

HANDLING & CUTTING



01/Product

Why choose Ascale? Because our sintered stone offers optimal technical performance for any work surface, matching—or even surpassing—the aesthetic value of any other material.

Our collections adapt perfectly to the needs of all audiences. Our portfolio includes all types of marbles, cements, stones, woods, metals, and basic colors. Our mission is to create spaces that evoke a sense of comfort in every environment.

Ascale's sintered stone goes beyond the limitations of traditional materials, making it the ideal choice for all types of coverings and surfaces. It offers a versatile, lightweight design in large formats (162 x 324 cm in 12 and 20 mm thicknesses, $160 \times 320 \text{ cm} / 120 \times 280 \text{ cm}$ in 6 mm thickness, and $100 \times 300 \text{ cm}$ in 3 mm thickness).

Ascale combines the **aesthetics** of natural stone with the **strength and durability** of sintered stone.







Size

162 x 324 cm / 160 x 320 cm / 120 x 280 cm / 100 x 300 cm

Finish



Thickness

3 mm / 6 mm / 12 mm / 20 mm

03/Advantages

NON-COMBUSTIBLE

	DIMENSIONAL STABILITY
↓↓↓ N/mm²	FLEXURAL STRENGTH
$\Diamond\Diamond\Diamond$	WATERPROOF
tc°	THERMAL RESISTANCE
mm ³	DEEP ABRASION RESISTANCE
	FROST RESISTANCE
	SURFACE ABRASION RESISTANCE
*	CRACK RESISTANCE
	CHEMICAL RESISTANCE
MOHS	SCRATCH RESISTANCE
	STAIN RESISTANCE
λ	

GRUPO Bla (GL) / GROUP Bla (GL)

PROPIEDADES FÍSICO -QUÍMICAS	NORMA DE ENSAYO	VALOR REQUERIDO	VALOR MEDIO
PHYSICAL-CHEMICAL PROPERTIES	STANDARD TEST	REQUIRED VALUE	AVERAGE VALUE
Espesor	ISO 10545-3	Cumple/Complies	Cumple/Complies
Thickness	.00 100 .0 0	Gup.16, GGp.166	
Absorción de agua	ISO 10545-3	≤ 0,5%	≤ 0.1%
Water absorbtion	100 100 10 0	_ 0,5 %	2 0,170
			≥ 1000 N e=6mm
Fuerza de rotura	ISO 10545-4	≥ 700 N e<7,5 mm	≥ 3000 N e=8mm
Breaking strenght		≥ 1300 N e≥7,5 mm	≥ 5000 N e=12mm
			≥ 11000 N e=20mm
Resistencia a la flexión Modulus of rupture	ISO 10545-4	R ≥ 35 N/mm2	≥ 50 N/mm2
Resistencia al impacto	100 405 45 5	Valor declarado	>0,8 sin defectos
Impact resistance	ISO 10545-5	Declared value	visibles / no visible defects
Resistencia a la abrasión superficial		Valor declarado	Valor declarado
Resistance to surface abrasion	ISO 10545-7	Declared value	Declared value
Dilatación térmica lineal	100 405 45 0	Valor declarado	5740.000
Linear thermal expansion	ISO 10545-8	Declared value	5,7.10-6°C
Resistencia al choque térmico	100 105 45 0	Resistente	Resistente
Thermal shock resistance	ISO 10545-9	Resistant	Resistant
Expansión por humedad	ISO 10545-10	Valor declarado	<0.1 mm/m
Moisture expansion	150 10545-10	Declared value	<0,1 mm/m
Resistencia al cuarteo	ISO 10545-11	Resistente	Resistente
Crazing resistance	130 10545-11	Resistant	Resistant
Resistente a la helada	ISO 10545-12	Resistente	Resistente
Frost resistance	130 10343-12	Resistant	Resistant
Resistencia química: productos de limpieza Chemical resistance: Cleaning products	ISO-10545-13	В	А
Resistencia química: Aditivos piscinas			
Chemical resistance: Swimming pool salts	ISO-10545-13	В	А
Resistencia química: Ácidos de baja		Valor declarado	LA acabado mate
concentración Chemical resistance: Low concentration	ISO-10545-13	Declared value	LB acabado pulido
acids			
Chemical resistance: Low concentration	ISO-10545-13	Valor declarado	LA acabado mate
bases	130 10343 13	Declared value	LB acabado pulido
Resistencia a las manchas	ISO 10545-14	Min.3	Min. 5 acabado mate
Resistance to stains	100 100 10 11	Will i.S	Min. 4 acabado pulido
Emisión de plomo y cadmio	ISO 10545-15	Valor declarado	Cadmium < 0,01 mg/l
Determination of lead and cadmium	.00 100 .0 10	Declared value	Lead < 0,1 mg/l
Resistencia al calor seco Dry heat resistance	EN 13310	Declared value	Resistente Resistant
Resistencia UV UV Resistance	DIN 51094	Declared value	Sin cambios
OV Nesistance			No change

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04/Sustainability

Ascale has an environmental management system in place to identify and minimize the impact of its operations on atmospheric emissions, wastewater, waste, and noise pollution.

Our commitment is backed by ISO 14001 certification, which endorses the effectiveness of our environmental management system in compliance with the most demanding international standards, with production processes aimed at preventing and reducing environmental impact at all stages of our activity.

Ascale also holds the Carbon Footprint certificate, which allows us to measure and control our greenhouse gas emissions, representing a major step towards more sustainable and low-carbon production.



















*Please consult the official list for certified models.

Vature inspiring innovation

By applying continuous improvement criteria, we carry out internal recovery of waste and selective collection of materials such as cardboard, plastic, or wood.

Ascale is committed to optimizing water management, based on the principles of reuse and optimization in different processes. In addition, it constantly promotes the application of energy efficiency criteria in its facilities and activities.







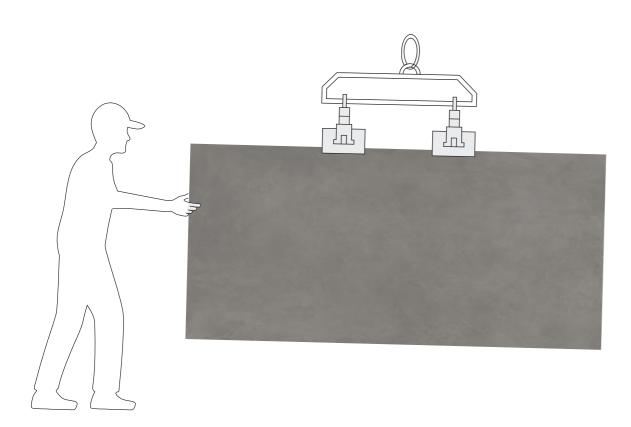
HANDLING OF SLABS

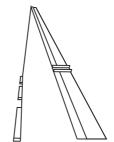
Technical information	U.M.	6 mm	12 mm	20 mm
Slab surface	m2	5.12	5.12	5.12
Slab weight	kg	77	152	253
Weight per m2	kg	14	29	48
Slabs per trestle*	nr.	44	22	14
net m² per trestle	m2	232,32	116,16	71,68
Metal trestle weight	kg		210	
Full trestle weight	kg	3388	3344	3752
Dimensions of trestle including packaging	mm	33	500 x 750 x 19	00

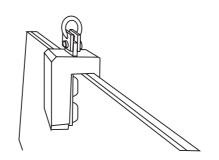
Transport with clamps:

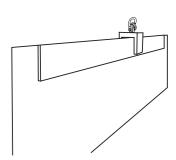
This is the best way to move 12 and 20 mm thick Ascale slabs. Always pay attention to the movement and handling of the slabs to prevent splintering or breakage.

