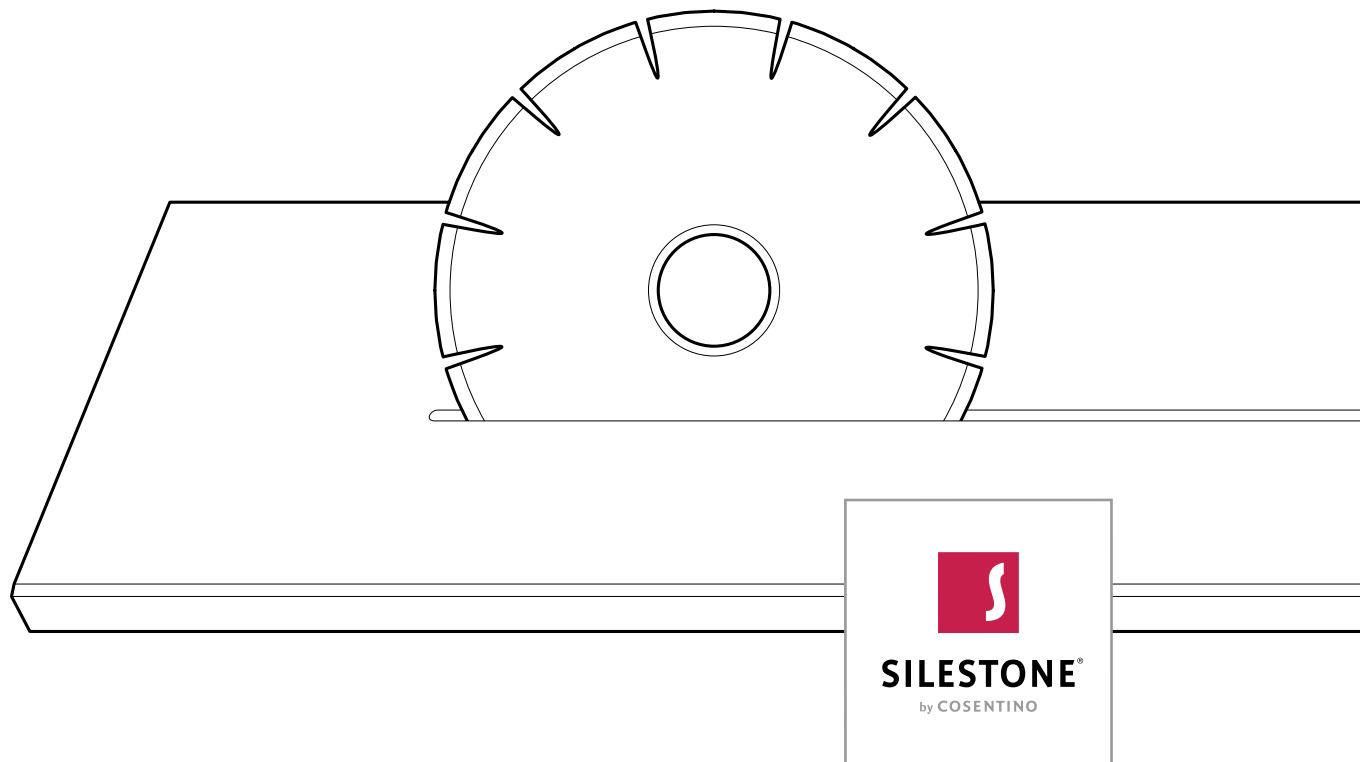


# Silestone® Manual for Professional Use

**INTENDED FOR:** MARBLE WORKERS,  
PROFESSIONAL FITTERS,  
AND ARCHITECTS



**SILESTONE®**  
by COSENTINO

On Top

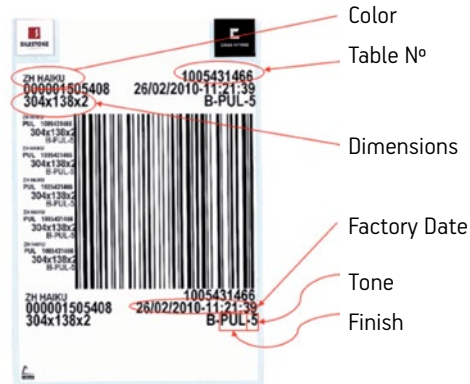
# Content

FABRICATION	3
CUTTING	3
PRECAUTIONS	4
EDGES	5
GENERAL SAFETY ADVICE	6
TECHNICAL DATA	6
ABRASIVES POSITIONING CHART	7
INSTALLATION	8
PROFESSIONAL CLEANING AND MAINTENANCE	10
TECHNICAL ADVICE REPORT	11

