CompactSlab®

Technical Information

OPULENCE WOOD PRODUCTS

CompactSlab

1. Product Description

CompactSlab tops are elements used as an integral part of the design and construction with a wide range of typical interior design options, for residential and corporate applications: kitchens, bathrooms or countertops for the home, as tabletops for commercial premises, etc. which at the same time provide an excellent finish with exclusive colors from the Decotone line. Consult your commercial advisor about references available in CompactSlab, the tone of CompactSlab may vary slightly with respect to the traditional line of Decotone HPL (ask for samples).

2. Advantages

- Our CompactSlab is Antimicrobial and helps to eliminate up to 99.7% of bacteria on the surface.
- Strong and durable.
- Variety in design.
- Resistant to water and common substances in kitchens and bathrooms.
- Easy to clean.
- Resistant to abrasion and microscratches
- Easy installation.
- Resistant to stains.
- Resistant to high temperatures.
- Slim design (12.5mm thick)
- Long useful life.
- Non-porous material.
- Carbon Neutral.

3. Transport And Transfer

The CompactSlab sheets must be transported in a horizontal position, perfectly aligned one on top of the other, without exceeding 10 modules in height. It is recommended to protect the perimeter with cardboard to prevent them from chipping on contact and should preferably be transported on pallets.
The modules must always be handled on site with gloves and suction cups to avoid cuts from the edges of the panels. Manual transfer must be carried out in a horizontal position. If stretchers are required for vertical transport, they must be designed with the same dimension as the panels. Despite the excellent hardness of the surface, the weight of the stack of panels can be a possible cause of damage. Therefore, it is always necessary to avoid any type of dirt or dust between the panels.
The sheets of CompactSlab must be secured against slipping during transport, when loading or unloading the sheets must be lifted. Do not push or drag them by the edges. During transport, the protection films must not be subjected to heat or direct sunlight. Remember that transport and transfer must always be done ensuring that the place is dry, never outdoors.

4. Storage

When you are going to store CompactSlab covers, keep in mind the following recommendations:

The material must be conditioned in a dry and ventilated place, never outdoors.

They must be stored horizontally and as far as possible at room temperature below 30ºC and relative humidity below 60%, for no reason should the tops be left leaning on walls or placed in a vertical position, since, due to the force of gravity and frequent changes of temperature, buckling may occur. Avoid storing them in humid places.

Stack tops on top of each other in a continuous manner, with no panel areas cantilevering over other panels. A maximum of 10 decks should be stacked. It is advisable to place them on pallets or any other type of platform that allows air circulation from below and protects from possible water pooling.

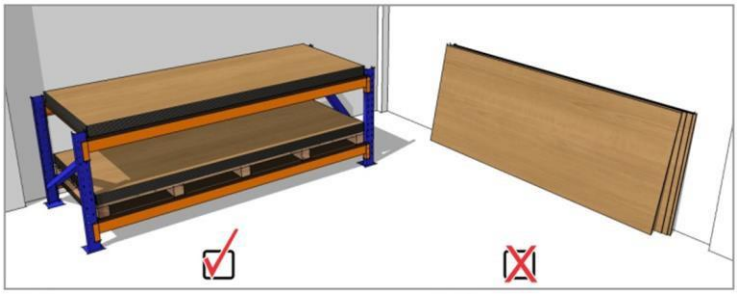
Work environments vary with the weather seasons, and it is common to have variations of ±25C° and/or up to ±40% relative humidity. Due to their nature and composition, CompactSlab tops react to differential humidity and temperature conditions. When a laminate has one side exposed to condition A (for example, the environment) and its other side is exposed to condition B (for example, the factory pallet), the material accommodates itself to this reality by "shrinking the drier side" and producing a typically concave upward deformation.

This should be managed and prevented as follows:
The pallet must be conditioned at the temperature and humidity to be processed/used for a minimum of 48 hours. At the beginning of said conditioning and before lowering the CompactSlab from the pallet, the film that wraps the pallet must be opened and the plastic strap must be removed. Usually the upper sheet and the lower sheet will have a more radical behavior as they are exposed to extreme conditions. These two sheets are recommended to be turned over and left to condition for an additional time. Normally these sheets recover their flatness.

Improper storage can cause permanent deformation of CompactSlab covers. The CompactSlab comes with separating kraft paper that must always be kept between each module while in storage to avoid deterioration of the surface.

The **Opak reference CompactSlabs** are protected with film on both sides. The **front** protective film should only be removed once it is installed, as it protects it from the friction to which they are exposed during transport, storage and installation. However, the protective **backing** film must be removed before installation to avoid imbalance of the installed product. As soon as this film is removed, the first cleaning process must be carried out to remove adhesive residues from both the film and excess from the installation. The longer the product is installed with the protective film on, the more difficult it will be to remove adhesive residue. In extremely dry or humid installation conditions, the protective film must be removed before installation.

