

DEKTON®

COUNTERTOP DESIGN AND INSTALLATION

FAMILIES I - II - III - IV

DEKTON® | DEKTON® XGLOSS | DEKTON® GRIP+ DEKTON® GRIP+



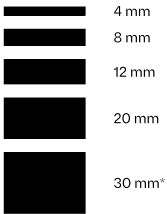
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Design criteria

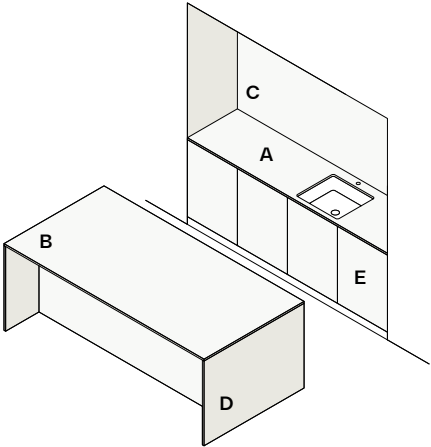
Available thicknesses

Dekton® is a very versatile material. One of the reasons is that it has a wide range of thicknesses that help cover all the needs that may arise during the design of a kitchen.



→ (*) All values applied to the 20 mm thickness in this manual will be valid for the 30 mm thickness.

In the attached diagram, we can see the different applications of the material in a kitchen:



A. Worktop.
B. Island.
C. Frontal/Copete.
D. Lateral cascade.
E. Furniture lining.

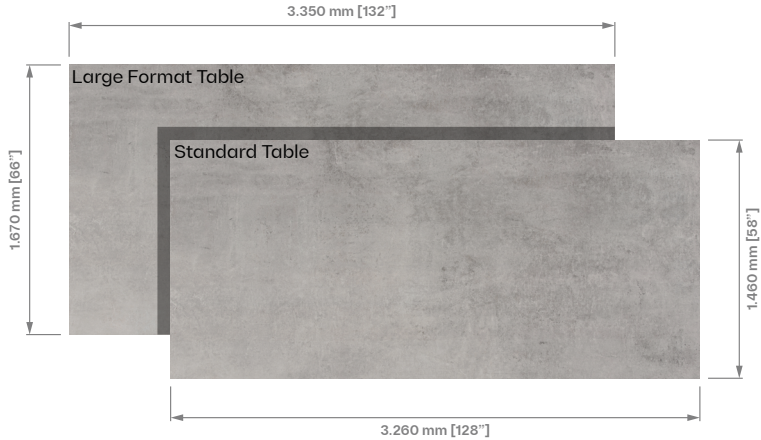
Recommended thicknesses depending on the application

	4 mm	8 mm	12 mm	20 mm
Countertop	●	● ⁽¹⁾	●	●
Island	●	● ⁽¹⁾	●	●
Front/Copete ⁽²⁾	●	●	●	●
Lateral cascade	● ⁽³⁾	● ⁽³⁾	●	●
Furniture lining ⁽⁴⁾	●	●	●	●

- (●) Recommended; (●) Accepted; (●) Not recommended.
- (1) See the specific documentation for 8 mm thick worktops.
- (2) Coping is considered for a height of up to 200 mm [8"]. Thereafter, it is considered as frontal.
- (3) Only for fully glued (lined) side cascades. See section "Lateral cascades".
- (4) Refer to the Furniture Design and Installation Manual for more details on this application.

Table formats

Depending on color and thickness, Dekton® is available in 2 different board formats. Therefore, it is necessary to consult* the starting dimensions when designing on our material.



→ (*) Consult current portfolios or the nearest Cosentino® contact person.

Tips for correct measurement

→ Fully installed furniture

Before making a detailed measurement, check that all furniture is installed in its final position and correctly leveled.

→ Measuring tools

→ Order templates

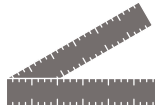
Standardized templates reflecting data such as: customer, color, type of edge, particularities, bar code...



→ Flexometer.



→ Laser meter.



→ Angle meter.



→ Bubble level.

Random pattern

Some of the Dekton® products are created and designed in the image and likeness of natural stone. In nature, we can find stones of heterogeneous image that may include veins and areas of different tone and contrast. This is also true for our materials, so it is very important to pay attention to the design and to carry out a layout of the parts prior to the production of the material.

→ Color identification

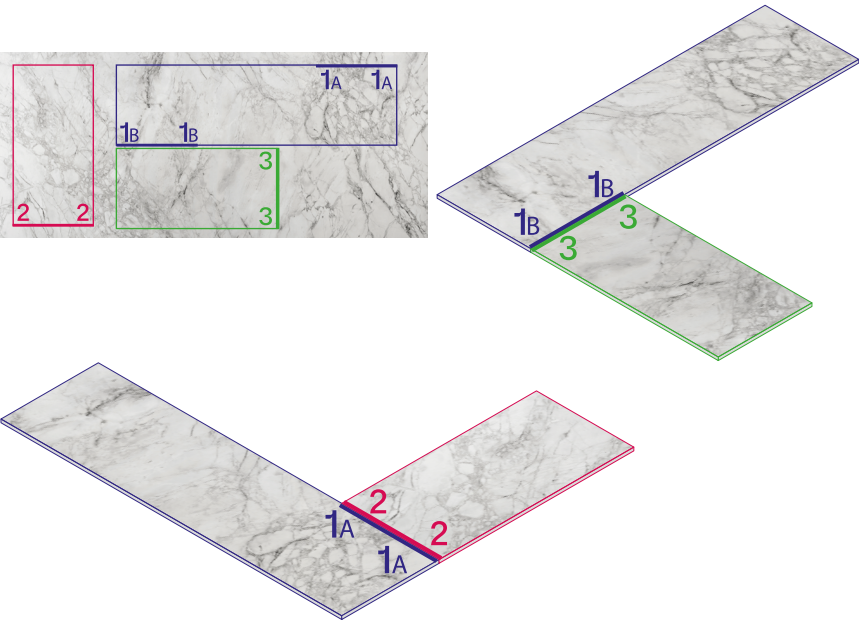
First of all, and with the help of all the information published by Cosentino®, we will identify the Dekton® colors in which we find heterogeneity in the background of the designs.

→ Stakeout of parts

Before cutting the different pieces that will make up the countertop, place the board on the cutting table, clean it and make a layout of these pieces where the tone and/or the arrangement of the veins will be identified.

In this way, areas with similar characteristics can be matched in the joint between pieces, either by tone or by the effect of the veins, and thus avoid differences between pieces of the same board or production.

We see, below, two examples of Dekton® colored staking out with a random pattern:



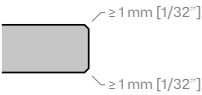
→ Stakeout examples | Dekton® Bergen kC.

Recommended songs

Unexposed edges
They are those that go against the vertical walls, in the joints of the countertop...

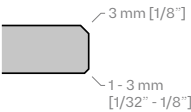
It is not necessary to polish the edge. It is enough to "kill" the edges, **both upper and lower**.