# Fabrication

Where more than one slab is required to make the kitchen worktop, check that the slabs match in colour and appearance by putting them together.

To do this, the information on the specifications label for each slab should be used. It is extremely important to keep the Reference Number for the slab, so as to be able to track its traceability in future, and to submit a claim in the event of receiving faulty material.



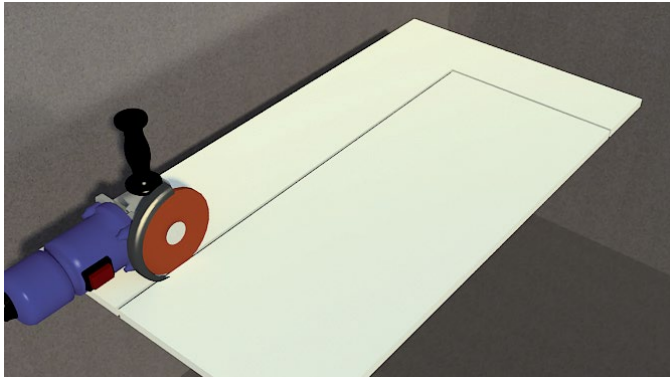
# Cutting

The cutting table should be solid and robust. It should also be perfectly flat and level. Check that the surface where the slab is going to rest on the cutting table is in good condition (i.e. that it is not covered in cuts in any one area, which might lead to the material moving about while being cut). The cutting disk must be in perfect condition (no missing parts, or worn disks, etc.).

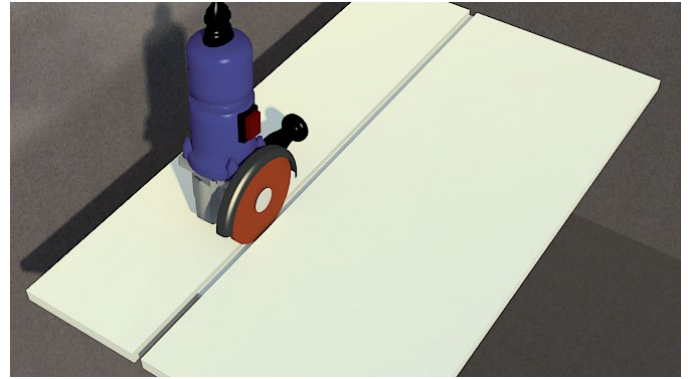
## Rate of advance:

For 2 cm slabs: between 3 and 3.5 m/min.  
For 3 cm slabs: between 2.5 and 3 m/min.

**Water flow:** Direct plenty of water to the leading edge of the disk as it cuts into the material.



To cut a Silestone® slab or one for ECO by Cosentino®, the first cut should be made along the length of the slab, and the second on the width, as shown in the diagram.



The cutting disk should be perfectly aligned with the cutting direction. Rotational speed: 2500 rpm for 20 cm radius disk; 3500 rpm for 15 cm radius disk.