Ascale recommends using the following type of clamp for lifting and moving individual slabs:









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The additional width of this clamp will prevent the slab from bending during handling and prevent unwanted breakage.

Recommendations:

Clamping more than two slabs at the same time is not recommended.

Make sure to cover all metal surfaces that may come into contact with the slab using adhesive foam tape.

If this type of clamp is not available, use a 2 cm thick plank of approximately $3 \text{ m} \times 20 \text{ cm}$ so the clamp can carry 12 mm slabs.

Fixing the ends of the slab to the plank with jacks to prevent the slab from sagging during handling is recommended.

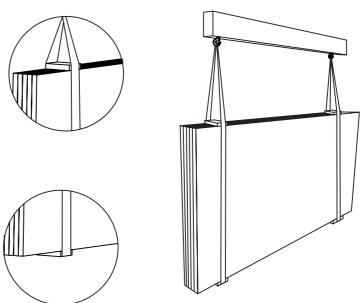
Position the plank to the rear of the slab to be lifted.

- 1) Place the clamp on the slab and plank.
- 2) Fix the clamp and lift the slab and plank with care.
- 3) Avoid sudden changes in direction.

Transport with slings

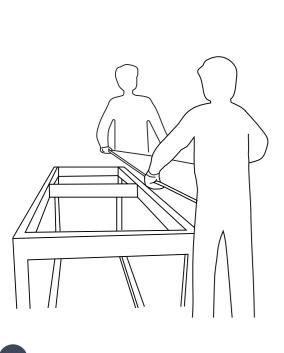
An adequate system for moving several slabs at the same time. Using canvas slings is recommended.

Metal slings should not be used to handle Ascale slabs. Using wooden spacers is recommended to prevent direct contact between the slings and slabs.

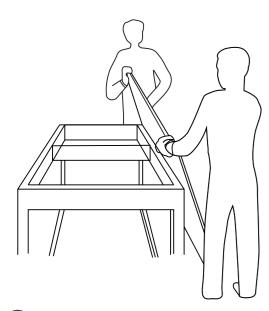


MANUAL TRANSPORT:

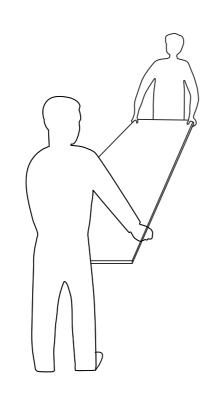
Always keep in mind the weight of anything that needs to be transported. Get help from any type of support and never move slabs in a flat horizontal position as this may cause excessive buckling.





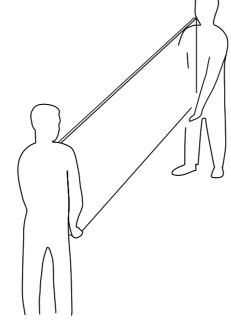








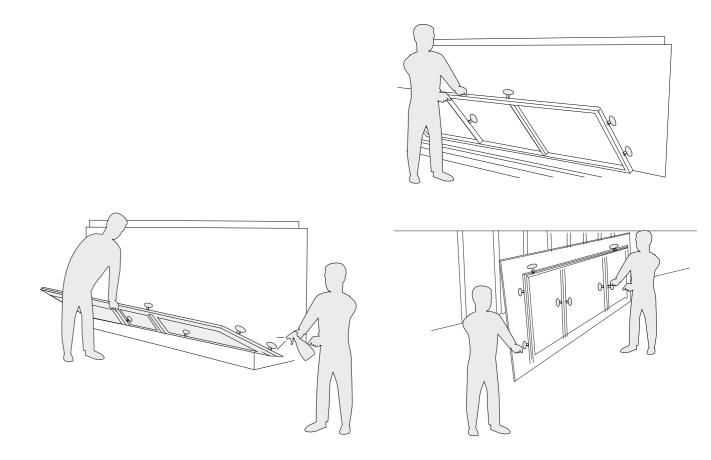






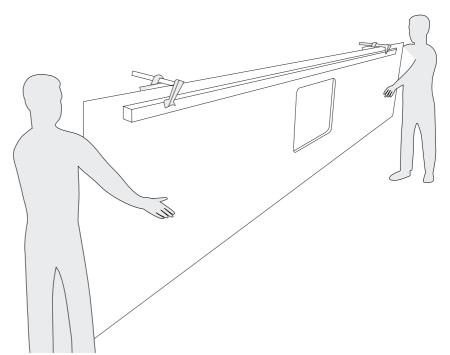
TRANSPORTE MEDIANTE MARCO CON VENTOSAS:

This is only recommended for 6 mm thick slabs. The suction cups can be positioned all along the frame to adapt to the size of the piece being moved. Using this tool is also recommended when installing the slab in its final location.



If this type of frame is not available, an aluminium rod or similar element, secured with several jacks, can also be used. This will prevent the piece from bending too much while being handled.

Fixing thin, long pieces (skirting, for example) with jacks to an aluminium rod for transport is also recommended.



PACKING:

After production, the slabs are placed on trestles which are ideal for transport and storage after proper labelling.



Trestles with Ascale slabs should be loaded, unloaded and moved using a suitable forklift, crane or other handling mechanism.

Whenever handling or moving items, make sure the load is balanced.

If possible, keep your Ascale slabs on the same trestle they came on. Any subsequent handling must be by using adequate trestles or rails (wooden or metal) with proper protection to vertically support the slabs (wooden, plastic or rubber) to prevent chips and dents at the support point.

STORAGE:

When storing slabs on trestles not supplied by us, using a continuous support base or at least one with four support points for the slabs is recommended. This base should be rigid (preferably made of wood). This will prevent splintering on the edges of the Ascale slabs.

