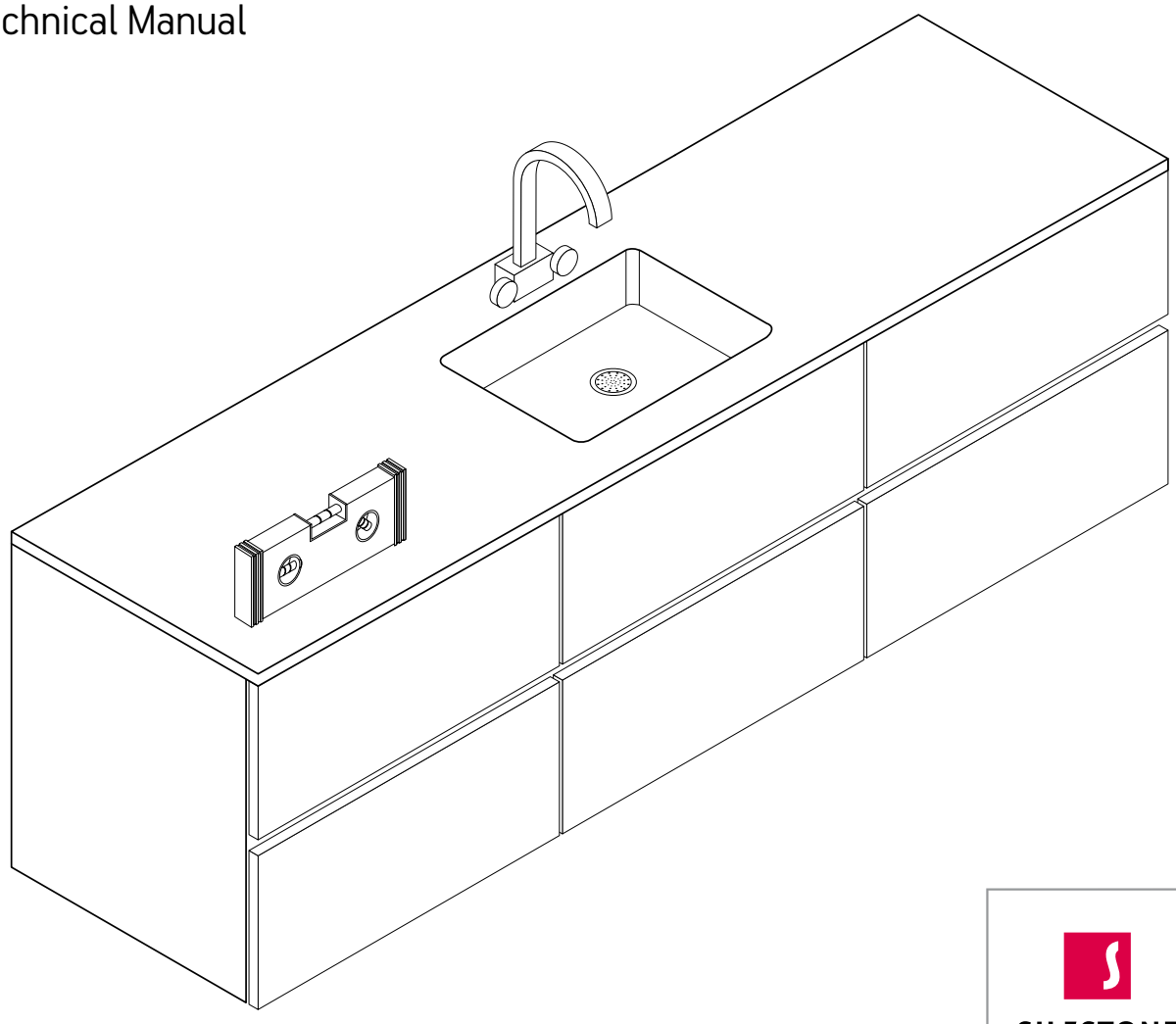
Silestone® worktops design and installation

Technical Manual



SILESTONE® by COSENTINO

On Top

The purpose of this manual is to provide general guidelines for the design of a Silestone® worktop.

It is advisable to review all other information on Silestone®, such as Technical Manuals or Safety Sections, before starting any work. You can consult these product documents at the website www.silestone.com, or by contacting Cosentino, S.A.