→ Straight unpolished

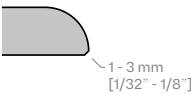


Exposed edges
Use one of the following types on countertops/bevels to improve the performance of the exposed edges against impacts and to avoid possible cuts:

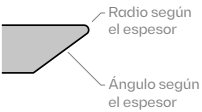
→ Polished straight



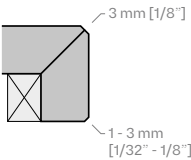
→ 1/2 round



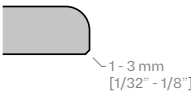
→ Flute spout



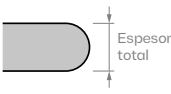
→ Mitre with skirting



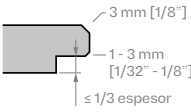
→ 1/4 round



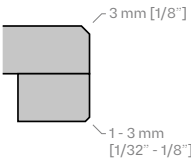
→ Round



→ Pilaster



→ Straight + thickening



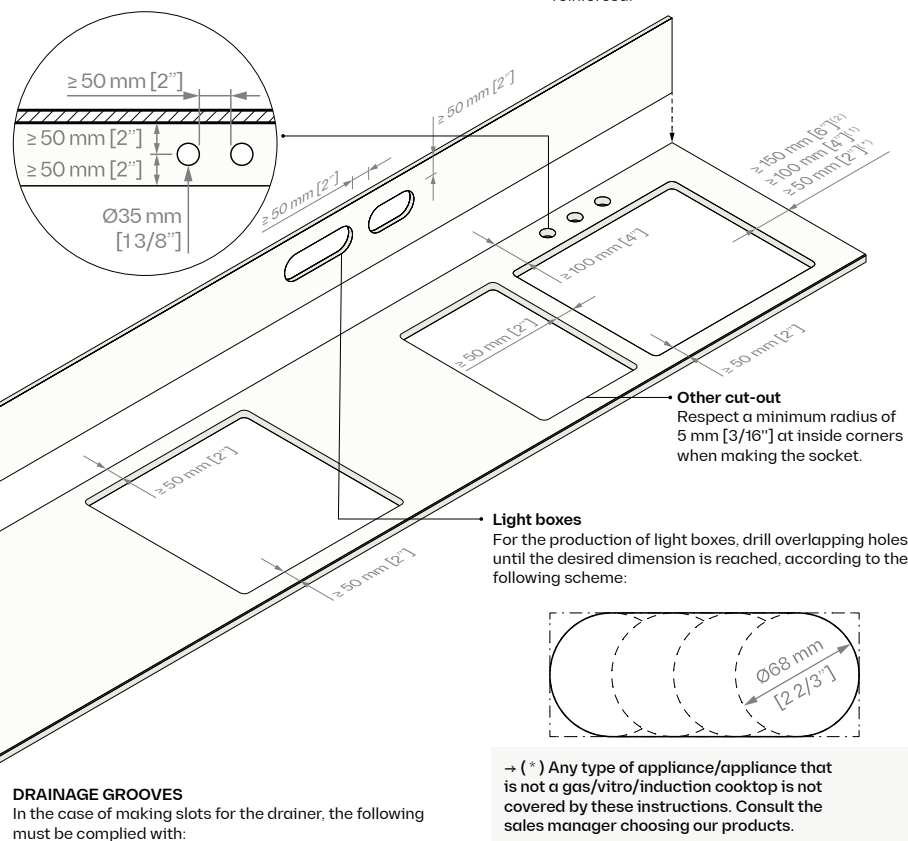
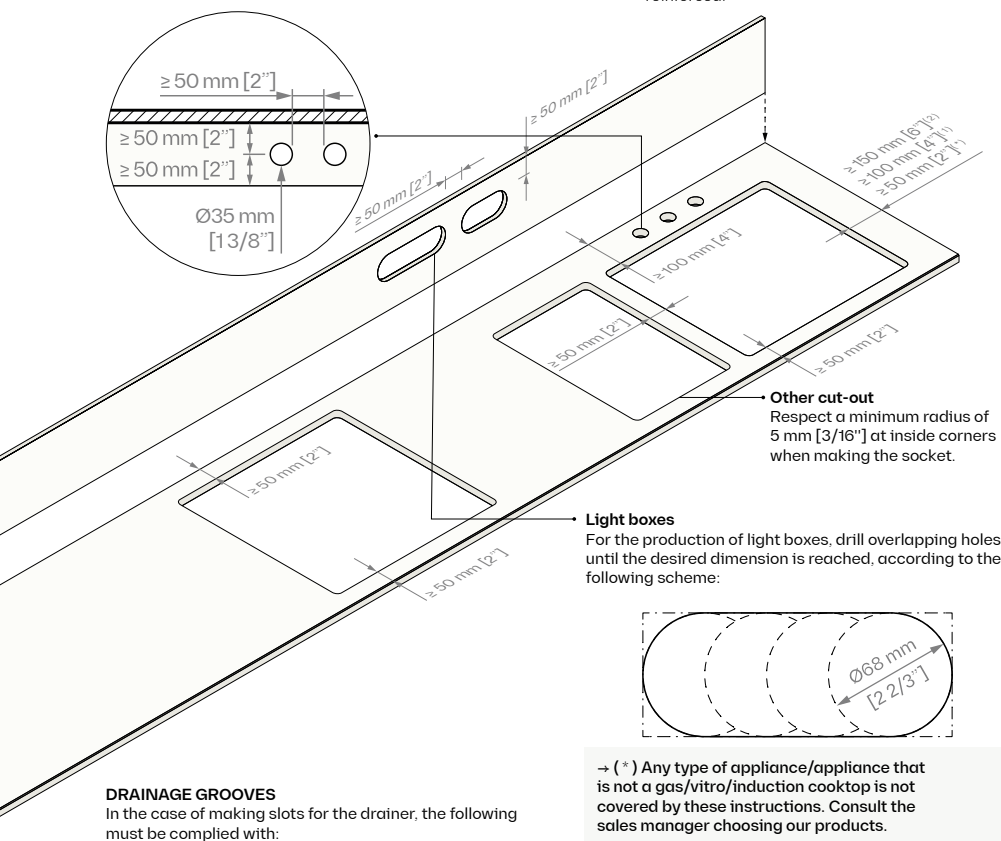
Edge recommendation according to thickness

	8 mm ⁽¹⁾	12 / 20 mm
Straight unpolished	●	●
Straight polished	●	●
1/4 round ⁽²⁾	●	●
1/2 round	●	●
Round ⁽²⁾	●	●
Flute beak	●	●
Pilastra ⁽²⁾	●	●
Mitre with skirting ⁽²⁾	●	●
Straight + thickening	●	●

→ (●) Recommended; (●) Accepted; (●) Not recommended.
→ For the 4 mm thickness, used in fronts/covers and linings, the edge must be polished, or at least "killed", with 1 mm [1/32"] bevels.
→ (1) For thickness 8 mm, used in fronts/covers and linings. For application as a countertop, please refer to the specific documentation.
→ (2) Valid only for straight sections.