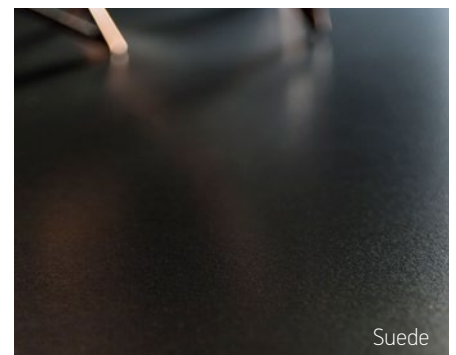
## Precautions

- Over the years the colour and shade of Silestone products may suffer from the effect of the sun's rays.
- Do not use water repellents or sealants to bring out the lustre.
- Once it has been installed, the sheen on Silestone® and ECO by Cosentino® is the natural lustre of the product itself.
- Sealants and water repellents provide an artificial, ephemeral shine.
- Do not use paint strippers, caustic soda or any products with a pH of more than 10.
- If bleach or solvent is used, it should be diluted with water and never left in permanent contact with the product.
- Bleach and solvent can continue to affect the product 12 hours later.
- Do not use chlorine-based products such as dichloramine (present in paint stripper).
- The surface of the material should not be re-polished, either on floors or on a worktop.
- Do not use degreasing agents such as those used in oven cleaners.
- Keep Silestone® and ECO by Cosentino® separate from sources of heat (deep-fat fryers, etc.).
- We always recommend placing hot objects on top of hot pads or tablemats.



Polished

**Do not sell  
products That are  
not originals and  
identified with the  
brand Silestone®**



Suede

# Edges

## Bullnose and half bullnose edges

The diamond generators should be in good condition without any deformities to achieve the right profile.

6-motor machine: Sandpaper grits 60, 120, 220, 400, 800, 1500.

8-motor machine: Sandpaper grits 120, 220, 220, 400, 600, 800, 1500, 3000.

Speed\*: Approximately 20-25 cm/min.

Pressure: Between 2 and 3 bar.

## Polishing edges with manual water polishing machine

The polished abrasives must be in good condition. The cutting table and the piece being worked on should be well secured to prevent any movement during polishing.

The polishing machine should turn at less than 4000 r.p.m.

The water flow must be high and properly directed towards the polishing area to keep the material cool and prevent it from burning.

Grind using a diamond disk.

Move the polishing machine gently over the material without pressing against it. When polishing, rather than remaining in the same position on the edge, the machine should be kept in constant motion.

Use diamond resin sandpapers. Use the following sequence of grits: 50, 100, 200, 400, 800, 1500, 3000..

## Polishing edges with an automatic edging machine. Straight edges

6-motor machine: Sandpaper grits 60, 120, 220, 400, 800, 1500.

8-motor machine: Sandpaper grits 60, 120, 220, 400, 600, 800, 1500, 3000.

Speed\*: Approximately 50-60 cm/min.

Pressure: Between 2 and 3 bar.

\*for dark colours, the speed should be 40-50.

## Polishing Suedelook edges

Use abrasives for SUEDE finishes. These can be obtained from any store or dealer authorised by Cosentino.

## Polishing by hand

The polishing should be done with water. Ensure that the manual polishing machine has a continuous supply of water so that the product is kept cool.

The sequence of grit size that should be used is as follows: 36, 36, 46, 46, 60, 120, 220, 400, 600.

For 36, 46, 60, 120 disks the rpm must be between 1500-2000.

For 220, 400, 600 disks the rpm must be between 2500-3000.

**IMPORTANT: Do not apply pressure as it breaks the teeth and is dangerous.**

## Polishing with an automatic edging machine

The pressure of the heads on the edge should be as low as possible to prevent the teeth on the special abrasives from breaking.

For such purpose, a back pressure should also be used to all but cancel out the pressure of the heads, as shown in the chart.

The trays with the concentric coupling screw are used for straight edges, whether it is polished or leather finish.

The trays with and off-centre screw are used for special edges.

**IMPORTANT: Do not apply pressure as it breaks the teeth and is dangerous.**

# General Safety Advice

Always pay attention to the safety and prevention measures set out in the "Guide to Good Practice for working with Silestone® and ECO by Cosentino® products" manufactured by Cosentino®.

Use cutting machines and tools with a "wet method" (using water). Dust emissions can be reduced and controlled using wet working methods that avoid sending particles into the atmosphere.

Wash your hands and face carefully after handling the product.

Do not eat, drink or smoke while using it.

Cosentino® does not accept responsibility for any damage caused as a result of failing to observe the instructions in this manual, or the precautions it contains.

All claims must be accompanied by the serial number of the slab(s) used to make the worktop.

The serial number is printed on the label that is stuck to the slab.