Consider that contaminants (for example, oil residues from the cutting or drilling machine, grease, adhesive residues, construction mortars, sunscreens, chemicals in general, etc.), which are placed on the surface of the Covers during storage or assembly must be removed immediately, leaving no residue.



4.1. Inspection

Our process and quality control guarantee that the product reaches customers in the proper way, however, it is advisable to carry out an inspection of the product upon receipt, to verify that it is free of manufacturing defects that may affect its use in the future.

5. Machining of CompactSlab

5.1. Recommendations For CompactSlab Machining

Circular saws, panel saws or machining centers can cut and/or transform the compact according to your design requirements. It is recommended to check with your machinery supplier what would be the ideal use to cut CompactSlab according to the specifications of your machines in the plant and thus avoid any future inconvenience.

- When working with CompactSlab Tops, feed rates should be slower (50%) due to the density of the material (compared to thin HPL on particleboard/MDF).
- When cutting the product it is recommended to operate with a minimum speed of 3m/min and a maximum of 5m/min.
- The recommended cutting discs must be made of tungsten carbide, with a trapezoidal/flat tooth type, the revolution of the disc is defined in the disc to be used taking into account the type of saw.
- A periodic change of discs must be carried out to avoid damage to the teeth. The cutting recommendation is 150 to 170 linear meters to make the change.
- The tools can be sent to sharpen after their correct use. In the cutting discs we can have between 10 and 12 sharp, depending on the quality of the tool; in strawberries there are between 4 and 6 sharp ones.

• Cutting and feed rates play an important role in both tool life and cut quality. As in any machining process, the parameters of the machines and the types of tools that will be used can vary. For this reason, it is best to perform tests to determine the proper parameters for the process.
• Saws with the "scoring saw" option minimize material deterioration and are recommended for optimal cutting.
• When the elements are milled, it is recommended to leave an oversize of 4 millimeters taking into account the final measurement.
• For machining centers, it is recommended to have a dust extraction system that guarantees proper cooling of the tools to be used.
• For perimeter milling it is recommended to do it in several cuts depending on the thickness of the material.
• The use of tungsten carbide straight Z-2 type burs is recommended to obtain better finishes and different types of edges.
• While good grade carbide is effective for small projects, diamond cutting tips can be more durable and cost effective.
• It is recommended to follow the instructions of the tool manufacturers in order to define the revolutions and advances that must be executed in the milling process, according to your machine.
• The support of machinery and/or tool suppliers is recommended to make the corresponding adjustments, taking into account the maintenance that may take place and its periodicity, in order to avoid future damage.
• All edges should be sanded smooth, free of sharp corners and cut marks, to improve visual presentation, prevent potential accidents, and eliminate material stress points.
• Hand Routing – For best results, the finished edges of CompactSlab Decks should be routed. Cut the raw panels with an allowance of approximately + 3mm so that when using the router the final measurement is guaranteed.
• Use only cleaners recommended in the care and maintenance chapter of this technical bulletin.
• Any machining process can generate or produce heat and thermal stress in the element and it is necessary to leave the CompactSlab at rest to acclimatize before installing.

The following general guidelines apply to cutting made with circular saws.

• Teeth: alternate or V-shaped flat cap teeth
• Positioning: always place the teeth on the decorative side of the panel.
• Edge cutting: the best results are obtained with bench machinery. Sharp edges can be rounded off with sandpaper or a router.
• Angle of inclination: the best performance is obtained with an angle of inclination of 45°
• Use rubber wedges to prevent the panels from slipping in case the machine is not equipped with a mobile work cover.

Consider that what is stated in the document are recommendations that can be adjusted with the support of the respective tool and/or machinery technicians and are subject to changes in order to preserve their useful life.

Circular Hand Saws

When using a handheld circular saw, the bottom side of the panel should be turned up.

Circular Bench Saw

• Keep decorative side up when cutting, drilling and routing.
• When a decorative side is to be slipped onto the machine countertop during machining, it is recommended to place a protective panel over the countertop (eg hardwood).