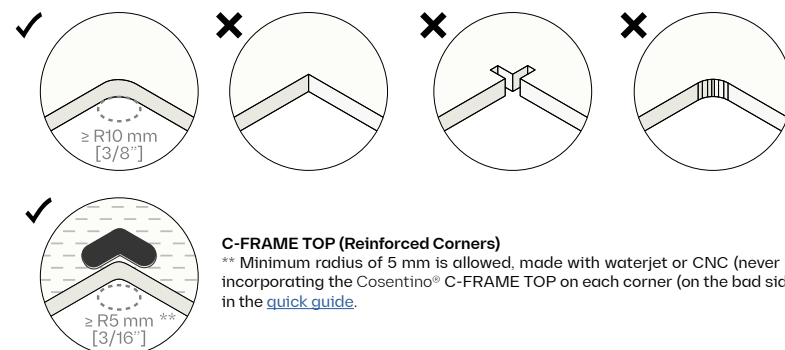
Insertions: Sink, tap and cooktop*.

- (1) Dekton® 20 mm.
 - (2) Dekton® 12 mm.
 - (*) Dekton® 12 mm & 20 mm:
- A distance of 50 mm is allowed if the socket is reinforced.



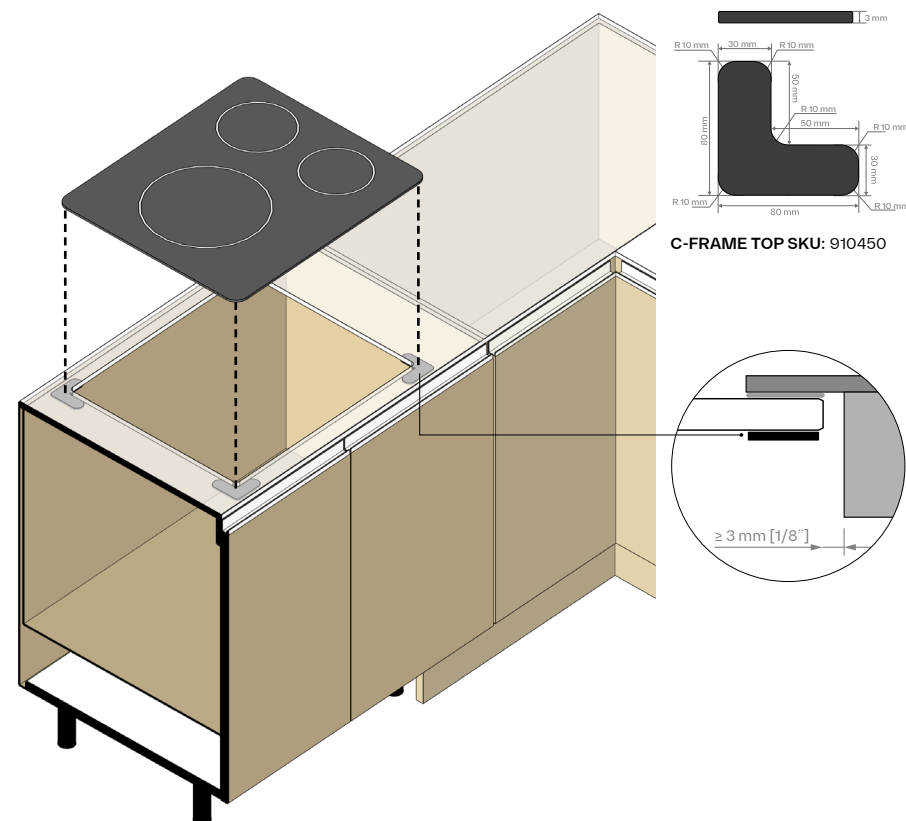
Minimum radii (sink and cooktop)

Respect a minimum radius of 10 mm [3/8"] at inside corners when making the cut-out.



C-FRAME TOP (Reinforced Corners)

** Minimum radius of 5 mm is allowed, made with waterjet or CNC (never with drilling) incorporating the Cosentino® C-FRAME TOP on each corner (on the bad side), as shown in the [quick guide](#).

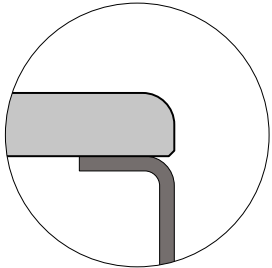


Placement Sinks

Sink types

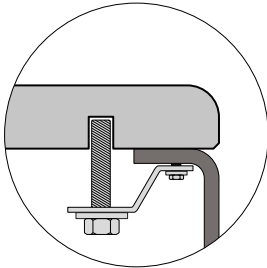
Depending on the type of sink chosen, observe the following installation recommendations:

→ Under worktop (glued)



- Singing: Straight polished, round.
- Fixing: Recommended adhesive.
- Without perimeter sealing.

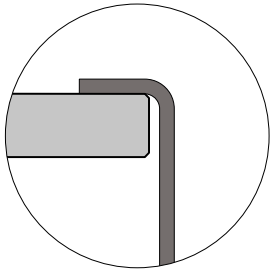
→ Under worktop (with platen)



- Singing: Straight polished, round.
- Fixing: Insert + screw.
- With perimeter sealing.

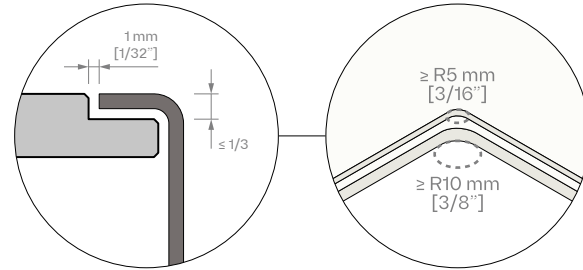
→ Under worktop (with insert)

→ On countertop



- Singing: Straight unpolished.
- Fixing: Recommended adhesive.
- Optional perimeter sealing.

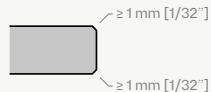
→ Furring



- Singing: Straight unpolished + recess.
- Fixing: Recommended adhesive.
- Perimeter seal $\geq 1 \text{ mm}$ [1/32"].



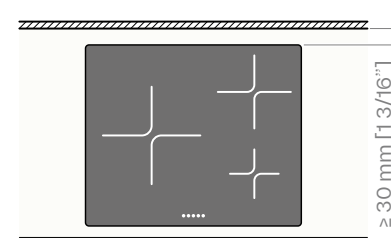
→ It is not necessary to polish the edge. It is enough to "kill" the edges, **both upper and lower**.



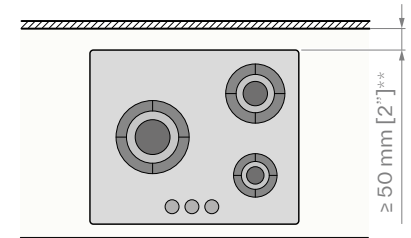
Distance to Dekton® front face

In case of Dekton® fronts, and depending on the type of cooktop chosen, respect the following distances:

→ Ceramic/Induction cooktop



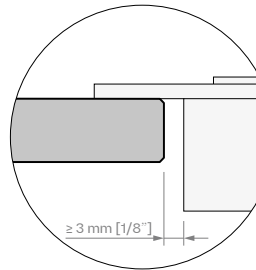
→ Gas hob



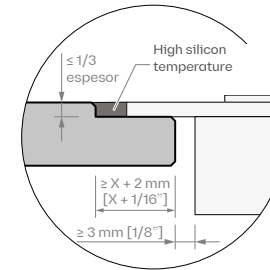
Types of placement

Depending on the type of cooktop chosen, respect the following installation recommendations:

→ On countertop

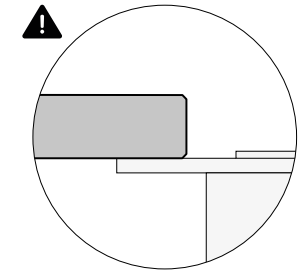


→ Furring



- (X) Distance recommended by the plate manufacturer.
- Minimum radius of 5 mm [3/16"] at the inside corners of the recess.