Make sure the Ascale slabs have at least three support points (one in the middle and one at each end)

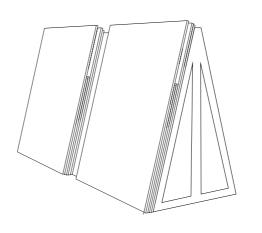
When storing outdoors, cover the slabs with waterproof fabric.

Cut pieces may have sharp edges, so handle with care and use adequate protection.

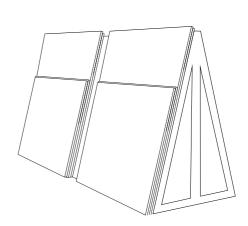
Cut material should be packaged with cardboard or similar protection on the corners and with shock absorbent panels around the perimeter edges (in adequate thicknesses) to protect against impact.

If the product is not packaged adequately, it may break.







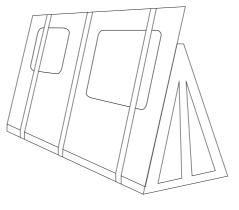


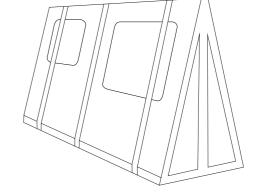
slabs against smaller slabs:"

"Avoid positioning large



CORRECT





"Likewise, check that the trestle or base on which the slabs are supported is larger than the slab surface:"

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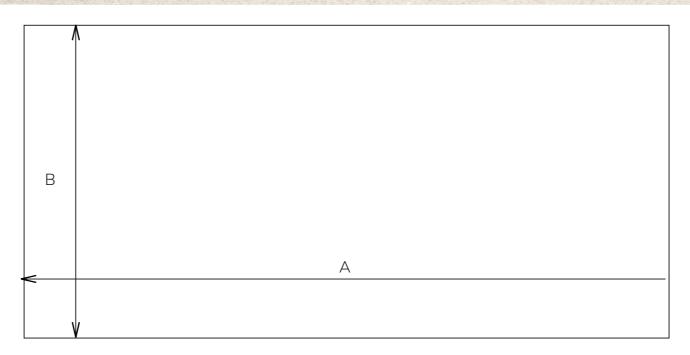
RECEPTION AND QUALITY CONTROLS

Ascale performs quality control on its slabs in accordance with the highest standards of quality. Nonetheless, always inspect received material before starting any work by following these steps:

- Check the packaging exterior (no visible impacts or damages).
- Check that the transport document, the purchase order and the material received all match. The product code is printed on the side edges of each slab.
- Visually inspect the slabs for possible surface defects: cracks, stains, colour fading, shade variation and imperfections. An inspection against the light is highly recommended.

No claims will be accepted for installed or manufactured material when defects were already present upon delivery of the material. Marble workers are responsible for determining whether the slabs are adequate for use. If they are not adequate, the supplier must be contacted immediately so they may be exchanged before the slabs are cut or modified in any way.

ASCALE 183 AS.ANTALYA SAND 160X320 MATE 20MM 100 MADE IN SPAIN 8429991903107 H01.



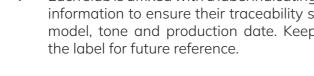
Dimensions	Length mm (A)	Width mm (B)
For guidance only	3240	1620
Useful for 6 mm	3197	1597
Useful for 12 mm	3240	1620
Useful for 20 mm	3240	1620

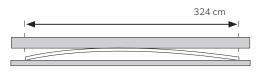




SLAB IDENTIFICATION

Each slab is affixed with a label indicating important information to ensure their traceability such as the model, tone and production date. Keep or record





flat horizontal base free of any residue.

Maximum slab width and length tolerance: 2 mm

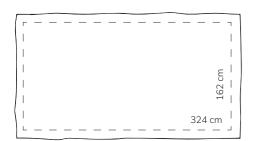
Any convex deviation from total flatness should be measured using an aluminium rod held parallel to one of the sides. The section of a slab showing a possible bend can be assessed using a 2 mm thickness measuring device. If the thickness measuring device does not fit underneath, there is no flatness problem.

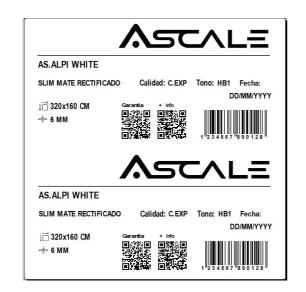
To check the flatness of a slab, position it over a completely

DIMENSIONS

FLATNESS

The term "Full Size" means that the slab has undergone the production cycle without being cut down. This size is intended for processing because it provides manufacturers with the opportunity to optimise their possible cutting models to suit specific projects. A piece measuring 162x324 cm can be obtained from each slab, which corresponds to the useful surface and the billable amount.







MECHANICAL PARAMETERS

PRELIMINARY INFORMATION

Before working with the slabs, always make sure the entire slab is supported on the bench and the bench is free of any shards. The slab must be completely flat.

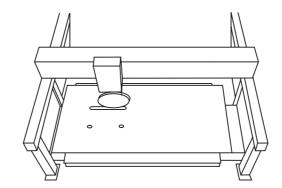
To release any strain on the raw slab before handling, we recommend correcting the edges by cutting approximately 2 cm from each side.

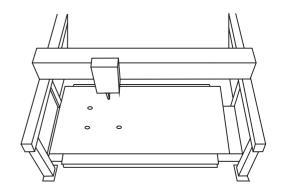
Recommended sequence for strain release cutting:



Due to the hardness of Ascale material, the disc cutter should be suitably cooled. The cooling jet must be continuous and always target the cutting point where the disc cutter will be in contact with the slab:

Sink holes: before making the cutouts, you should drill the corners of the holes using a bit with a radius of at least 5 mm.





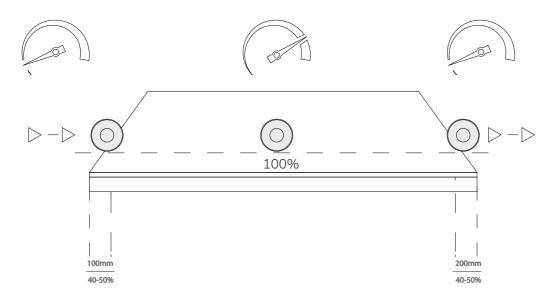
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CUTTING WITH A DISC CUTTER

We recommend cutting Ascale slabs with a segmented disc cutter. The cutting parameters are as follows:

Disc	RPM	Forward speed (m/min) for 6/12/20 mm thicknesses	
		Straight cut	45° cut
300 mm		3/2,5/2	1,5/1/0,7
350 mm	As per the manufacturer	3/2,5/2	1,5/1/0,7
400 mm		3/2,5/2	1,5/1/0,7

These speeds should be reduced by 50% at the beginning and end of the cut (approximately 15-20 cm at the start and end of the cut):





PARAMETERS FOR CNC TOOLS

Ascale slabs can be cut using computer numerical control (CNC) machines.