Diameter		*Teeth*	RPM	*Thickness*		*Blade Height*	
mm	**Pulg /** *in*	**N°**	**1/min**	**mm**	**Pulg /** *in*	**mm**	**Pulg /** *in*
150	6	36	4000	2.5	7/64	15	5/8

Jigsaws

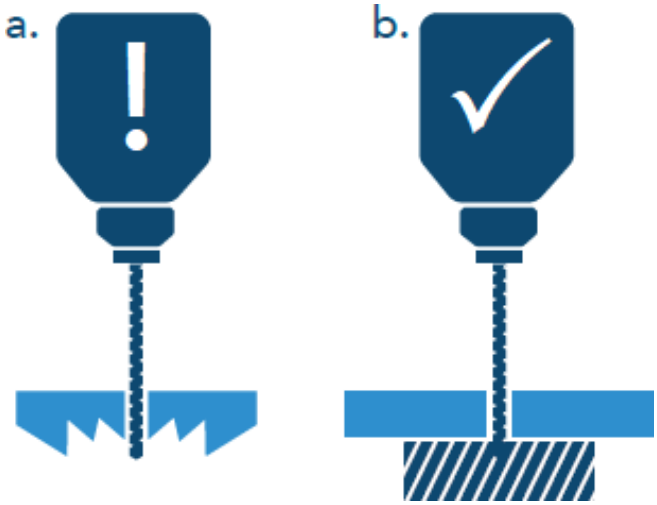
The carbide-tipped inside corners of the cutouts should first be drilled with a hole diameter of 8-10mm (≈ 5/16 - 3/8in). Consider using a dedicated jigsaw blade for decorative surfaces.

Drilling

To drill CompactSlab tops, use 10,000rpm drills. With biangular tip tungsten-carbide bits, the bit selected should be 0.002 inch (0.05mm) larger than the diameter of the hole to be made.

The use of carbide-tipped HSS drills with an angle of 60-80º is recommended. CompactSlab tops must be drilled with backing sheets, do not leave the area to be drilled empty. Large holes, such as those used for fixtures, faucets, etc. they should be drilled with combination bits (starting small and increasing to the required size). The output speed of the drill must be carefully selected so as not to damage the surface of the product. Shortly before the bit exits the workpiece at full diameter, the feed rate should be reduced by 50%.

During drilling operations, support must be guaranteed to the back of the piece, hardwood or equivalent material can be used to prevent the surface from fracturing.



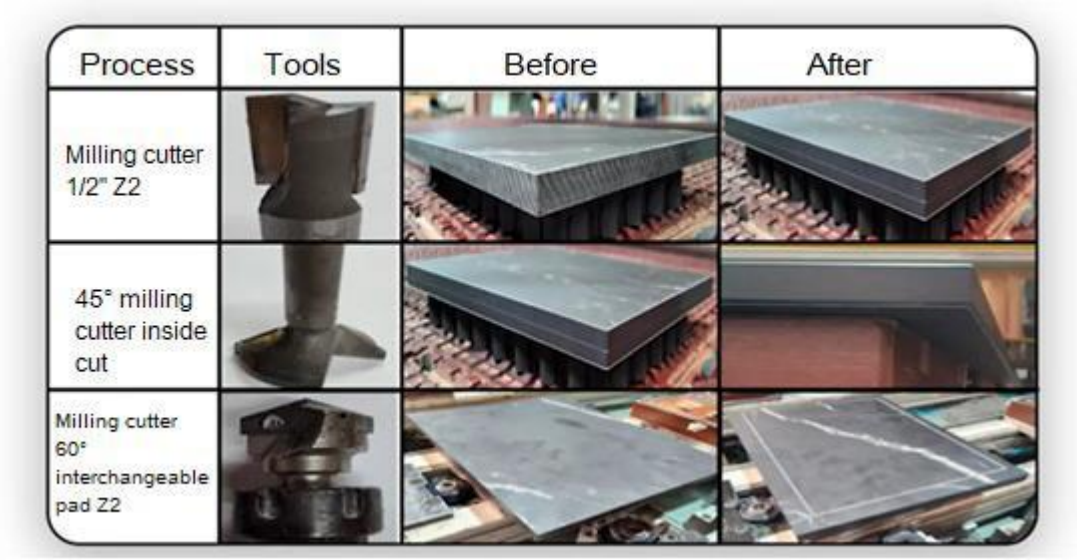
Milled or Routed

For routing tasks, you must use cylindrical cutters of 12,000 r.p.m., minimum.