→ Under worktop

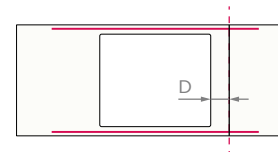


- (*) PROHIBITED if a gas cooktop is used, as the flame must never be projected directly onto Dekton®. Valid if vitro/induction is used.

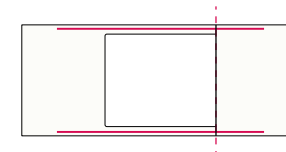
JOINTS IN CUT-OUTS

Cosentino® does not recommend joints in the joints. If, for design and/or dimensional reasons, it is necessary to have a joint in the worktop, respect the following recommendations:

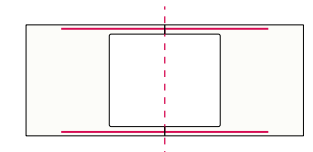
→ External to the socket



→ Tangent to socket*



→ Interior to the socket

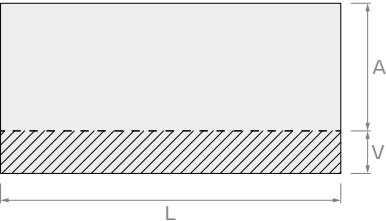


- (D) Joint-to-recession distance:
 $\geq 150 \text{ mm}$ [6"] | Dekton® 12 mm.
 $\geq 100 \text{ mm}$ [4"] | Dekton® 20 mm.

- (*) Only in case of cooktop hobs.

- (●) Ensure continuous and passing support in this area.

Overhangs on islands without cut-out/drilling



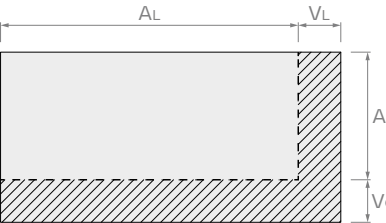
1. Long side overhang

	12 mm	20 mm
V	≤ 300 mm [12"]	≤ 600 mm [24"]
A	≥ 2 · V	
L	≥ 600 mm [24"]	



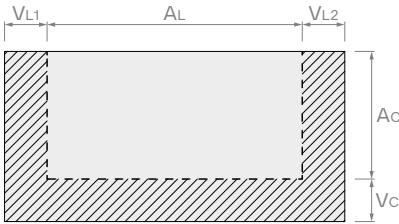
2. Short side overhang

	12 mm	20 mm
V	≤ 300 mm [12"]	≤ 600 mm [24"]
A	≥ 2 · V	
L	≥ 600 mm [24"]	



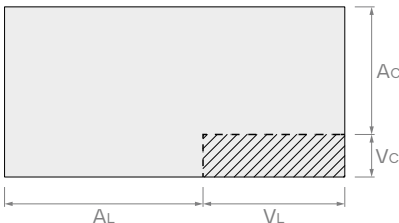
3. L" overhang

	12 mm	20 mm
VL	≤ 250 mm [10"]	≤ 500 mm [20"]
AL	≥ 2 · VL	
VC	≤ 250 mm [10"]	≤ 500 mm [20"]
AC	≥ 2 · VC	



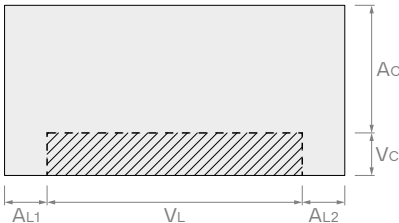
4. U-Overhang

	12 mm	20 mm
VL1, VL2	≤ 250 mm [10"]	≤ 500 mm [20"]
AL	≥ 2 · (VL1 + VL2)	
VC	≤ 250 mm [10"]	≤ 500 mm [20"]
AC	≥ 2 · VC	



5. Partial overhang

	12 mm	20 mm
VL	≤ 800 mm [31 1/2"]	≤ 1,600 mm [63"]
AL	≥ VL	
VC	≤ 250 mm [10"]	≤ 500 mm [20"]
AC	≥ VC	



6. Overhang between supports

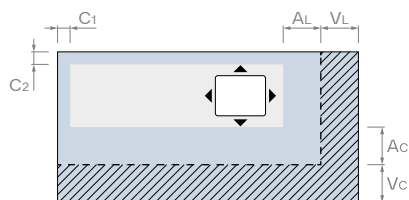
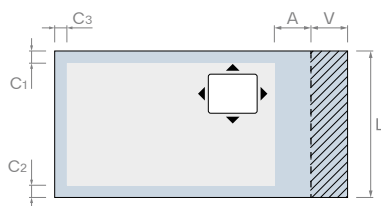
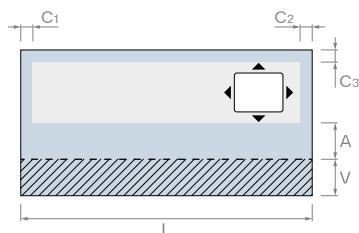
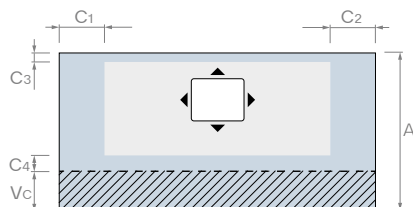
	12 mm	20 mm
VL	≤ 1,000 mm [39"]	≤ 2,000 mm [79"]
AL1, AL2*, AL2	≥ 100 mm [4"]	≥ 50 mm [2"]
VC	≤ 400 mm [16"]	≤ 800 mm [31 1/2"]
AC	≥ VC	

→ (*) Below these values, "1" is considered. Long side overhang".

→ (V) Overhang; (A) Support; (L) Overhang length;
(VL) Long side of overhang; (vc) Short side of the overhang;
(AL) Long side of the support; (ac) Short side of the support.

→ Maximum concentrated **static** load = 100 kg [220 lb].

Overhangs on islands with cut-out/drilled holes



It is possible to make a recess/drill in this area.

Do not drill and/or drill holes in this area.