The most complex CNC machines offer the option to rotate and tilt the cutting head for numerous types of cuts. CNC is normally used after shaping the upper part with a disc cutter or hydrojet.

These machines are mainly used to cut out sink holes and for finishing off the edges of flush countertops, holes, edges and curved lines. The tool must have a diamond tip to process porcelain tile. Your choice of machine will depend on the specific process to be performed.

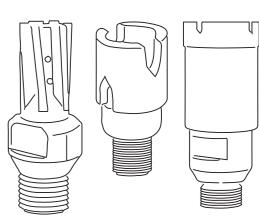
Do not make cuts or holes while the machine is oscillating. It is important to use plenty of water aimed in the right direction while cutting, both inside and outside of the machine.





The machine must be at least 1 mm wider than the thickness of the slab.

Tool	RPM	Forward (mm/min)
19-22 mm cutter	4500-5500	150-250
35 mm drill bit	3500-4000	10
Router bit	6000-9000	400

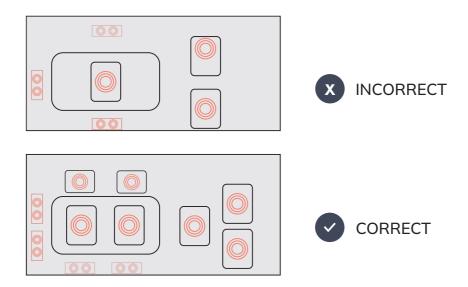


POSITIONING SUCTION CUPS

Before starting the process, check that the suction cups are correctly positioned on the rear of the slab.

If anchorage is insufficient, use softer joints of a suitable thickness.

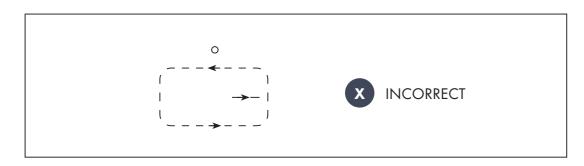
Correct placement of the suction cups holding the slab is fundamental to obtaining a good cut. Suction cups should therefore be spread evenly so as to hold the slab, including any part(s) to be removed. If this is not done, the part of the portion already cut could bend and lead to cracking before the process is concluded.

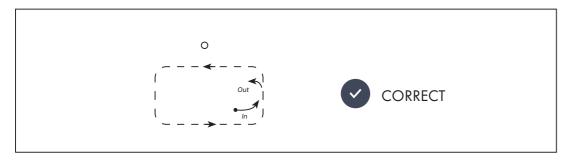


Clamps can be used instead of suction cups, in which case it should be remembered that the clamp side cannot be cut.

CUTOUT CUTTING DIAGRAM

Make cuts as shown in the diagram below, without cutting into the hole perimeter at 90°, as this will compromise quality in the final process.



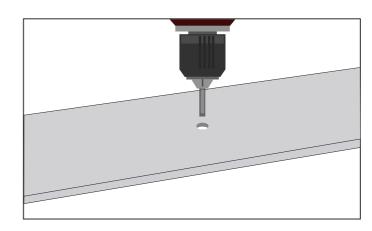


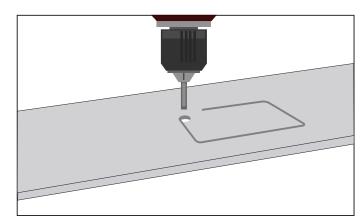
FLUSH PROCESS

Aconsejamos terminar el procesamiento de la encimera a ras antes de hacer el recorte.

Es posible cortar un rebaje máximo de 4 mm en una placa Ascale 12+ y de 8 mm en una placa Ascale 20+, de un tamaño y profundidad adecuados según las instrucciones de la ficha técnica del fregadero o aparato para instalar.

CUTTING PARAMETERS

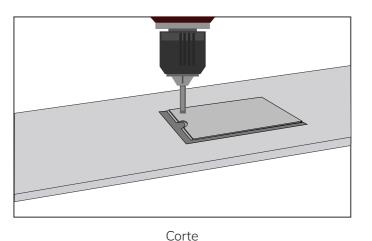




Perforación

Rebordeado

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 \wedge

MANUAL PROCESING

A manual cutting tool can be used to cut 12+ and 20+ Ascale slabs.

By using such accessories as cutting discs, diamond bits or abrasive pads of various grades, it is possible to obtain cuts, holes or finishes for edges or details on the surface of countertops.

The slab being processed should be suitably positioned to prevent movement and vibration. The area being processed and the tool being used should be constantly bathed in water to ensure proper cooling and process quality.

POST-PROCESSING CLEANING

Cutting, drilling and similar operations lead to dust residue caused by material abrasion. This residue tends to solidify on the surface once the water needed during the processing stage dries.

Correct cleaning is therefore essential after the processing stages because if this is done incorrectly it can produce marks that are difficult to remove (especially visible on darker colours).

Clean processing residue from the slab surface with plenty of water and then dry it with a paper cloth. Repeat this operation until it is clean. Avoid storing processed material that is still wet.

Polyurethane or epoxy adhesives are used when assembling the countertop and creating the edges, suspended sinks, etc. Epoxy products have been designed not to unstick, thereby guaranteeing long-term performance. For this reason, they could stick to the surfaces without being absorbed and make removal difficult or even impossible.

It is therefore essential to remove them quickly using sponges or soft cloths and the cleaning products recommended by the suppliers. Avoid contaminating the rest of the surface with cloths/sponges used to remove this material. Do not move the finished surface wearing gloves that are dirty with adhesive products.

If any epoxy/polyurethane material is observed after installing the countertop, it will need to be treated with basic products and soft sponges. However, it may not always be possible to completely remove this material as it will have completely dried.

WATERJET PARAMETERS

The entire surface of the slab must be supported on the ribs of the waterjet. The ribs must be as close as possible and must be in perfect conditions.

For perimeter and outer cuts, first discharge water off the slab. Then, make the first hole in the slab at 700 bar pressure for 10 seconds. After that, increase the pressure to around 3900 bar to begin cutting.

If the machine software and design allow, finishing the cut as close as possible to the edge of the slab is recommended.

Other recommended parameters:



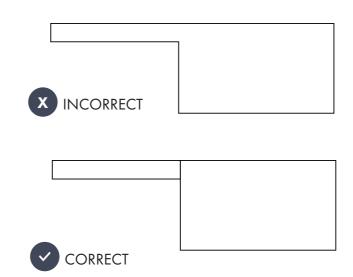
Head	0,88 mm
Abrasive flow rate	500 gr/min
Cutting speed (6 mm+)	1,8-2,4 m/min
Cutting speed (12 mm+)	1,2-1,8 m/min
Cutting speed (20 mm+)	0,6-1 m/min

DESIGN AND SHAPES

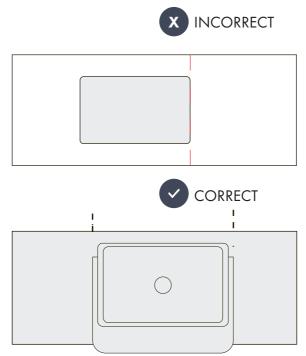
Certain recommendations should be followed when designing a countertop. Here are a few cutting, design and architecture tips to help reduce problems caused by breakage, cracks or deformations in the final product.