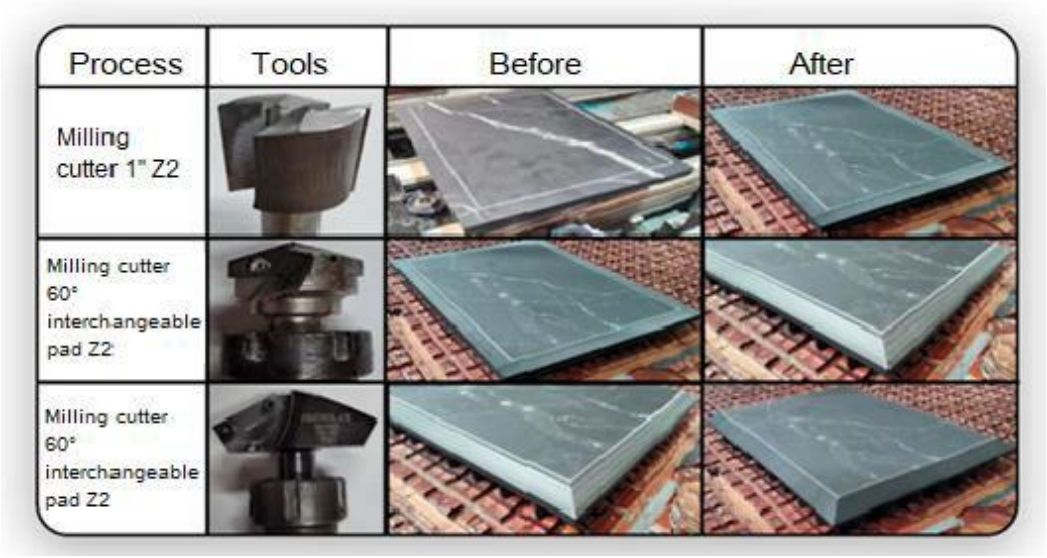
- Straight and angled bits for edging and chamfering.
- Circular diamond saw blades for grooves.
- Ball bearing bits for polishing edges.

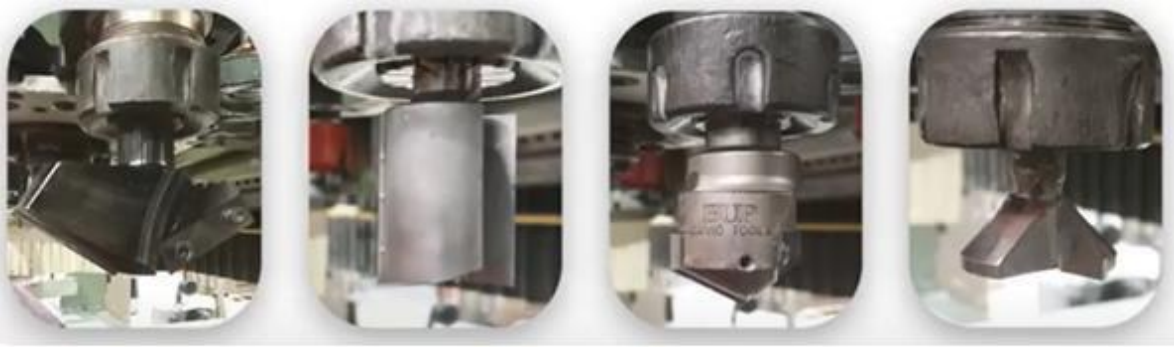
C.N.C. (Computer numeric control)

For cutting and machining tasks with C.N.C. (Computer Numerical Control) keep the machines and tools that you are going to use in optimal conditions, a defective tool will affect the final



finish of the product, use the suggested tools for each process.





60° interchangeable pad milling cutter

Milling cutter 1" straight cut

45° downcut end milling cutter

45° upcut end milling cutter

Before any machining, check that the piece is properly fastened on the work table so that it does not move during the process, check that at the time of machining the cover does not have chips or particulate matter that could deteriorate the surface

We recommend as a starting point for C.N.C. machining:

- Speed: 12,000- 18,000 RPM according to the diameter of the tool.
- Advance speed: 2.5 to 3.5 m/min for roughing, leaving 300 microns for finishing.
- Advance speed: 4.5 to 6 m/min to give final finish.

Check the configuration of the machine including "point 0" (or starting point) and height of tools before proceeding to machining, we suggest you perform a test with scrap or non-conforming material before working with the CompactSlab, remember to perform the initial roughing as the procedure suggests, the surface of the CompactSlab is hard and for this reason it is essential.

1.1. Tools

1.1.1. Electric Tools

Drill

Wood Router

Festool Saw (Fixed Table Saw if you have)