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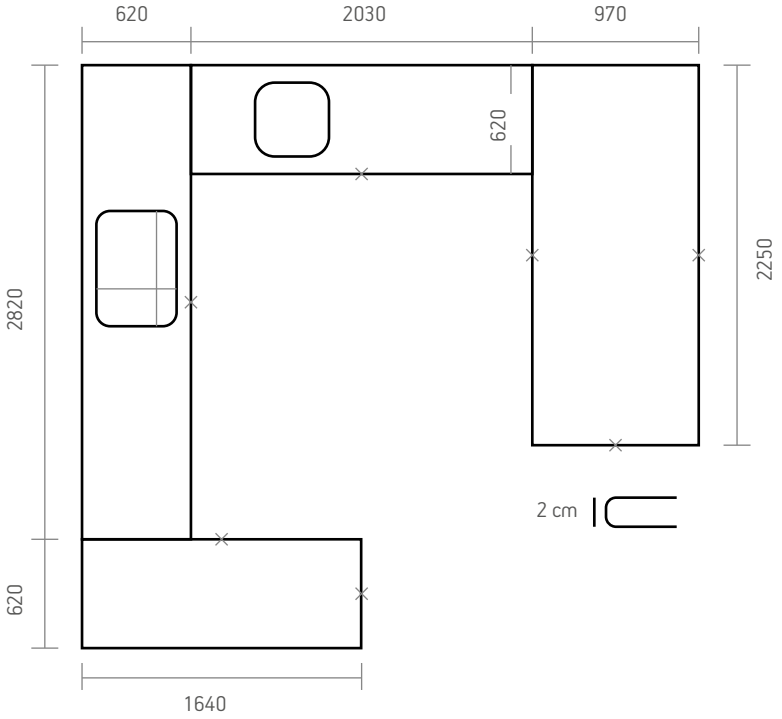
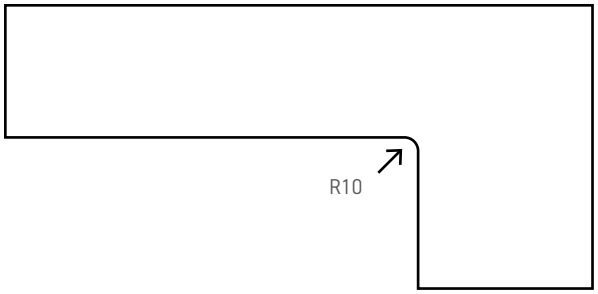
Design principles



Minimum radios

It is mandatory that any internal corner must be rounded.

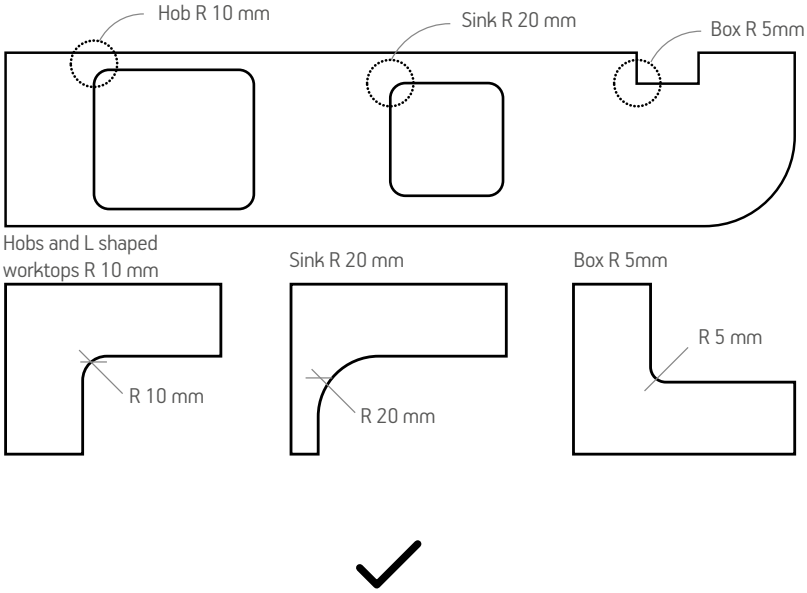
Inside Corners on L-Shapes must have a minimum 10mm radius.



Cutouts

A minimum of 4mm radius is mandatory for inside corners except for L Shapes, where 10mm is required

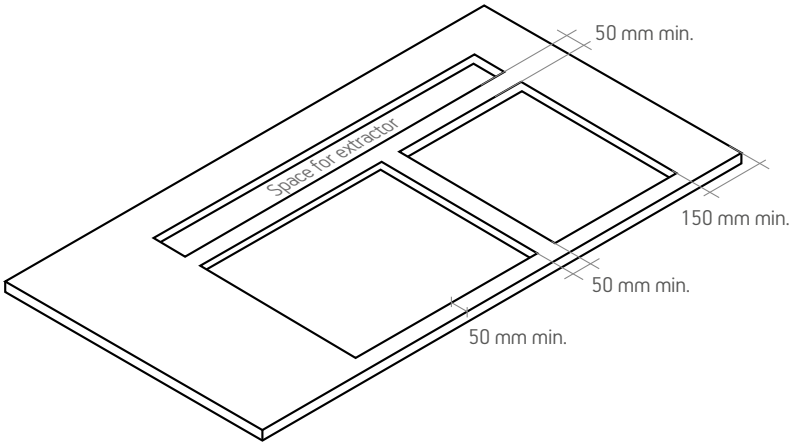
Below are recommended examples of cut-outs for fittings such as sinks, hobs, columns, etc.