0. Overhang with cut-outs away from the side

	20 mm
Vc	≤ 300 mm [12"]
A	≥ 900 mm [35"]
C1, C2	≥ 250 mm [10"]
C3, C4	≥ 70 mm [3"]

1. Long side overhang

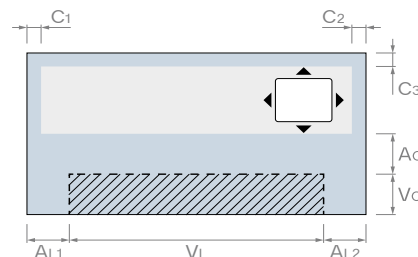
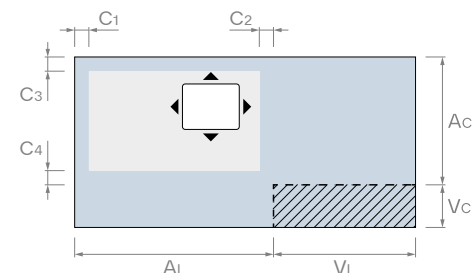
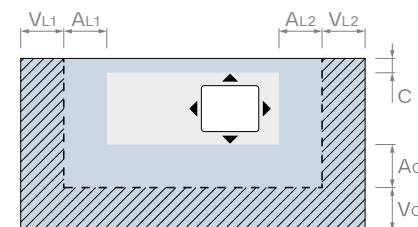
	12 mm	20 mm
V	≤ 300 mm [12"]	≤ 600 mm [24"]
A	≥ V	
L	≥ 600 mm [24"]	
C1, C2	≥ 150 mm [6"]	
C3	≥ 100 mm [4"]	

2. Short side overhang

	12 mm	20 mm
V	≤ 300 mm [12"]	≤ 600 mm [24"]
A	≥ V	
L	≥ 600 mm [24"]	
C1, C2	≥ 100 mm [4"]	
C3	≥ 150 mm [6"]	

3. L" overhang

	12 mm	20 mm
VL, Vc	≤ 250 mm [10"]	≤ 500 mm [20"]
AL	≥ VL	
Ac	≥ Vc	
C1	≥ 150 mm [6"]	
C2	≥ 100 mm [4"]	



→ (*) Below these values, "1" is considered. Long side overhang".

→ (V) Overhang; (A) Support; (L) Overhang length; (VL) Long side of overhang; (Vc) Short side of the overhang; (AL) Long side of the support; (Ac) Short side of the support; (C1), (C2), (C3), (C4) Distance to edge.

→ Maximum concentrated **static** load = 100 kg [220 lb].

4. U-Overhang

	12 mm	20 mm
VL1, VL2	≤ 250 mm [10"]	≤ 500 mm [20"]
AL1	≥ VL1	
AL2	≥ VL2	
Vc	≤ 250 mm [10"]	≤ 500 mm [20"]
Ac	≥ Vc	
C	≥ 100 mm [4"]	

5. Partial overhang

	12 mm	20 mm
VL	≤ 800 mm [31 1/2"]	≤ 1,600 mm [63"]
AL	≥ VL	
Vc	≤ 250 mm [10"]	≤ 500 mm [20"]
Ac	≥ Vc	
C1, C2, C3, C4	≥ 150 mm [6"]	≥ 100 mm [4"]

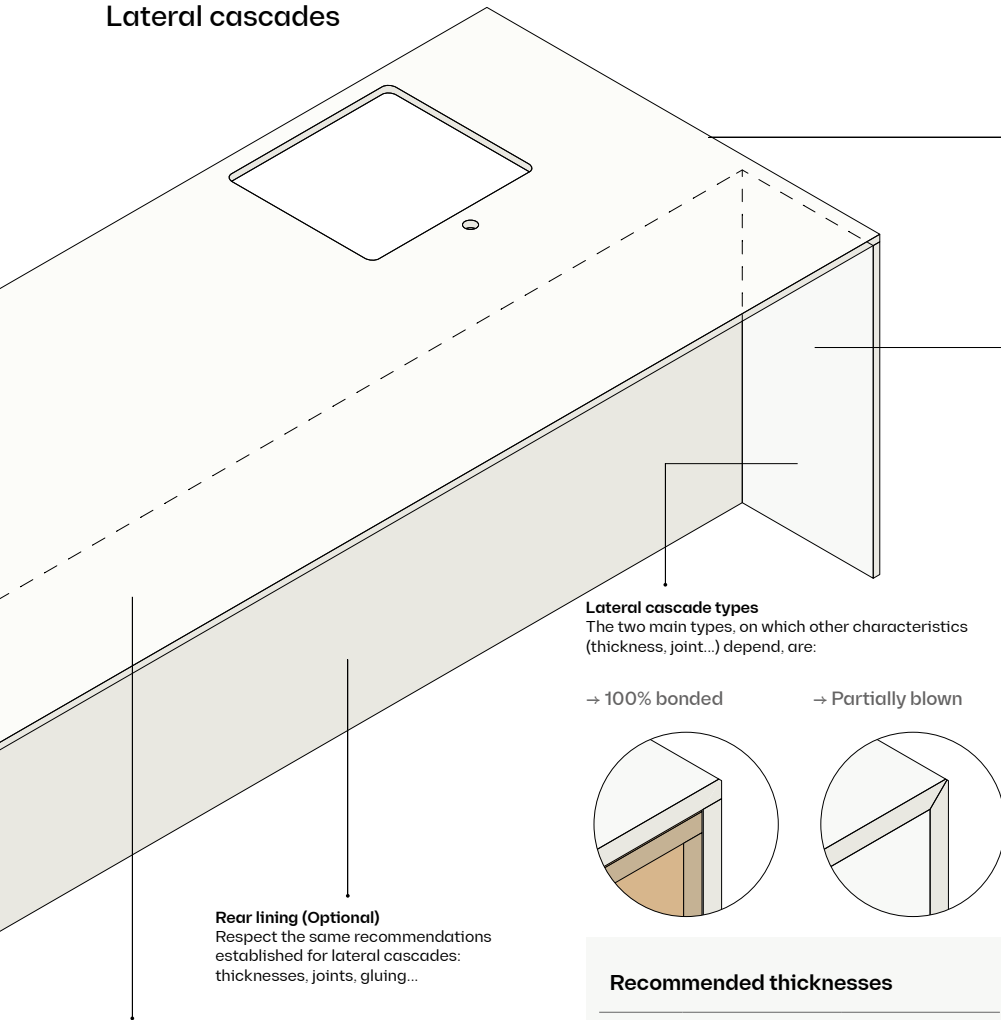
6. Overhang between supports

	12 mm	20 mm
VL	≤ 1,000 mm [39"]	≤ 2,000 mm [79"]
AL1, AL2, AL2	≥ 100 mm [4"]	≥ 50 mm [2"]
Vc	≤ 400 mm [16"]	≤ 800 mm [31 1/2"]
Ac	≥ Vc	
C1, C2	≥ 150 mm [6"]	
C3	≥ 100 mm [4"]	



→ If there is more than one recess/drill hole, the thickness of the worktop shall be 20 mm or 12 mm and the minimum distance between them shall be 250 mm [10"].

Lateral cascades



Lateral cascade + Overhang

When the use of lateral cascades in combination with overhangs is required, the maximum dimensions of both elements would be:

1. Partially overturned waterfalls:

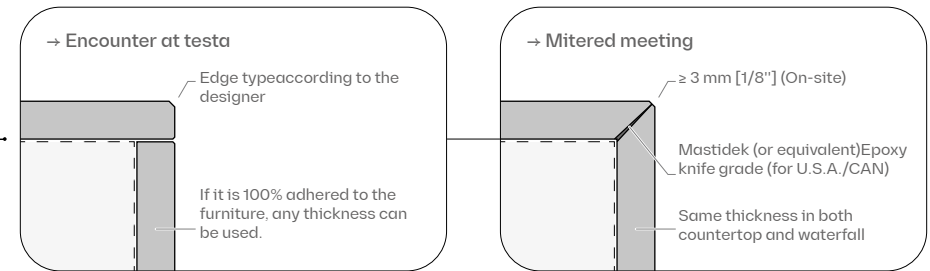
- Thickness 12 mm: ≤ 250 mm [10"].
- Thickness 20 mm: ≤ 500 mm [20"].