Ascale recommends using 12 mm and 20 mm thick material when producing countertops.

If the countertop design allows, avoid Ascale countertops with unbalanced weights:



Irregular cuts are also not recommended such as for a "farmhouse sink". In these cases, add joints to the countertop design:





PLANNING

General considerations

To the extent possible, the following indications must be observed:

- Make sure the support is in the final position
- Measure and project the size, shape and location of the surface. Measuring precision is essential for proper production and installation.
- Plan production with rectangular pieces that are as big as possible with the least amount of slab waste.
- Pre-mark the furniture with the location of any joints to be placed on the countertop. Joints should be placed on complex seams. Check that the surface is even in the places where joints will be added.
- Check the location and available space for any accessories to be placed in the countertop considering the distance between them and the areas around them.
- Do not cut visible edges on the countertop in accordance with slab edges given that the raw slab edge is not appropriate as a final slab edge.
- Si el proyecto incluye el uso de varias tablas, verifique la orientación de la gráfica del material.

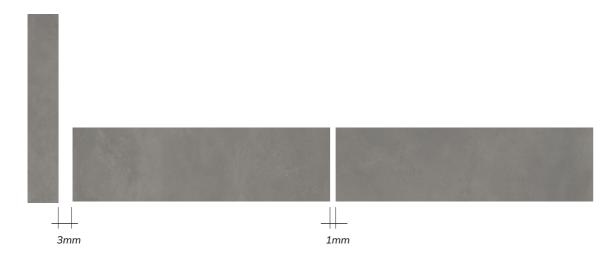
PATTERNS

If the project includes the use of several slabs, check the graphic orientation of the material.

If several slabs are to be used for graphic continuity (bookmatch effect, for example), pay attention when cutting the pieces that will be joined together. As occurs with natural stone, this type of work may show slight isolated deviations in the graphics even when done properly. Ascale will not accept claims for this reason.

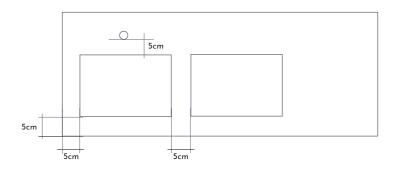
JOINTS

An empty space of at least 3 mm between the product Due to the nature of Ascale slabs, micro-bevelling and the supporting wall and approximately 1 mm is recommended for all joints. between juxtaposed slabs must be planned during the work as expansion joints.



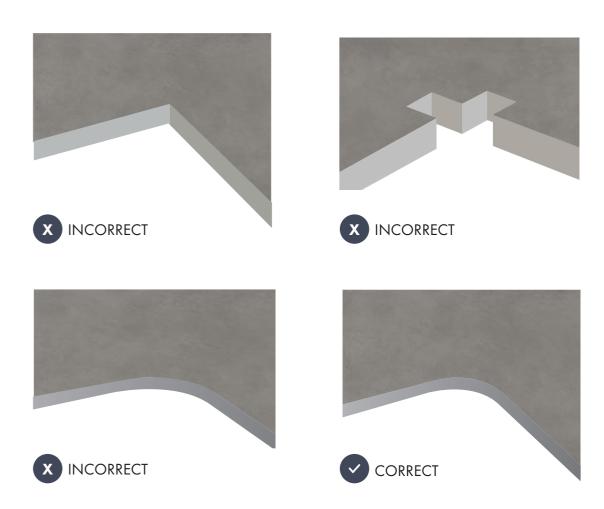
DESIGN OF HOLES FOR SINKS AND COOKTOPS

The minimum distance allowed between holes or cutouts and/or from the edge of the slab is 5 cm. If a gas hob is being used, leave 8 cm between the hob cutout and the backsplash.



The inner angles of the cutouts must have a constant radius of 5 mm.

If cutting with a grinder, drill holes must be made in each of the corners with a 10 mm drill bit prior to the cuts on the straight sides.



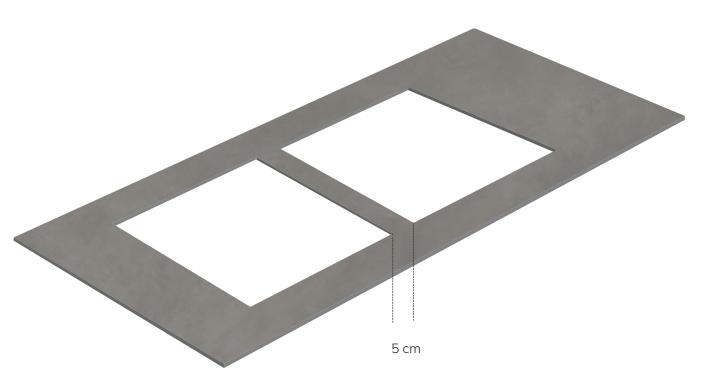


After cutting, the edges of the cutouts for vitroceramic hobs, sockets or switches are often a bit sharp or irregular; therefore, bevelling them with special diamond or abrasive sanders is recommended.

Polishing the edges of the cutout is recommended to eliminate any microcracks created when cutting. The more intense this treatment is, the less risk there will be in the future.

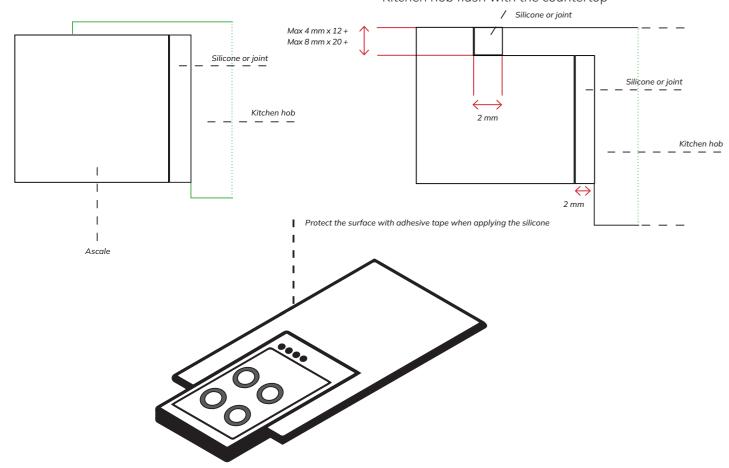
If large-size cutouts are planned (more than 70 cm), place a pre-cut bar approximately 5 cm wide in the centre of the opening in the direction of the depth (which must be removed after installation) to make any movement in the piece less critical.