Minimum distances

The following distances must be respected:

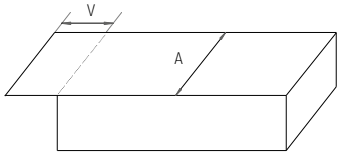
- The distance between the fitting and the outer edge of the slab must be at least 5 cm.
- The distance between the fitting and the seams/joins of the slab must be at least 15 cm.



Overhangs

OVERHANG IN WORKTOPS WITHOUT CUTOUT	12mm		20mm		30mm	
	FAMILIES A, D	FAMILIES B, C	FAMILIES A, D	FAMILIES B, C	FAMILIES A, D	FAMILIES B, C
Overhang whole side (1) (2)	V ≤ 5 cm	V ≤ 10 cm	V ≤ 20 cm	V ≤ 30 cm	V ≤ 50 cm	V ≤ 70 cm
Overhang partial side (3)	N/A	N/A	V_L ≤ 40 cm; V_C ≤ 15 cm	V_L ≤ 70 cm; V_C ≤ 25 cm	V_L ≤ 100 cm; V_C ≤ 30 cm	V_L ≤ 140 cm; V_C ≤ 40 cm

(1)



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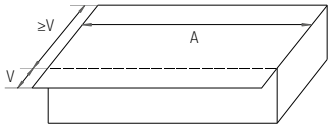

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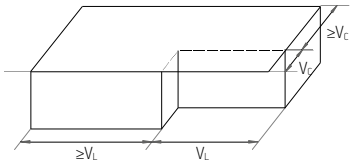


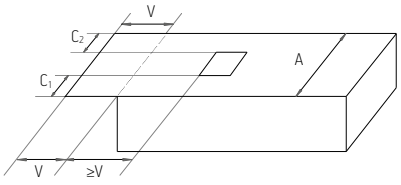
*A ≥ 60cm; V = Overhang; V_L= Long overhang, V_C= Short overhang

Maximum punctual static charge = 100Kg

OVERHANG WITH CUTOUT	12mm		20mm		30mm	
	FAMILIES A, D	FAMILIES B, C	FAMILIES A, D	FAMILIES B, C	FAMILIES A, D	FAMILIES B, C
Overhang whole side (4) (5)	V ≤ 5 cm	V ≤ 10 cm	V ≤ 20 cm	V ≤ 30 cm	V ≤ 50 cm	V ≤ 70 cm
Overhang partial side (6)	N/A	N/A	V_L ≤ 40 cm; V_C ≤ 15 cm	V_L ≤ 70 cm; V_C ≤ 25 cm	V_L ≤ 100 cm; V_C ≤ 30 cm	V_L ≤ 140 cm; V_C ≤ 40 cm

The previous table is just applied to worktop with one cutout. For further information, you have to get in contact with Cosentino.

(4)



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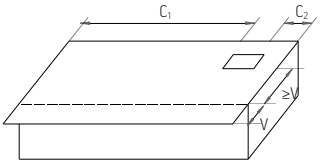

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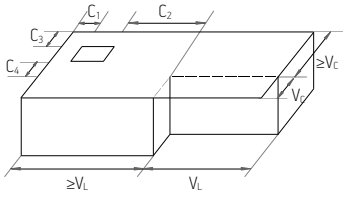


*A ≥ 60cm; V = Overhang; V_L= Long overhang, V_C= Short overhang

Maximum punctual static charge = 100Kg

Conditions: (4) (5) C_1, C_2 ≥ 10 cm; $C_1 + C_2$ ≥ 35 cm;

(6) C_1, C_2, C_3, C_4 ≥ 10 cm; $C_1 + C_2$ ≥ 35 cm; $C_3 + C_4$ ≥ 35 cm

Worktop edges

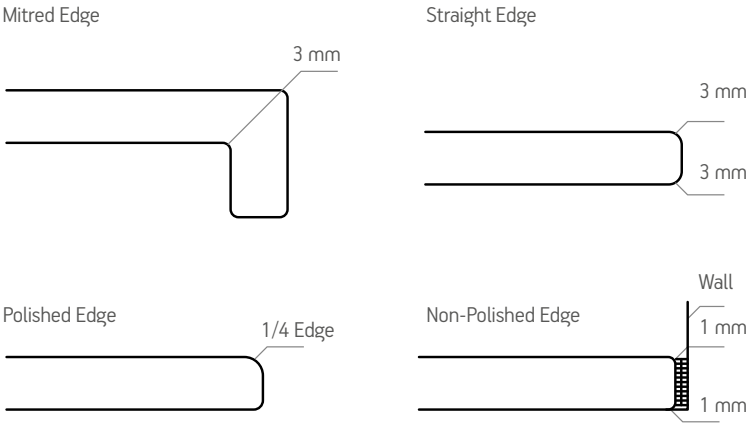
Silestone gives the possibility to achieve many different edges with the same texture and co- lor in the whole body.