2. 100% bonded (lined) waterfalls: Distances established in the section "Overhangs in islands".

Recommended thicknesses

	100% attached to the furniture	Partially blown
4 mm	●	●
8 mm	●	●
12 mm	●	●
20 mm	●	●

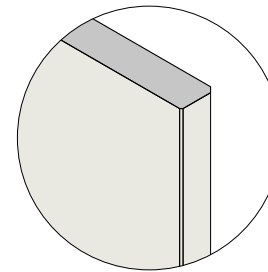
→ (●) Recommended; (●) Accepted;
(●) Not recommended.



Interior finish of the side cascade

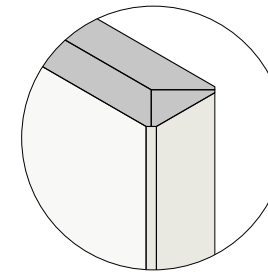
In the case of side cascades where the rough back face of Dekton® is exposed, and depending on the required design and the characteristics of the cascade, there are three ways to achieve a better appearance for that area:

→ Sanding of the rear side



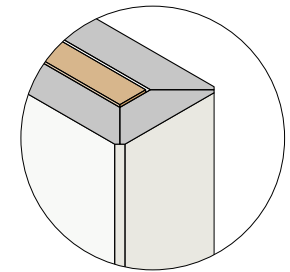
- Finishing: Honed, NEVER similar to the front face.
- Thickness: 12 and 20 mm.
- Elaboration: Sanding sequence (GR50 - GR100 - GR200 - GR400).
- Valid only for partially flown waterfalls.

→ Dekton® return.



- Finishing: Same as on the front face of the waterfall.
- Thickness: 12 and 20 mm.
- Elaboration: Gluing of mitered parts.
- Valid only for partially flown waterfalls.

→ Dekton® return (on furniture)

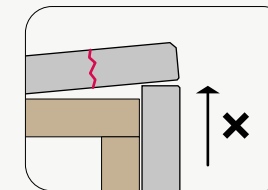


- Finishing: Same as on the front face of the waterfall.
- Thickness: 4, 8, 12 and 20 mm.
- Elaboration: Gluing of mitered pieces to the structure of the furniture.
- Valid only for waterfalls 100% attached to the furniture.



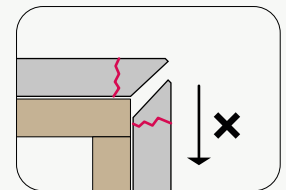
→ For this application, Dekton® will NEVER have a structural function. It will only act as a lining for the furniture, which will support the stresses.

→ When using a different thickness than the countertop, consider both pattern and shade when designing and processing.



→ The side cascade MUST NOT lift the cabinet top.

The worktop must always rest on the structure of the furniture.



→ If the side cascade is sagging, the joint with the countertop will break and open.

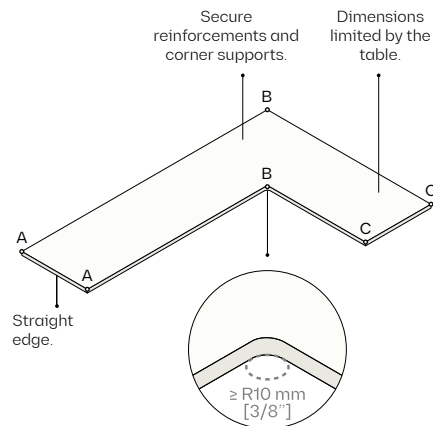
To avoid this, the skirting must be perfectly glued.

Other considerations

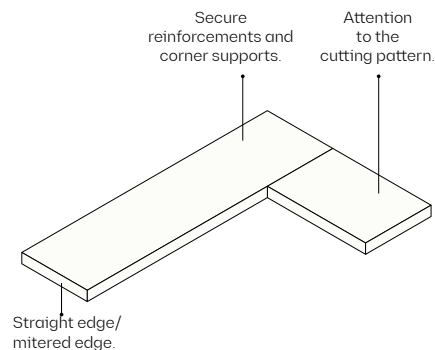
→ "L" countertop

For this type of worktop, ensure that the support points (A, B, C) are at the same height. If there are slight variations, a bedding-support should be provided at the ribs of the furniture by continuous 5 mm [3/16"] neoprene or elastomer strips.

For one-piece "L" countertops:

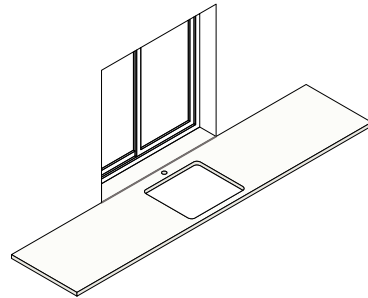


For "L" countertops in several pieces:



→ Sill (Window)

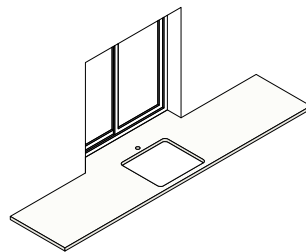
At this meeting point, where it is not possible to ensure a continuous and through support, have a joint separating the countertop from the sill piece (best solution) and fill it with silicone in the color of the countertop.



→ Resolution WITH board.

Alternatively, and in the event that the joint is NOT desired:

- The support must be continuous, through and of the same material (e.g. wood) under both the countertop and the sill.
- Leave a perimeter gap ≥ 3 mm [1/8"] and fill with silicone.
- Make appropriate radii ($\geq R10$ mm [3/8"]) at all inside corners.
- Valid for thicknesses 12 and 20 mm.



→ Resolution WITHOUT gasket.

Installation criteria

On-site adjustments

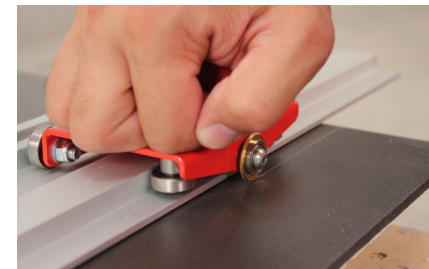
Ideally, all processing should be carried out in the workshop, with the appropriate machinery, once a thorough measurement has been made at the installation site.

However, it is possible to make small adjustments on site, both in the countertop and in the cladding, following some recommendations.

→ Dry straight cutting (Cladding and furniture lining).

On-site cutting with mitre saws (dry cutting) is only recommended for thicknesses of 4 mm and 8 mm, used for cladding and furniture lining.

After cutting, use a polishing block to "kill" the resulting edges.



→ Straight cut with disc and water supply.

This can also be carried out on site, for thicknesses between 8 mm and 20 mm, meeting the following requirements:

- Use cutting tools recommended by Cosentino®.
- Always cut with water supply.
- Sharpen the tool frequently.