# Technical Data

It has been observed that the finish is better if eccentric cutter heads are used.

The first 4 cutter heads will have a rotational speed of 1500 r.p.m.

The last 4 cutter heads will have a rotational speed of 1500 r.p.m.

Pressures for all cutter heads should be the same: 1.2 bar of pressure and 1 bar of back pressure.

NB: It should be borne in mind that these values have been obtained using a COMANDULLI machine. In other machines, attention should be paid to their machining and functional features; however, the operating principle should always be borne in mind (namely, that the brushes are not flattened against the edge being worked on).

For this reason, we need to regulate the machine to achieve optimum pressure, bearing in mind the pressures required by our particular machine, or where it is positioned.

# Abrasives Positioning Chart

## Straight Edge

PRESSURE	GRAIN	SPEED	PRESSURE	COUNTERPRESSURE
1 <sup>st</sup> position	36	70 cm/min	1,2 Bar	1 Bar
2 <sup>nd</sup> position	46	70 cm/min	1,2 Bar	1 Bar
3 <sup>rd</sup> position	60	70 cm/min	1,2 Bar	1 Bar
4 <sup>th</sup> position	120	70 cm/min	1,2 Bar	1 Bar
5 <sup>th</sup> position	220	70 cm/min	1,2 Bar	1 Bar
6 <sup>th</sup> position	380	70 cm/min	1,2 Bar	1 Bar

## Special Edge

PRESSURE	GRAIN	SPEED	PRESSURE	COUNTERPRESSURE
1 <sup>st</sup> position	Common Abrasive 220	30 cm/min	1,2 Bar	1 Bar
2 <sup>nd</sup> position	Common Abrasive 220	30 cm/min	1,2 Bar	1 Bar
3 <sup>rd</sup> position	60	30 cm/min	1,2 Bar	1 Bar
4 <sup>th</sup> position	120	30 cm/min	1,2 Bar	1 Bar
5 <sup>th</sup> position	220	30 cm/min	1,2 Bar	1 Bar
6 <sup>th</sup> position	380	30 cm/min	1,2 Bar	1 Bar

# Installation

## Step 1

The gap between the worktop and the hob should be as large as possible. Do not let the elements for fixing the hob in place press against the worktop (inasmuch as this is possible).

## Step 2

The radius of the holes at the corners should never be less than 4 mm. This can be achieved by using an 8mm drill. Where possible, the radius should be larger than 4 mm. For unit or column cut outs, a radius should likewise be left at the corners.

## Step 3

Do not cross cuts at the holes or the Units or columns, these should be rounded off.

## Step 4

Ensure that the base units supporting the Worktop are level by adjusting the legs on the units. Special attention should be paid to worktops with reinforced joints (2+2 or mitre), which should be fitted with reinforcements at the places indicated in the drawing, so that the worktop rests on the walls of the kitchen units properly. The corner should be levelled off and properly supported. Check that the front of the kitchen unit in the area around the sink is solid enough and there is no possibility of bowing.

## Step 5

Stick heat sink tape in all areas in direct contact with heat. Remove the adhesive Tape and stick the insulating tape on the edge of the worktop cut out in the area around the hob. Check that the seal runs all the way round the hob. This should not be removed at any time.

## Step 6

Place the insulating tape in position and use silicone to stick it to the underside of the worktop, just above the dishwasher and washing machine.

## Step 7

Use "Juntax" pigments, solumastic and Colorsil silicones, to achieve smooth, even joints in the worktop. Contact your distributor to obtain a supply.