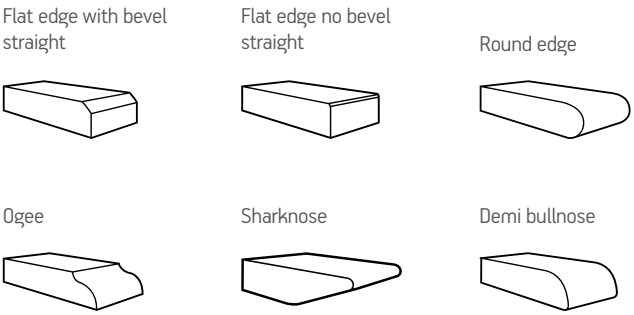
Precautions: We recommend bevelling the ou- ter edges of worktops to improve their resis- tance to impact and to avoid possible cuts from sharp edges.

The greater the bevel, the greater its resistance to impact. The minimum bevel is of 1 mm when it is hidden or not exposed (for example, against a wall), and 3 mm when exposed.

However, it is common to cut bevels greater than those mentioned above despite being te- chnically complex.

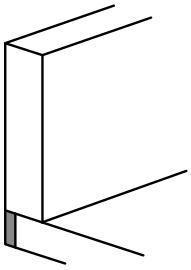
Note: Chiseled or hammered edges are not approved





Joints, seams and backsplashes

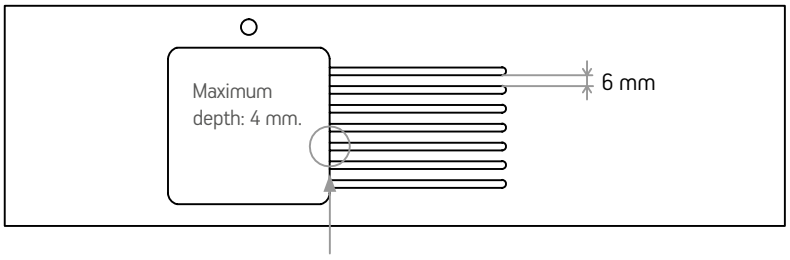
Due to the irregularities of the wall and possible structural movements of the building, we recommended leaving a perimeter expansion joint of 3mm on the worktop. These visible spaces should be filled with silicone. The seam between the backsplash and worktop should be sealed with a thread of silicone.



3 mm separation silicone filing

Drainer grooves

- Maximum depth of 4mm in all thick- nes- ses (12,20,30)
- Minimum distance of 6mm between each groove.



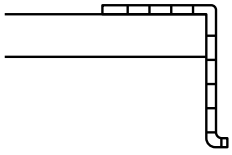
Two reinforcements are needed in this part because of the thickness has been reduced.

Flushed sinks and hobs

Hobs and sinks that are fitted flush with the worktop are increasingly popular. Three kinds of sinks can be installed:

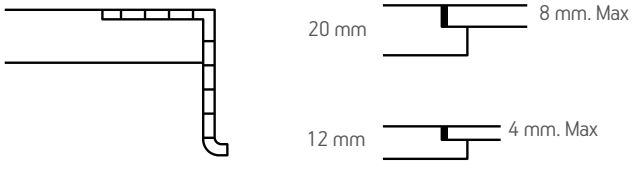
A. Top mount sink

The edge is completely protected by the sink.



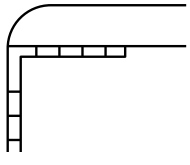
B. Sink flush to worktop

Waterproofing is ensured by a 1mm cord of silicone around the perimeter.