After cutting, use a polishing block to "kill" the resulting edges.

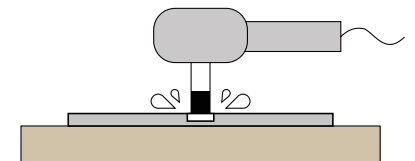


→ Drills

Holes can be drilled on site for the production of, for example, light boxes ($\varnothing 68$ mm [2 2 2/3"] overlapping holes).

Drill on a continuous substrate of lower density than Dekton® (e.g. wood) to avoid possible chipping.

For larger drillings and Cut-outs, it is recommended that they be made in the workshop.



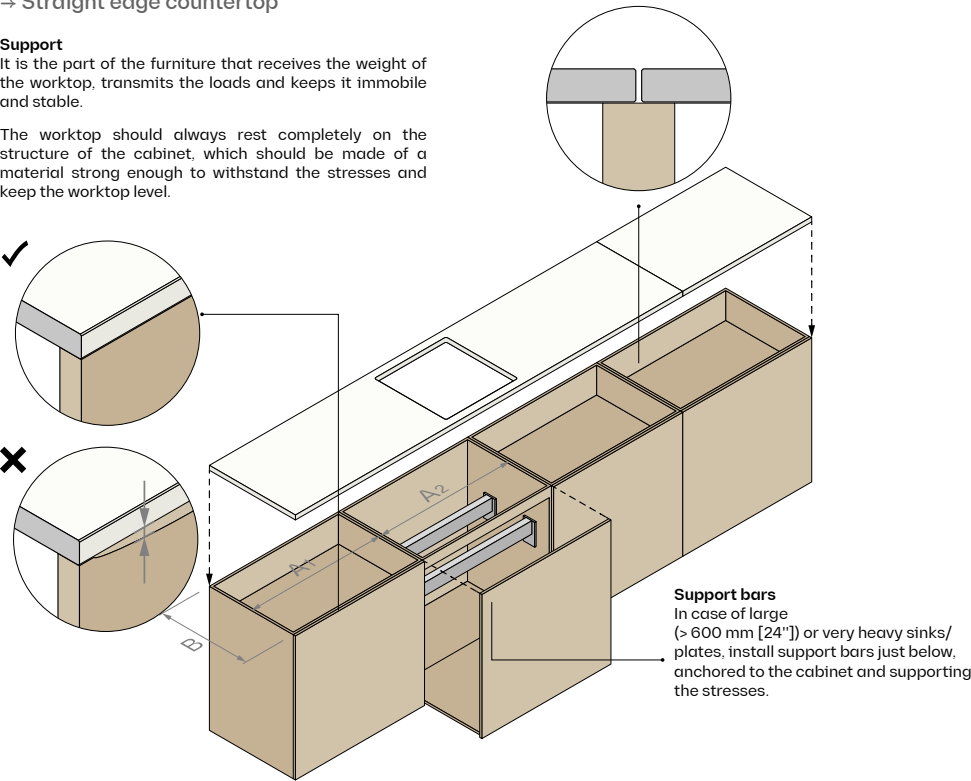
Supports, supports and reinforcements

→ Straight edge countertop

Support
It is the part of the furniture that receives the weight of the worktop, transmits the loads and keeps it immobile and stable.

The worktop should always rest completely on the structure of the cabinet, which should be made of a material strong enough to withstand the stresses and keep the worktop level.

Joint support
If possible, if there is a joint, it is recommended that it coincide with a furniture support.



Distance between two supports

	12 mm	20 mm
A1 No socket	≤ 900 mm [35"]	≤ 1,200 mm [47"]
A2 With Inset	≤ 600 mm [23"]	≤ 800 mm [31"]
B Cabinet width	≤ 700 mm [27 1/2"]	



If the furniture on which the countertop rests does not comply with the distances between supports, it must be reinforced to ensure proper support.

SUPPORTS IN "L" COUNTERTOPS
It is important to ensure a continuous, through and continuous support in the corner area for this type of countertops, especially when they are resolved in 1 piece.



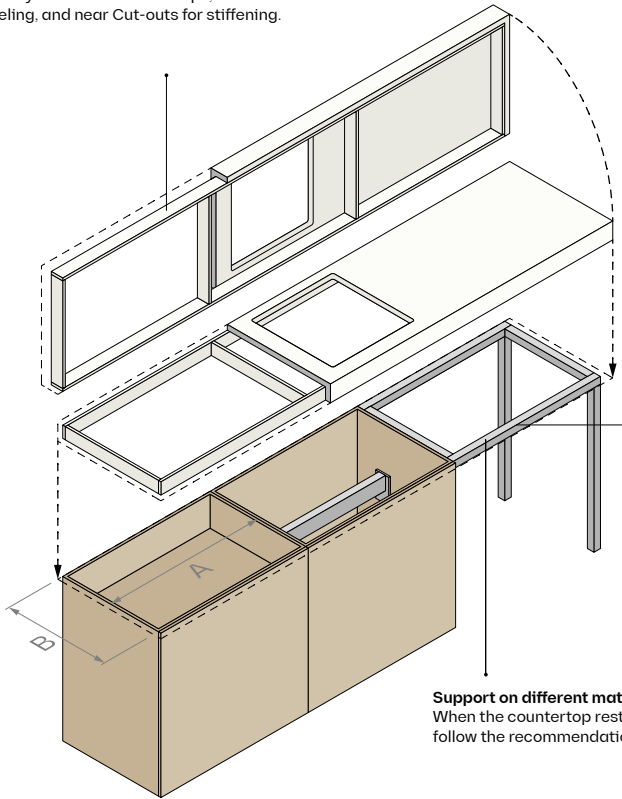
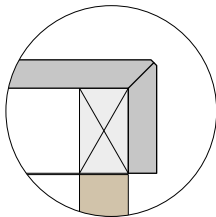
→ Mitered edge countertop (skirting).

Reinforcement
It is the added part that makes a weakened area more solid and resistant (for example, in Cut-outs and in mitered skirting).

It should be made of Dekton® or a material with similar physical properties (e.g., marble or granite). It must be bonded in such a way that the countertop + reinforcement function as a whole.

The reinforcements must match the load-bearing structure of the furniture.

Necessary in mitered countertops, both for reinforcement and for leveling, and near Cut-outs for stiffening.



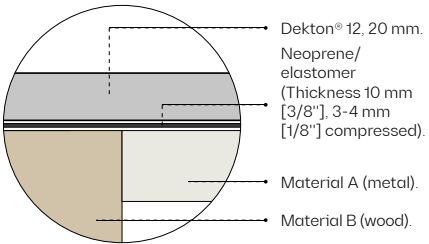
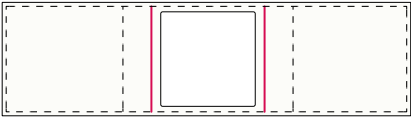
Metal structure
It must be sufficiently rigid and stable to ensure continuous support of the countertop.

The support of the countertop on the metal structure shall be ≥ 100 mm [4"].

The encounter with the rest of the furniture (wood) will always have a mechanical connection.

Support on different materials
When the countertop rests on two different materials, follow the recommendations below:

REINFORCED CUT-OUTS
Reinforce the surrounding area when the socket has large dimensions and/or when it is placed on 12 mm thick worktops and/or with skirting.