Kitchen hob over the countertop

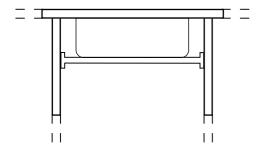
Kitchen hob flush with the countertop

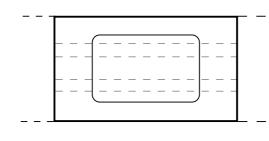


Processing Ascale 12+ and 20+ slabs to create holes for installing sinks or electrical appliances should only be done after a careful assessment of the processing measurements indicated in the data file for the product to be installed based on the installation method.

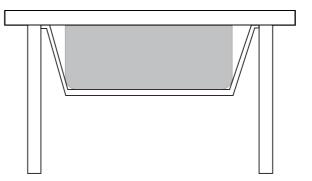
A minimum distance of at least 2 mm is required between the kitchen hob and the Ascale slab for the purpose of thermal dilation unless the device manufacturer indicates a larger distance. The gap should be filled with a suitable sealant.

Regardless of the type of sink being used in the project, support bars or other similar systems should be anchored to the unit structure to support the weight of the sink and the water it may contain so that it does not depend on the slab.

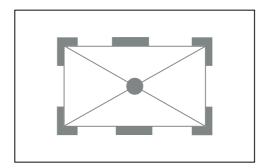


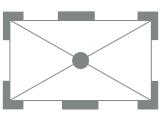


If the base has sliding drawers, these supports should have the proper shape so they can slide correctly:



Depending on the project (such as repeated grooves in close proximity), assess the possible need to reinforce the cut-out perimeter by applying an Ascale profile with a suitable adhesive underneath the countertop.





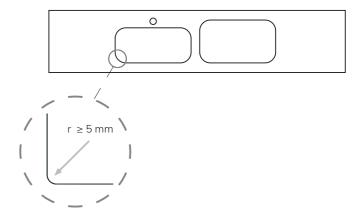
The Ascale 12+ and Ascale 20+ slabs can be processed to obtain different configurations for sinks and kitchen hobs.

Inside corners

To create inside open corners, make an adjustment based on a minimum radius equal to 5 mm in order to distribute tension in the same way you would normally when processing natural stone, marble and compound stone.

We do not advise creating right-angle inside corners (90°).

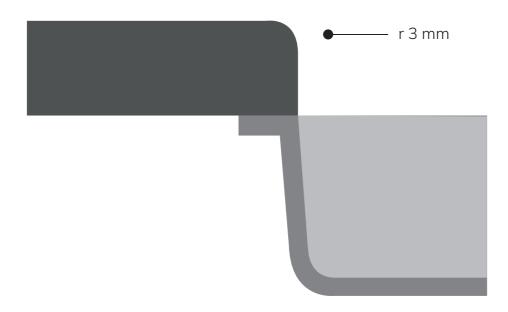
As for all stiff materials like marble, natural stone, quartz agglomerate and glass, it can be done under operator liability based on their own personal experience and using processes that the operator has tested and considers suitable.

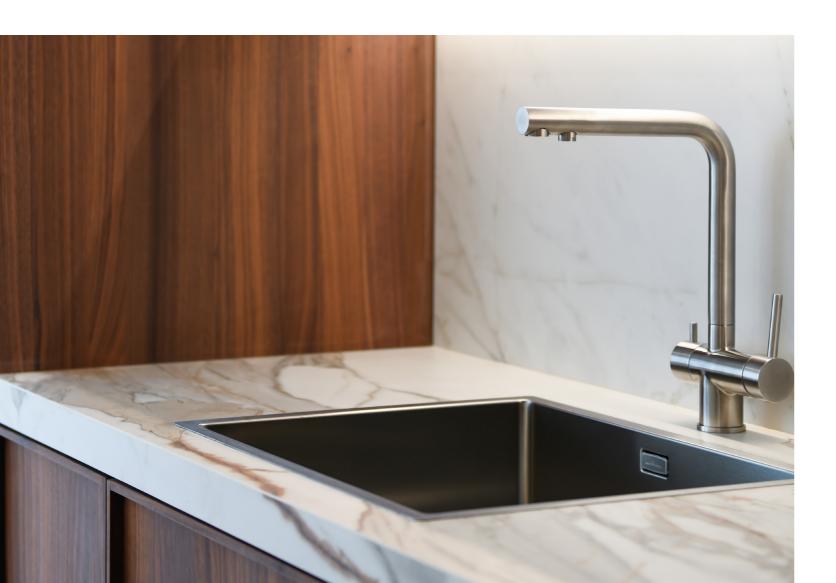


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SINKS AND HOBS

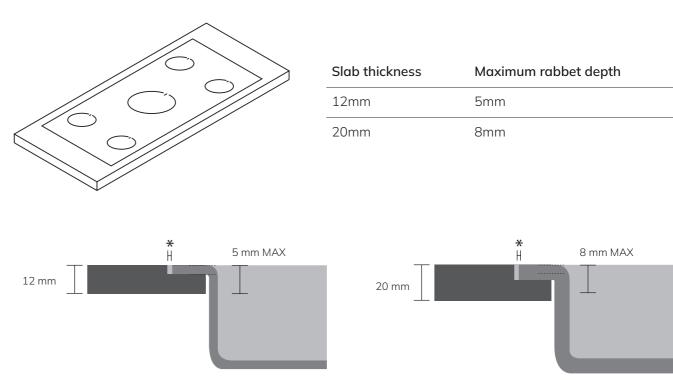
To reduce the risk of splintering at the edges to a minimum, a round edge or even a corner cove edge with a radius of at least 3 mm is recommended.