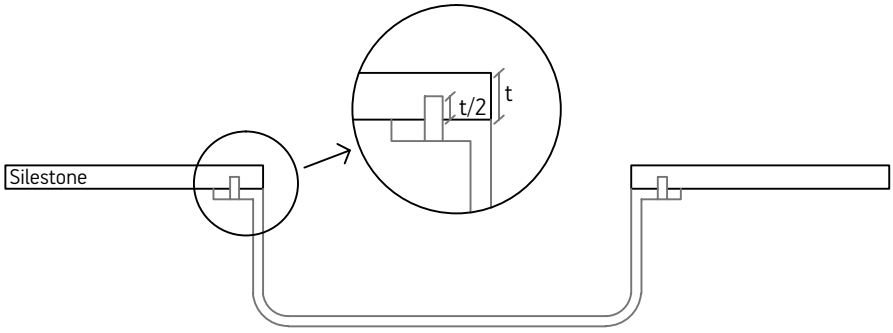
C. Under-Mount sink

In this case, the edge more exposed to knocks. We recommend making rounded edges.

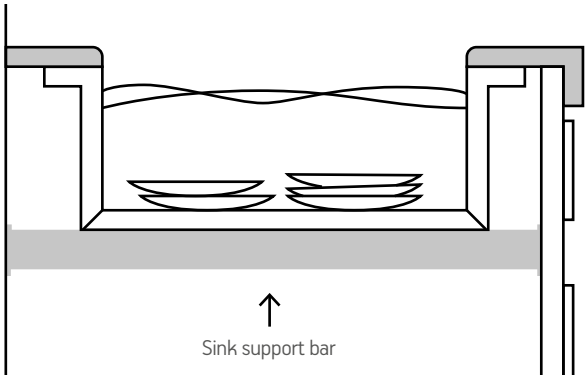


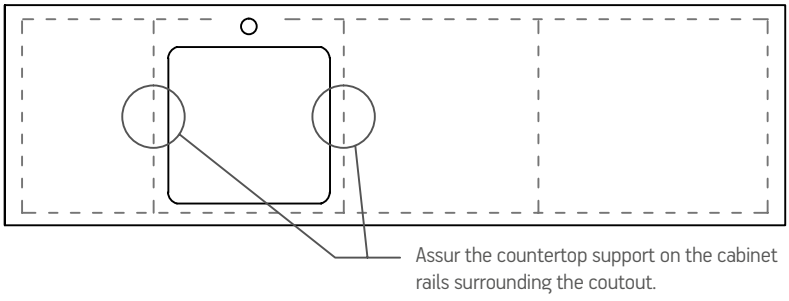
Drills and Slits

All incisions, slits or drills must pass through the material a maximum of half of the thickness.



Furthermore, for large sinks, we recommend placing support bars under the sink, so that its weight is borne by the bars and not (by) the worktop.



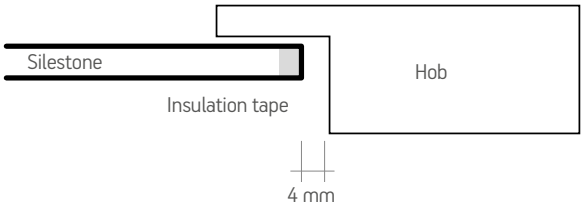


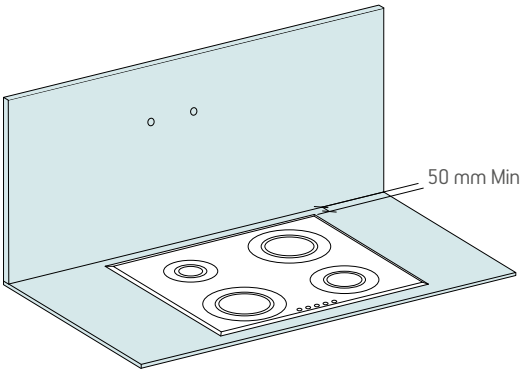
Hobs

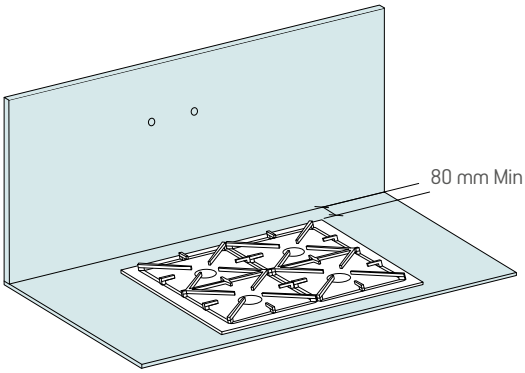
The design principles for flushed hobs are the same as those for sinks.

We recommend leaving a minimal distance of 50mm between the hob and the Silestone® cladding for electric and induction stoves, and 80 mm from the edge of the gas burner.

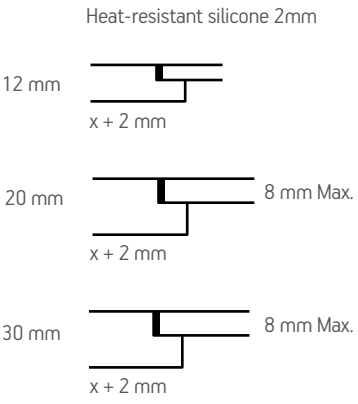
- Always allow an extra 4mm between the appliance and the edge of the cutout for expansion..