Electric Screwdriver

Orbital Sander

Biscuit Joiner

1.1.2. Hand Tools

Caulking Gun

Self-retracting Metal Tape Measure

Level

Rubber Mallet

Hand Clamps

Pressure Clamp

Suction Cups

Putty Knife

5.5mm Non-through Drill Bit

4mm Hex Bit For Screwdriver

½ x ¼ Bur

½ x ¼ Bearing Router Bit

45° Bevel Cutter With Bearing

2. Seams Of CompactSlab Tops

2.1. Common Joints of CompactSlab Tops

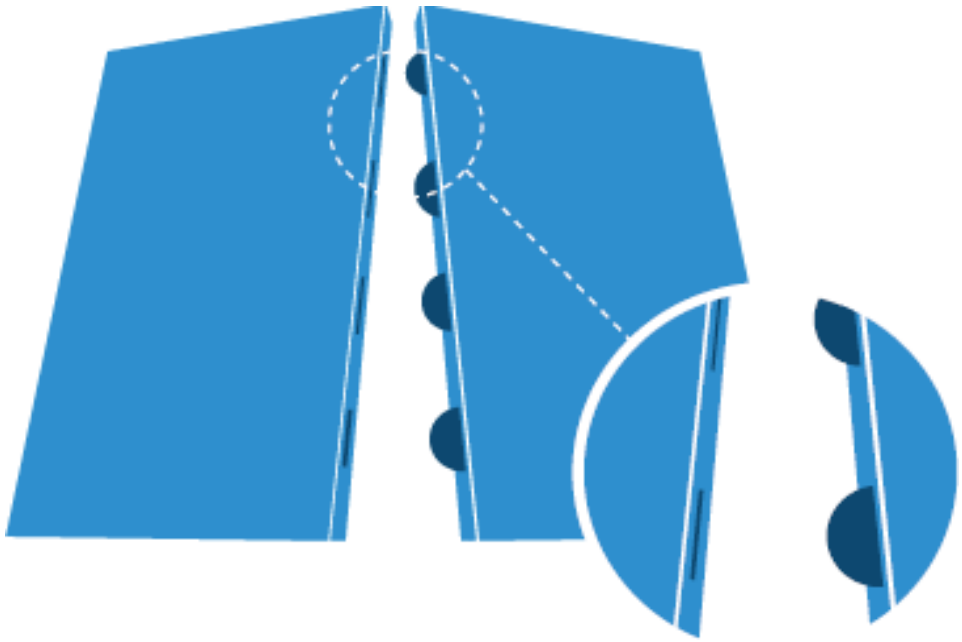
2.1.1. Joining Using Plugins As Alignment Biscuits (Inserts)

By using aids such as alignment biscuits (inserts), these will ensure that the alignment and fit of the pieces is proper when joining them.

• Initially cut the edges to be joined. It is advisable to oversize the 2 pieces, each one + 3mm, so that when routing the measurement is guaranteed. Routing of parts will ensure a proper fit.

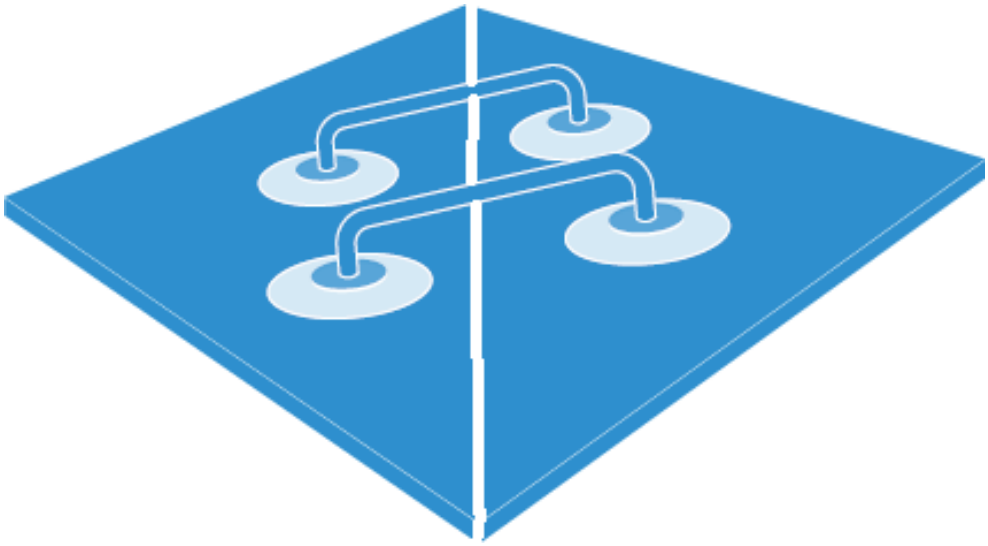
- The joint should be snug.
- Use a slot cutter or biscuit machine woodwork bit.

- It is recommended to use a minimum of 4 biscuits for the butt joint, biscuits at the ends should be 75mm from the inside and outside corners. The other biscuits should be evenly distributed for proper alignment and leveling.



- Thoroughly clean the areas to be joined using industrial spirits and a clean white cloth.
- Prepare clamping tools such as hand clamps, vice grips, suction cups, wooden blocks, etc. that allow it to maintain stability while the adhesive cures.
- Prepare the two-component epoxy adhesive using the same amount of each of the components (Follow the supplier's instructions).

- Apply the two-component epoxy adhesive evenly on the faces of the parts to be glued.
- Join the pieces and secure them using the fastener you selected.



