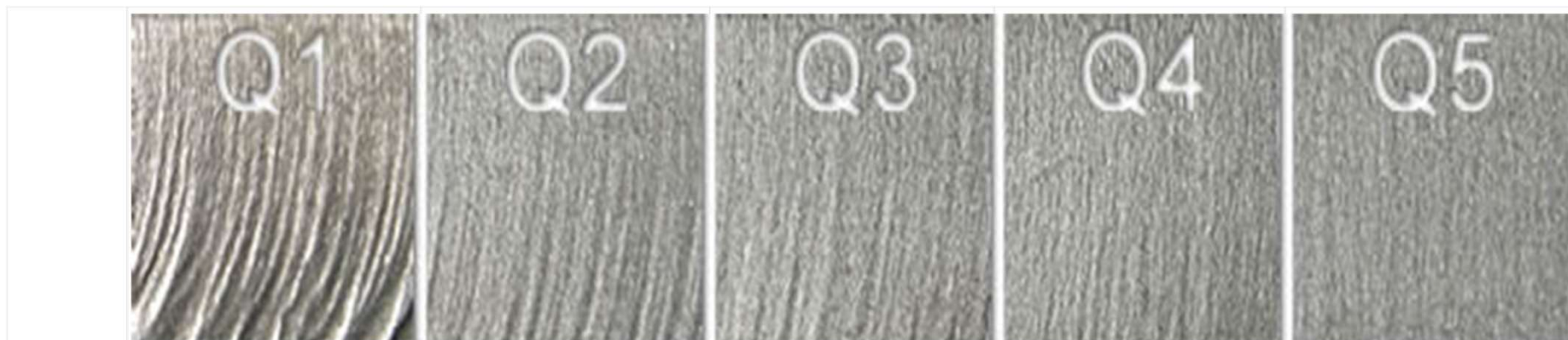


## WATERJET SHAPING

	Cut			Piercing cut	
Slab thickness (mm)	Cutting speed (mm/min)	Working pressure (bar)	Abrasive flow during cut (g/min)	Pressure (bar)	Abrasive flow (g/min)
3	1500 - 2700	3300 - 3500	300 - 350	800 - 1200	120 - 200
6, 3+3	1500 - 2700	3300 - 3500	300 - 350	800 - 1200	120 - 200
12	600 - 1300	3300 - 3500	300 - 350	800 - 1200	120 - 200
20	500 - 700	3300 - 3500	300 - 350	800 - 1200	120 - 200

The above values are suggestions; adjust the cutting speed and abrasive load as necessary to get the cleanest cut.

# WATERJET QUALITY EDGE



	Q1	Q2	Q3	Q4	Q5
<b>Material</b>	Q1	Q2	Q3	Q4	Q5
<b>thickness</b>	separation cut	through cut	clean cut	good edge finish	excellent edge finish
<b>mm</b>	mm/min	mm/min	mm/min	mm/min	mm/min
6,5	4000	3450	2170	1560	1200
12	2300	1700	1070	780	600
20	1150	950	600	430	330

Quantity of abrasive used for all tests: **350 gr/min**

Type of abrasive: **80-mesh garnet**



## WATER JET PROCESSING (6-8-12-20 mm)

### POSSIBLE CUTS FOR ALL THICKNESSES (6-8-12-20 mm)

- Cutouts (3 axis or tilted)
- Tap holes
- Cutout walls
- Horizontal and tilted recessed cuts
- No minimum piece size (external cuts).
- Minimum size for internal cuts: 2 mm x 2 mm



THANK YOU

LEVEL

ITALIAN PORCELAIN SLABS