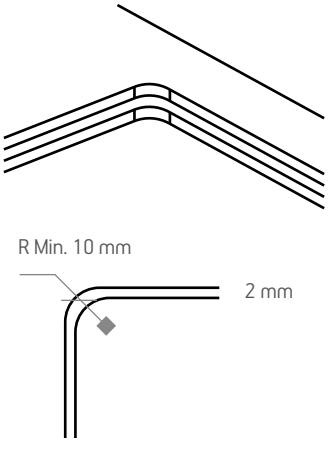




Silestone® advises only fitting flush hobs with worktops, respecting the following distances:



X = measurement recommended by the hob manufacturer



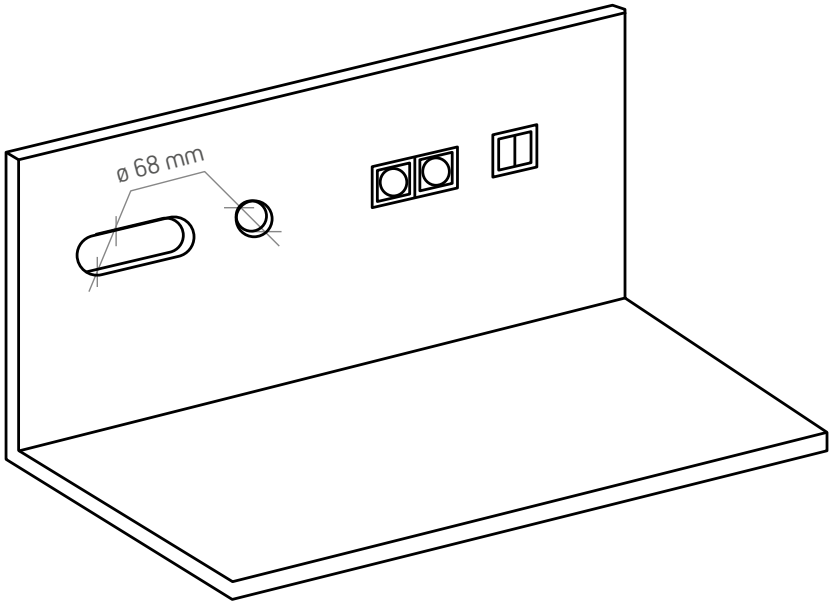
Accessories and cladding

Cladding for indoor walls can be done using high adhesion adhesives or silico- ne, such as polyurethane or epoxy pro- ducts.

The holes made for attaching accessories (sockets,switches, etc.) must be made using circular drill bits.

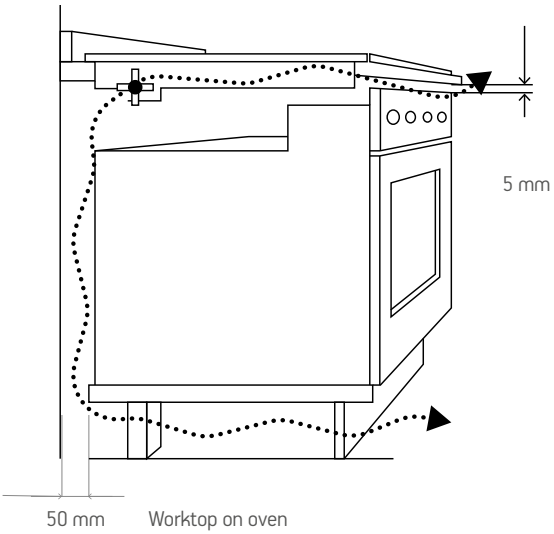
Drill contiguous holes for larger openings. Drilling must be done with approved tools.

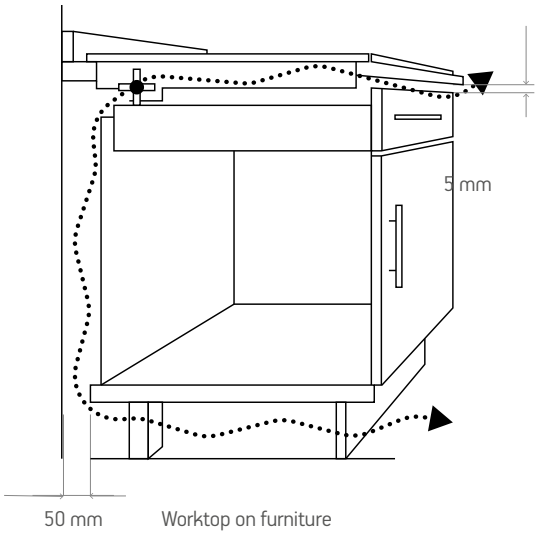
If the hole to be drilled is near a corner, leave a distance of at least 5 cm between the corner and the hole.