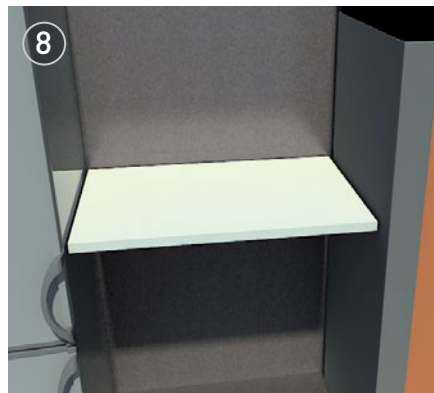
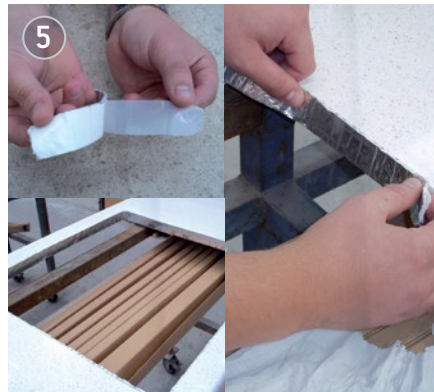
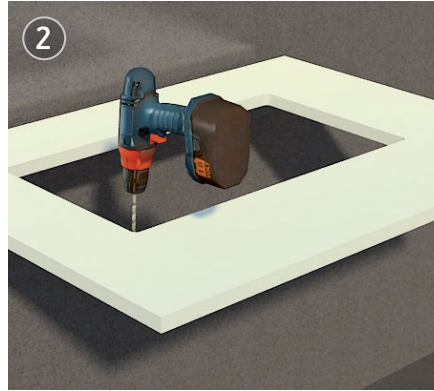
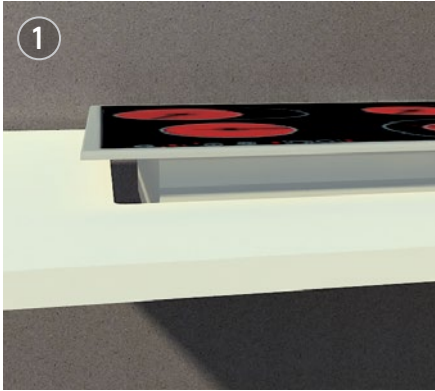
## Step 8

Silestone® y ECO by Cosentino® cannot be fitted between walls, furniture, etc. Allow for a 3mm expansion gap on either side. Use COLORSIL.

## Step 9

Supply your customer with a Cleanpack (Care kit) to ensure correct use of the worktop.





# Professional Cleaning & Maintenance

## Prevention

For the correct manufacturing and fitting of Silestone®, it is important to take increased precautions, in order to speed up working times and avoid unnecessary cleaning and stains. Below, we have included two good practice procedures to be followed during fitting:

Masking tape to avoid spreading the glue over the surface of the material



Use of a spatula to correctly remove the excess from the silicone rows



## Cleaning of Silicone and Glue

During manufacturing at the workshop (mitre joint, laminated edges, general cleaning of the piece) and the fitting of the countertop (connections, joints, borders, etc.) where glue, adhesives and silicones are used, we recommend cleaning straight after application (maximum 30 minutes after gluing). For this purpose, use clean cotton cloths or failing this, paper towels.

Use Clean Colorsil (a supplementary product by Cosentino) for cleaning silicone and adhesives; failing this, you can use Isopropyl Alcohol (Isopropanol) or ethanol.

## Products that are not advisable

Products such as solvent or acetone should not be used to clean countertops or boards.

Scrubbers should not be used. It is advisable to use a microfibre cloth or damp paper towel.



# Technical Advice Report

The recommendations and proposals in this document should only be used as guidelines for the implementation of the organisational, technical measures and individual habits. Under no circumstances should the specified legal obligations in terms of the health and safety be substituted for national legislation

including risk assessments, planning corrective actions, specific technical advice reports, training and information, preventative medicine etc, which correspond to the health and safety departments of the companies or their external consultants in this area.

A product designed by **COSENTINO**\*



\* To check terms and conditions please go to [www.silestone.com](http://www.silestone.com)

**COSENTINO HEADQUARTERS**

Ctra. Baza a Huércal-Overa, km 59. 04850 Cantoria, Almería (Spain)

+34 950 444 175 [info@cosentino.com](mailto:info@cosentino.com) [www.cosentino.com](http://www.cosentino.com)

[www.silestone.com](http://www.silestone.com) [SilestonebyCosentino](https://www.facebook.com/SilestonebyCosentino) [@Silestone\\_ESP](https://twitter.com/Silestone_ESP)