Installation process and recommendations

1. Before you start

Protect everything that we can stain or damage, and verify that the support area is clean and free of objects.

2. Dimensions

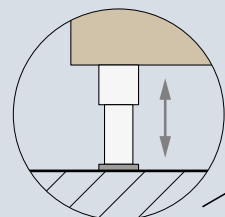
Verify the measurements of the furniture and of the cut countertop pieces. Also those of the siding/copete.

3. Supports, supports and reinforcements

Verify that the distances and recommendations established according to the chosen Dekton® thickness are complied with.

4. Furniture

Check the correct leveling of the furniture. Correct, if necessary, in an appropriate manner and according to the type of furniture chosen.

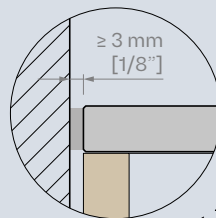


5. Superior flatness

Check that the top of the furniture is completely level, as the worktop must rest completely on the structure of the furniture.

7. Placement

Place the worktop pieces on the furniture, already leveled, and adjust the position. Leave a perimeter joint of at least 3 mm [1/8"] in all areas of contact with the vertical facing, filling the exposed areas with silicone. Check, with a gauge, that the support is continuous.



8. Joint between parts

Make as few joints as possible, using suction cups and the recommended adhesive (Mastidek or silicone in the color of the countertop). Use masking tape to protect the surface.

6. Adhesive

Apply the recommended adhesive on the upper edges of the furniture or reinforcements, being careful not to stain the rest of the furniture.

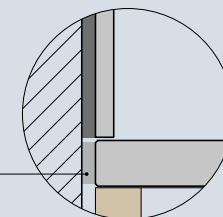
9. Cut-outs

It is recommended that the recesses be made before installing the front piece.

10. Frontal/Copete®.

a. Submit the front end and correct if necessary.
b. Apply the recommended adhesive/mastic, which ensures a rigid fixation, and glue the piece to the facing that will support the entire load of the front.

→ (*) For face bonding, refer to the Dekton® Interior Cladding Quick Guide. For the gluing of copings, it is sufficient to apply silicone beads.



11. Perimeter sealing

Apply the recommended silicone, or grout, at all necessary joints, according to the manufacturer's instructions.

12. Final cleaning

It is important to perform a final job site cleaning as soon as possible to remove any residue from the installation process.

HOB AND SINK INSTALLATION

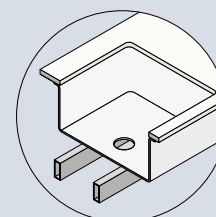
COOKTOP: Install according to the type chosen. Respect the distances to the cladding. If it is not possible to respect them, this area will not be lined with Dekton® and another material (e.g. steel) will be used.

SINK: Install according to the type chosen.

IMPORTANT: In case of large (> 600 mm [24"]) or very heavy plates/sinks, install support bars just below, anchored to the furniture and bearing the stresses.

SIDE CASCADES (OPTIONAL)

Install, gluing to the furniture according to the type of joint chosen (end-grain/end-grain) and using adhesives/mastics that ensure a rigid fixation, so that the side cascade NEVER acts as a structural element.



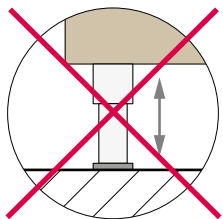
→ Always use tools and adhesives recommended by Cosentino®.

→ Follow the appliance manufacturers' installation recommendations for proper ventilation under the countertop.

→ Failure to correctly follow the instructions set out in this Manual may result in material breakage pathologies.

Installation process with cabinets without leveling feet

This solution is valid only for the USA. The company's operations are located in the U.S., Canada and France.

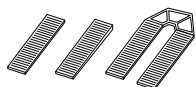


1. Leveling

The cabinet should be flat and level, with a tolerance of 1/8" (3 mm) over a distance of 120" (3 m).

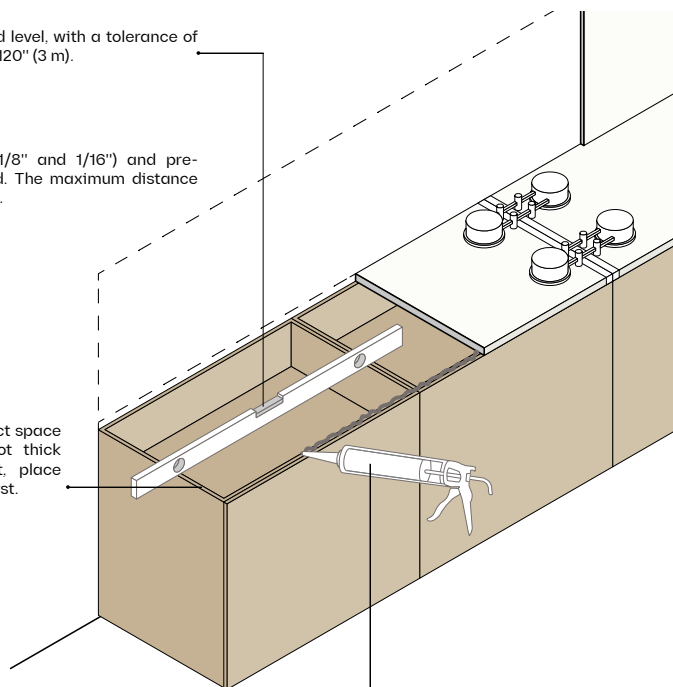
2. Leveling wedges

Horseshoe-shaped wedges (1/8" and 1/16") and pre-marked wedges are validated. The maximum distance between wedges is 12" (30 cm).



3. Wedge adjustment

Mold the wedge to fill the exact space needed. If one wedge is not thick enough for the required fit, place another wedge on top of the first.



4. Adhesive

Adhesive: Once the countertop is level, apply silicone directly through the shims to secure it.



→ Always use tools and adhesives recommended by Cosentino®.

→ The material of the wedges can be plastic or composite. Be sure to push it far enough. It must be placed in the correct position to fulfill its function. Unsecured wedges can slip or fall out of position, putting the countertop at risk.

→ Failure to properly follow the instructions in this Manual may result in material breakage.

Health and safety

Manufacturers and installers working with Dekton® must comply with all applicable laws and regulations regarding occupational health and safety.

Apply the necessary occupational safety measures to comply with local regulatory requirements. This Guide is not exhaustive or a substitute for the relevant regulation, and is provided for information purposes only.

Safety measures will depend on the specific conditions of each workstation.

Risks associated with handling and transportation

During the transport and handling of Dekton® materials, risks such as blows, cuts, musculoskeletal disorders, entrapment or projection injuries due to incorrect handling may occur.

Risks associated with elaboration and processing

The processing process may involve cutting hazards, projection injuries, entrapment and exposure to high noise levels and/or respirable crystalline silica dust.

Before processing the product, consult the Dekton® Safety Data Sheet and the Guide to Good Practices available upon request from Cosentino® or on the website osh.cosentino.com.

COSENTINO®

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→ These certificates apply to
Dekton® and Silestone®.

→ Get information on colors with
NSF certification through www.nsf.org

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