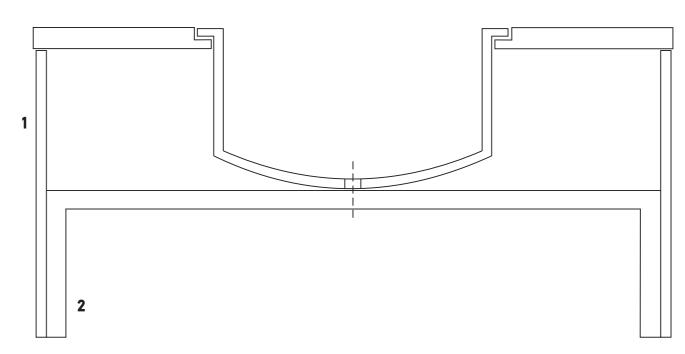


FLUSH SINKS AND HOBS

Flush sinks and induction or vitroceramic hobs supported on rabbets made on the surface of the countertop are only recommended for 12 mm and 20 mm thick countertops with the following maximum rabbet depths:



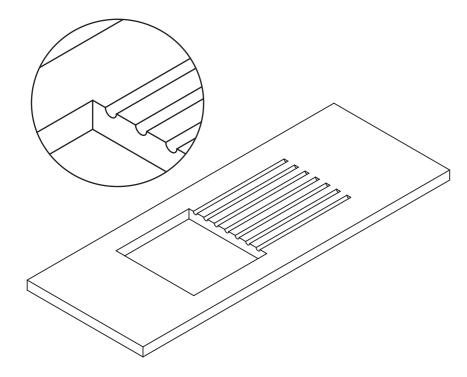
For large-size sinks, you might need to place a supporting rod under the sink:



DRAINING GROOVES

The best result for this work is achieved in full body materials where the finish on the grooves looks just like the normal slab surface. Considerations for this type of work:

- Procedure: create the rabbet based on the instructions provided in the section of this manual entitled "Cutting Parameters and Recommendations", starting from the hole for the sink. Sand the grooves by hand to remove any marks left by the router bit. Finally, treat the grooves with a sealant to prevent water absorption in that area.
- The depth of the channels must be limited to 25% of the thickness: 3 mm for 12 mm and 5 mm for 20 mm.
- The minimum distance between grooves should be 1 cm.
- Furthermore, the grooved area will need additional reinforcement on the back of the slab.



It must be taken into account that making the grooves (or recesses) will expose the base color of the slab, which may contrast with the surface design on some models. Depending on the model, the grooves may change color and be left without the design.

Production

Recess

Use a recessing router bit and always start from the sink hole. Never lower the router bit directly onto the surface

During the first two passes, remove 0.5 mm; after that, you can remove a maximum of 2 mm per pass.

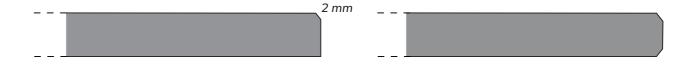
EDGES

Edge finishes can be obtained by processing with automatic machinery (polishers, numerical control machines) or by hand, depending on the desired effect.

Straight and bevelled edges

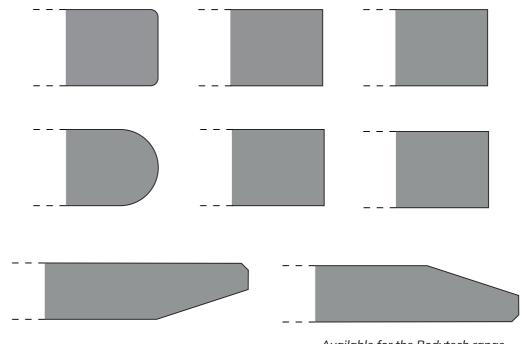
The straight edge is the finish that enables the edge of Ascale 12+ and Ascale 20+ slabs to be shown. This is usually used for the perimeter edge of the surface of countertops and kitchen panels, or as the finish for a hole when installing the sink beneath the countertop.

If required, the edge can be polished subsequently using a sequence of increasingly finer abrasive diamond grinders on CNC machines. We suggest creating a bevelled edge of at least 2 mm to increase edge strength in the event of accidental impact. For curved bevelling, a CNC machine with a grinder on 5 axes will be necessary.



Other edge types

Other edge types can be obtained (such as the bull's nose and half bull's nose) using angle grinders with specific profiles on CNC machines. As a result, several different edge finishes can be obtained using different angle grinders. The working speed should be checked as a precaution.



Available for the Bodytech range

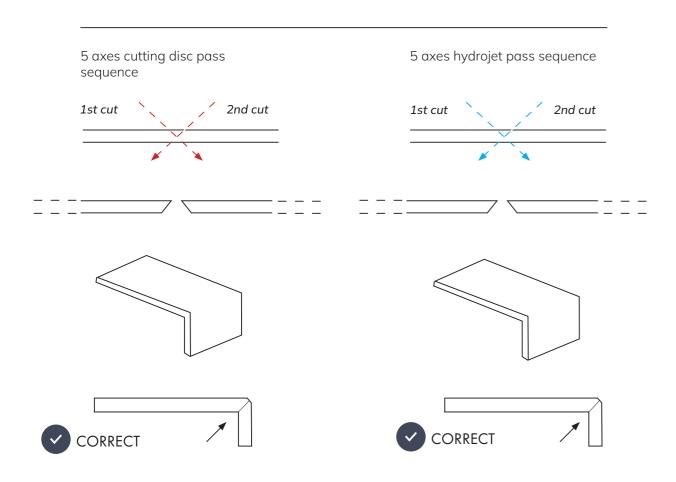


45° EDGE AND STRUCTURES

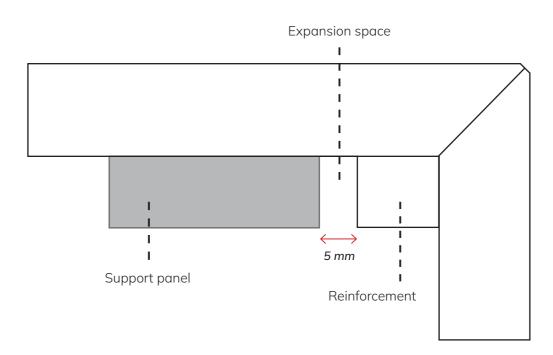
Ascale 12+ and Ascale 20+ slabs can be processed to obtain continuous joints, which can then be used to create slabs of heights greater than the product thickness, sinks and other structures. This solution is also adopted when graphical continuity is desired on the front countertop panel.

After creating the pieces to be used, we recommend protecting the adjacent surfaces with plastic film or adhesive tape to prevent the slab being stained with glue because the adhesives will be difficult to remove once dry.

Clean the sections to be glued and apply an even layer of the adhesive over the entire surface. Make sure that the sections remain in position until the glue has completely dried, following the manufacturer's instructions. Once the glue has completely hardened, create a bevel of at least 2 mm.



We suggest reinforcing the joint by applying profiles made from unused parts of the Ascale slabs secured with the same type of adhesive as that used to glue the 45° angle.



We recommend using two-component adhesives (generally epoxy-based or equivalent), which are widely available in the market.

These adhesives can be pre-coloured or transparent, and specific colour additives can also be used with them. A selection of products available in the market is shown below. Several companies have coloured glue or adhesive products in their range that can be combined with Ascale finishes.

Ask the manufacturer directly about suitable products.

We recommend proper and immediate cleaning of all glues and adhesives used, based on the manufacturer's instructions. Removing any glue later that has dried might be impossible and would lead to the formation of halos on the slab.

Bodytech finish for the edges

For finishing Ascale products produced using Bodytech technology, the surface structure can be recreated on the slab edges.