- Remove excess adhesive with industrial spirits and a clean white cloth.
- Two-part epoxy adhesive has a 24-hour cure time.
- Do not scrape, chisel, or remove adhesive before it is fully cured.

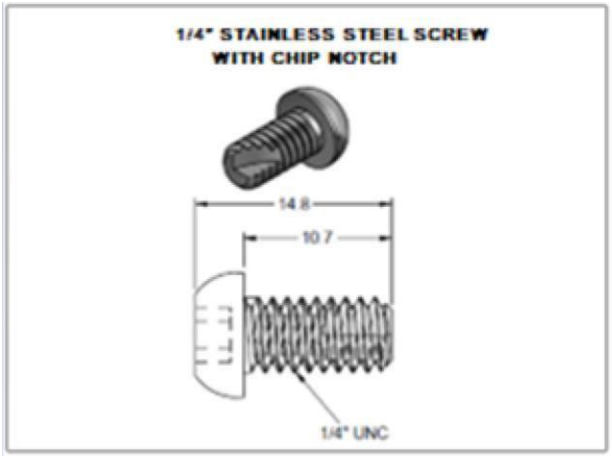
2.1.2. Joint Without Complements

- Initially cut the edges to be joined. It is advisable to oversize the 2 pieces, each one + 3mm, so that when routing the measurement is guaranteed. Routing of parts will ensure a proper fit.
- The joint should be snug.
- Thoroughly clean the areas to be joined using industrial spirits and a clean white cloth.
- To guarantee the joint butt and in the proper position, place transparent adhesive tape on the back of the elements to be joined, so that when gluing the pieces do not move.
- Prepare clamping tools such as hand clamps, vice grips, suction cups, wooden blocks, etc. that allow it to maintain stability while the adhesive cures.
- Prepare the two-component epoxy adhesive using the same amount of each of the components (Follow the supplier's instructions).
- Apply the two-component epoxy adhesive evenly on the faces of the parts to be glued.
- Join the pieces and secure them using the fastener you selected. You can use a support element on the back, (A piece of wood, MDP, MDF, etc.) so that the joint is level and does not move.
- Remove excess adhesive with industrial spirits and a clean white cloth.
- Two-part epoxy adhesive has a 24-hour cure time.
- Do not scrape, chisel, or remove adhesive before it is fully cured.
- Take into account that this procedure requires special care in your application to avoid leaks and installation inconveniences, always check the adequate support of the cover to guarantee its performance.

2.1.3. Mechanical Connection With Plate

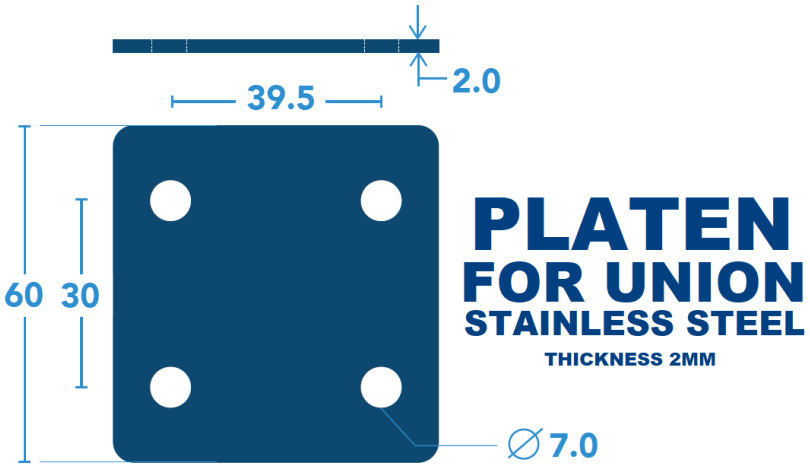
You can use plates to join the elements on the underside of the material, keep in mind that you must seal the joint using silicone of the color you consider appropriate, this in order to avoid liquid leaks.

• Check the dimensions of the plate and the perforations that must be made in the 2 pieces to be joined, consider their location, checking the dimensions of the furniture or the surface where you will make the final installation of the CompactSlab top. This is so that when the CompactSlab top over is located they do not become an obstacle for installation.
• The recommended screw for any anchorage in CompactSlab top is a ¼" stainless steel self-



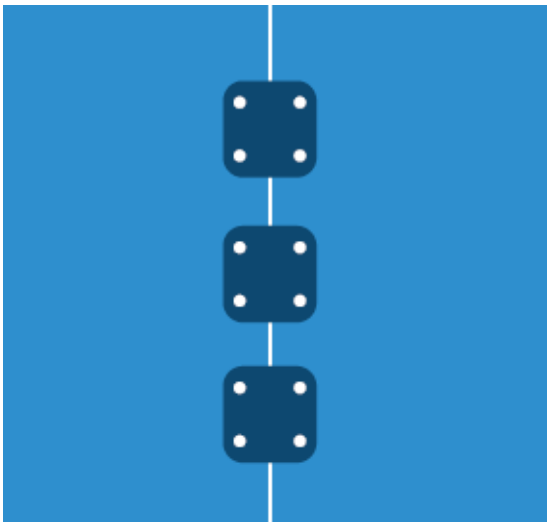
tapping screw with chip notch. Suggested dimensions are as follows:

• It is recommended to use a 2 mm thick Stainless Steel plate, with the following dimensions:



• Initially cut the edges to be joined, it is advisable to oversize the 2 pieces, each one + 3mm, so that when routing the measurement is guaranteed. Routing of parts will ensure a proper fit.
• The joint should be snug.

• To ensure the butt joint and in the proper position, place transparent adhesive tape on the TOP of the elements to be joined, so that when splicing the pieces do not move. It is possible that due to the thickness tolerance between one sheet and another, it is necessary to wedge the plate, always guaranteeing the flatness of the surface at the top.
• Overlap the plates to be used, the use of 3 plates is recommended to guarantee a better splice. Locate one at each end, (check position so it does not interfere with CompactSlab Top to Base assembly).



• Mark the position of the holes to be made for anchoring the plates.
• With the 5.5mm non-through bit, make the holes considering that it cannot exceed a depth of 10mm.
• Join the pieces and secure them using the plates and ¼" stainless steel self-tapping screw with chip notch.
• Apply a layer of silicone on the joint, so as to eliminate any type of filtration that may occur.
• Clean and remove excess silicone.

2.2. 45° Joints Of CompactSlab Tops

2.2.1. Joining Using Plugins As Alignment Biscuits (Inserts)

By using aids such as alignment biscuits (inserts), these will ensure that the alignment and fit of the pieces is proper when joining them.

• Initially cut the edges to be joined. It is advisable to oversize the 2 pieces, each one + 3mm, so that when routing the measurement is guaranteed. Routing of parts will ensure a proper fit.
• It is recommended to use a minimum of 4 biscuits for joining at 45°. The biscuits at the ends should be 75mm from the inside and outside corners. The other cookies should be evenly distributed for proper alignment and leveling.
• Thoroughly clean the areas to be joined using industrial spirits and a clean white cloth.
• Make sure the pieces are tight when joining.

• To guarantee the joint butt and in the proper position, place transparent adhesive tape on the back of the elements to be joined, so that when gluing the pieces do not move.
• Secure the pieces properly when making a 45° joint so that the corners meet properly and thus guarantee the joint.
•Prepare clamping tools such as hand clamps, vice grips, suction cups, wooden blocks, etc. that allow it to maintain stability while the adhesive cures.
• Prepare the two-part epoxy adhesive using the same amount of each component. (Follow the provider's instructions.)
• Apply the two-component epoxy adhesive evenly on the faces of the parts to be glued.
• Join the pieces and secure them using the fastener you selected.
• Remove excess adhesive with industrial spirits and a clean white cloth.
• Two-part epoxy adhesive has a 24-hour cure time.
• Do not scrape, chisel, or remove adhesive before it is fully cured.

Note: Take into account the dimensions of the kitchen, the location of the CompactSlab Top and the distances with other elements before carrying out the process.