Appliances: oven, induction hobs, dishwashers...

Leave a gap between the top and cabinet to allow proper ventilation.





*insulation tape must be installed around the hob cutout

A cushioned insulation is needed to prevent heat transmission by conduction and convec- tion. Optionally, an insulation with a metallic finish can be included to avoid the heat trans- mitted by radiation, but always with a cushio- ned layer.

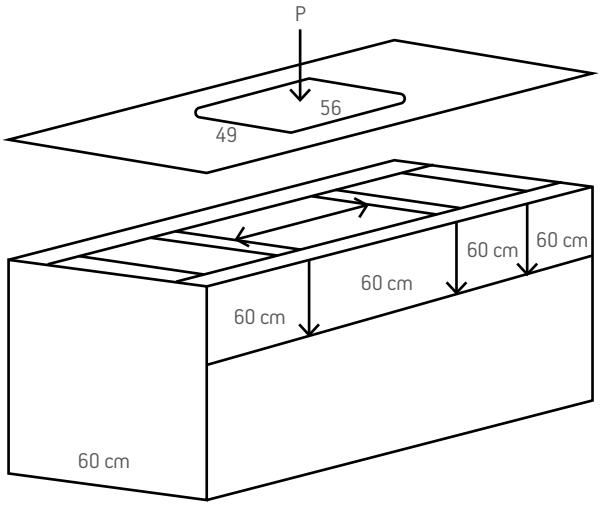
Worktop installation

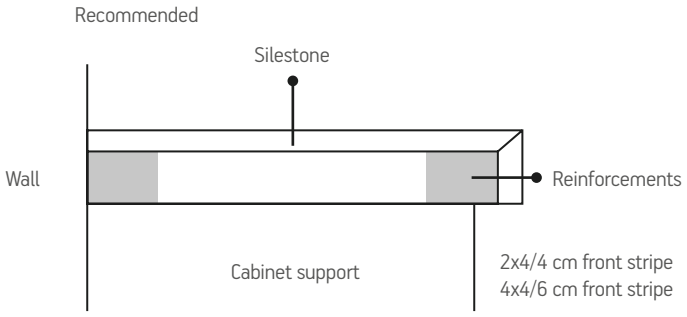
Before starting installation, it is impor- tant to remember that the Silestone® worktop requires Leveled and proper support,must be clean and cleared of all objects. For recommendations on tool manufactures, putties and comple- mentary products, contact your nearest Cosentino® Centre representative for in- formation and advice in order to ensure optimum installation.

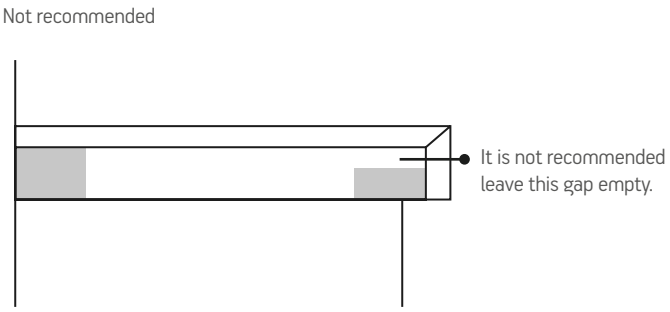
Measurements

Reinforcements on a kitchen worktop are essential to ensure proper installa- tion. These reinforcements must always be used.

- Silestone might be supported on the whole perimeter frame.
- Support rails within the cabinet should be provided every 600mm.
- Supports to surround cutouts..
- Support must be provided under all countertop joints.