This is usually done using a sand blaster (commonly used for natural stone) with a suitable air pressure level and quantity of sand.

We recommend protecting the horizontal surface of the slab so it is not affected by the sand blasting process, which would compromise its finish and technical characteristics.

Fibre abrasion

The fibre reinforcement in the visible part of the countertop edge can be removed, either manually or using cutters, to improve the appearance. Because this is a fibreglass material applied with a polyurethane adhesive, this process should be carried out in accordance with applicable national safety regulations.

SUBSTRUCTURE AND INSTALLATION

12 mm and 20 mm (with reinforcement mesh) thick Ascale slabs do not require adhesive on a continuous structural support even though it is common practice.

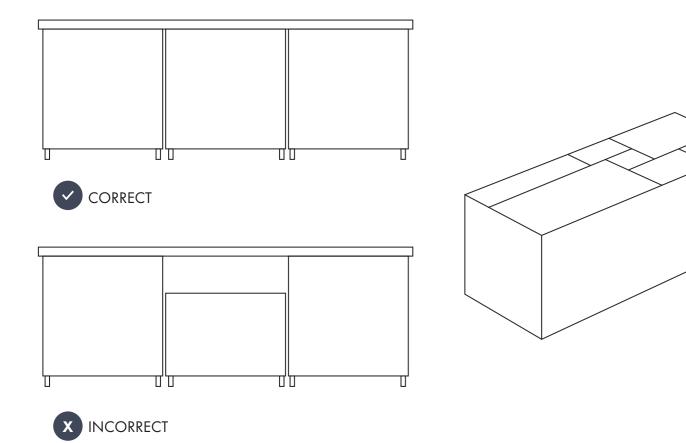
The support material must be rigid, dimensionally stable for the conditions of use and have a thermal expansion coefficient that is similar to the slab. For outdoor countertops, do not use wooden supports or any recycled materials or materials with a thermal expansion coefficient that is too different from that of the ceramic material (6-7 M°K-1).

The countertop surface must be perfectly supported as any unsupported point may weaken the piece produced. Therefore, never apply isolated drops of silicone but rather extend the adhesive all across the supporting area.

12 mm thick slabs must be fixed to a base (total perimeter of the perfectly aligned furniture or substructure) in a $600 \times 600 \text{ mm}$ square.

20 mm thick slabs must be fixed to a base (total perimeter of the perfectly aligned furniture or substructure) in a $900 \times 900 \text{ mm}$ square.

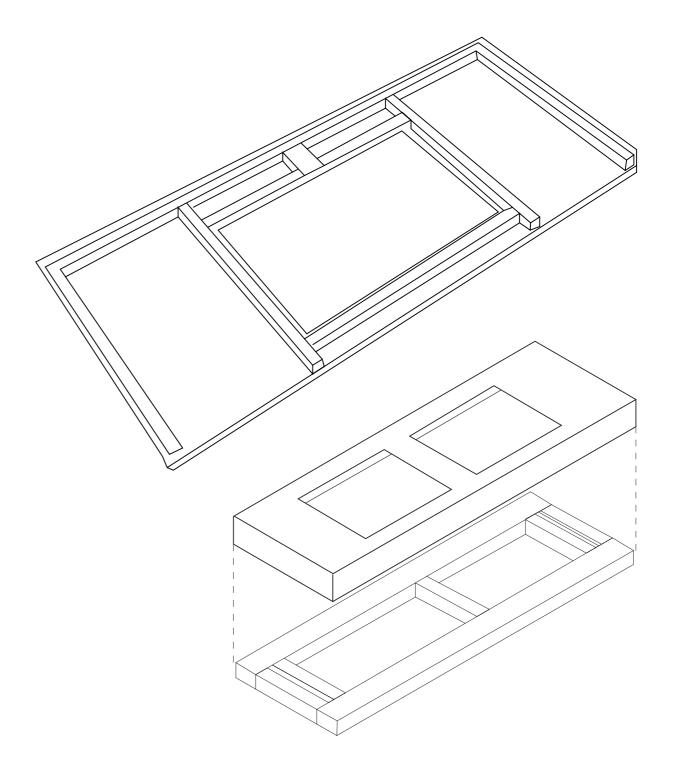
Continuous surface reinforcements such as an integrated board on the furniture should be placed on countertops with straight edge designs where the substructures cannot be hidden.



REINFORCEMENTS

These reinforcements are important because they give the countertop more rigidness and stability. The reinforcements must be distributed all along the perimeter so they are directly supported on the sides of the kitchen furniture. For tap holes, wooden or similar reinforcement is recommended as it will distribute the tension generated during daily use.

For countertops with 45° edges, the edge reinforcements must be made with the remains of the slab used or dense granite. Do not use reinforcements made of other materials (quartz, for example) as the thermal expansion may cause curling or openings in the edging.





OVERHANGS

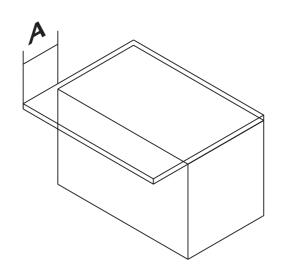
Ascale slabs in 12 and 20 mm thicknesses allow for overhangs.

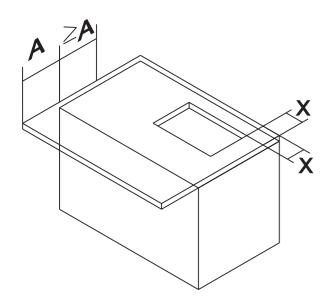
Overhangs are not recommended when there are cutouts or holes in the slab at least 15 cm from the edge of the furniture; for holes or cutouts at a distance of 15-60 cm from the edge, the length of the overhangs must be reduced by 50% with respect to the following indications.

Ascale recommends:

SINGLE OVERHANG

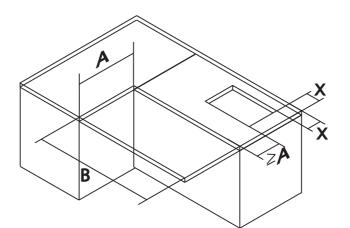
Thickness	12 mm	20 mm
	A ≤ 35 cm	A ≤ 45 cm





SINGLE OVERHANG WITH A CUTOUT

Thickness	12 mm	20 mm
	A ≤ 35 cm	A ≤ 45 cm
	X ≥ 10 cm	X ≥ 10 cm



PARTIAL OVERHANG

Thickness	12 mm	20 mm
	A ≤ 15 mm	A ≤ 30 mm
	B ≤ 80 cm	B ≤ 100 cm
	X ≥ 10 cm	$X \ge 10 \text{ cm}$



20 mm Thickness 12 mm $A \le 25 \text{ cm}$ $A \le 35 \text{ cm}$