Worktops with straight edges

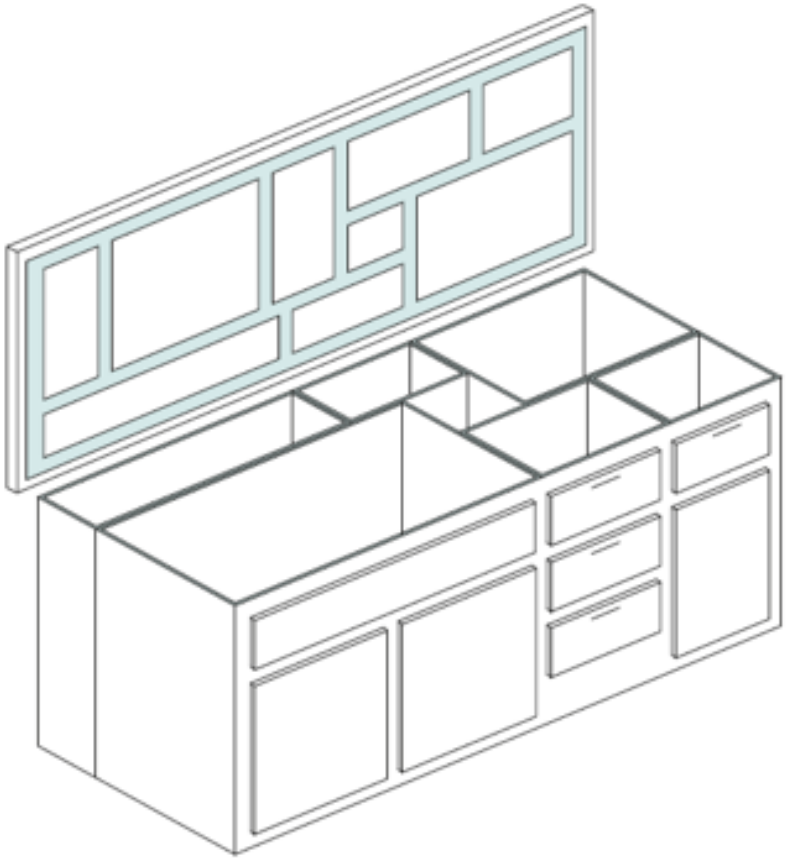
For worktops with designs that have a straight edge where the interior structure of the work- top cannot be hidden, we recommend a total, level support for the entire structure. To achie- ve it, we recommend installing a continuous board of MDF (or similar material) integrated into the kitchen furniture.

Worktops with mitred edges

In the case of worktops with mitred edges, in- terior hidden structures such as edgings, strips, etc., can be installed that ensure the correct level of the worktop with the kitchen cabinet, as well as increased strength for the worktop, these edgings must be must be placed all around the edge of the final shape of the wor- ktop so that they rest directly on the vertical supports of the kitchen cabinets.

Furthermore, it is important to place these perimeter edgings around the fittings to make them stronger and strengthen the area

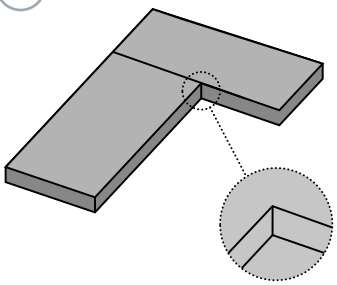
It is also necessary to strengthen the areas that have cut-outs to give the worktop more stability.



L-Shaped wortops

COSENTINO recommends the fabrication of L-Shape worktops adding a joint on the angle.

A



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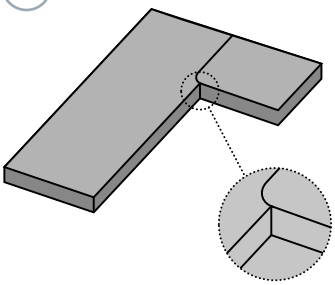

Adhesion

For the joints, follow the steps below:

1) Clean the area, removing all dirt and dust. Before adhesion, It is advisable to place masking tape on both sides of the join to keep your work clean.

2) Fill in all spaces using silicone or coloured Solumastic. Approved polyester resin in the correct colour may also be used.

3) Apply silicone remover and rub down the silicone to remove any excess. Excess silicone can be removed using CleanCo- lorsil.

Cosentino offers a range of complementary products for stonemasons that allow to have a product perfectly finished and installed in any color with resins and silicones that adjust to the offered tones.

For more info visit the web
http://pro.coentino.com/en/

Cleaning and maintenance

Prevention measures

To ensure proper processing and installation of Silestone®, it is important to take precautions, speed up work times and avoid unnecessary cleaning and staining.

Below are two best practice procedures during installation:

- Adhesive tape to prevent glue from spreading on the material surface.

- Use of spatula to properly remove the excess of silicone.

Silicone and glue cleaning

During fabrication (miter cutting, polishing, general cleaning of parts) and countertop installation (joints, cladding, etc.) where glues, adhesives and silicones are used, we recommend cleaning up afterwards, at the latest 30 minutes after gluing. To do this, use cotton or paper.

Use Clean Colorsil (Cosentino professional complement) as a silicone and adhesive cleaner; or, isopropyl alcohol (Isopropanol) or ethanol can be used instead.

Not recommended products

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

Scouring pads should not be used. It is recommended to use a microfiber cloth or wet paper.

Liability waiver

This manual has been created to offer informative guidelines for the design and installation of Silestonen® products.

The information provided is merely infor- mative and the customer must check it over thoroughly.

For any queries or further information consult the website www.silestone.com or contact Cosentino, S.A.

COSENTINO®

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