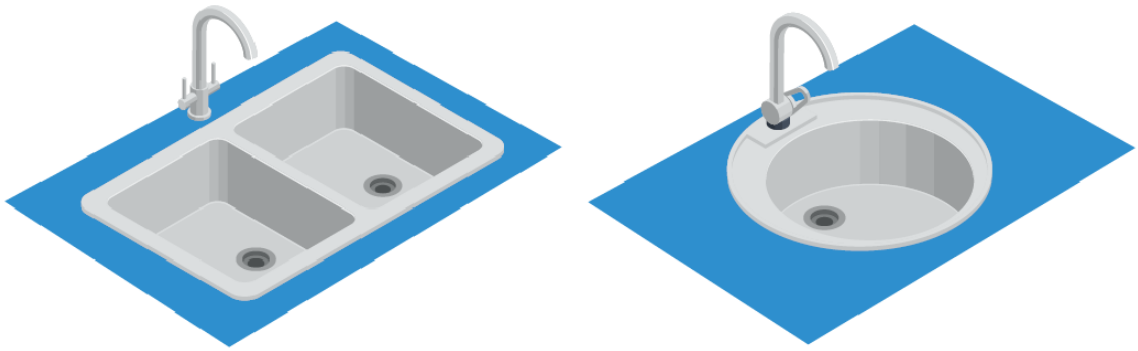
2.2.2. Joint Without Complements

• Initially cut the edges to be joined. It is advisable to oversize the 2 pieces, each one + 3mm, so that when routing the measurement is guaranteed. Routing of parts will ensure a proper fit.
• The joint should be snug. Make sure the pieces are tight when joining.
• Thoroughly clean the areas to be joined using industrial spirits and a clean white cloth.
• To guarantee the joint butt and in the proper position, place transparent adhesive tape on the back of the elements to be joined, so that when gluing the pieces do not move.
• Secure the pieces properly when making a 45° joint so that the corners meet properly and thus guarantee the joint.
•Prepare clamping tools such as hand clamps, vice grips, suction cups, wooden blocks, etc. that allow it to maintain stability while the adhesive cures.
•Prepare the two-component epoxy adhesive using the same amount of each of the components (Follow the supplier's instructions).
• Apply the two-component epoxy adhesive evenly on the faces of the parts to be glued.
• Join the pieces and secure them using the fastener you selected. You can use a support element on the back, (A piece of wood, MDP, MDF, etc.) so that the joint is level and does not move.
• Remove excess adhesive with industrial spirits and a clean white cloth.
• Two-part epoxy adhesive has a 24-hour cure time.
• Do not scrape, chisel, or remove adhesive before it is fully cured.

Note: Take into account the dimensions of the kitchen, the location of the CompactSlab Top and the distances with other elements before carrying out the process.

3. Installation

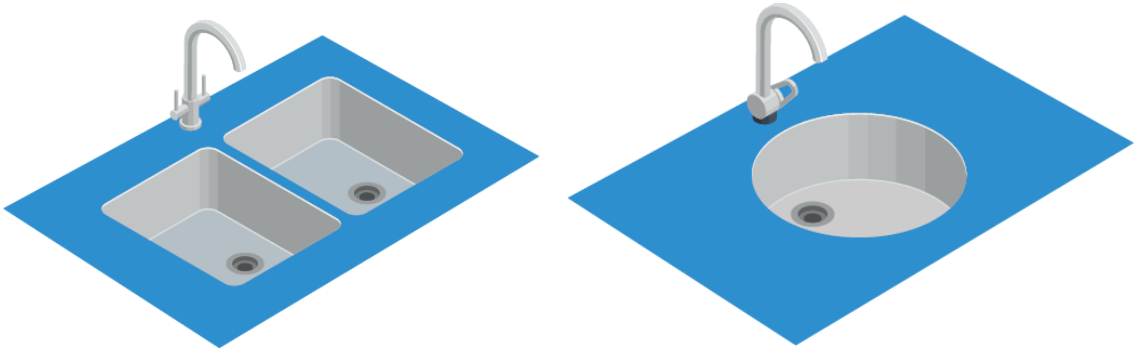
3.1. Installing A Dishwasher Or Sink Drop-In/Self-Rimming In A CompactSlab Countertop



- First perform a visual inspection inspect the sink/dishwasher for blemishes and check color.
- Identify location, the distance between the drop in sink/dishwasher cutout and the seam location (if any) must be a minimum of 75mm, while the distance from the front edge of the CompactSlab Top must be a minimum of 40mm.
- Locate the sink/dishwasher, based on the size and position of the CompactSlab Top. Lay it face down on the face of the CompactSlab Cover and mark around the perimeter to locate the position of it.
- Using a template, draw a second line at least 10mm to 13mm inside the first line of the perimeter of the dishwasher. This should allow the part to fit properly once the excess section of material has been removed.
- Make sure CompactSlab Decks are adequately supported during all cutting processes.
- You can use an additional material such as MDF or MDP to create a template that allows you to ensure that the measurements you took are adequate to install the element in the CompactSlab Top.
- Using a ½" (13mm) drill bit, drill each of the 4 inside line corners to create the corner radius. A minimum ¼" (6mm) radius is required at inside corners. This will prevent any possible stress cracking.
- Taking the above into account, start routing the material using a ½" (13mm) bit, increasing the depth by 4mm until finished. Routing with a router will guarantee a better finish.
- Remove any blemishes from the dishwasher to ensure a proper fit.
- Thoroughly clean the areas to be joined using industrial spirits and a clean white cloth.
- Apply adhesion promoter (of chosen adhesive system) to areas to be bonded to both the sink and the CompactSlab Top. Let the product act for a period of 10 minutes. (Consult the technical data sheet and product safety sheet).
- Using foam, apply primer (of chosen adhesive system) to areas that will bond to both the Dishwasher and the CompactSlab Top. (Consult the technical data sheet and product safety sheet).

• Subsequently, using the caulking gun, apply the one-component elastic assembly adhesive (of the chosen adhesive system) to the CompactSlab Top in the area where the sink/dishwasher will be installed, avoiding air being trapped in the joint. (Consult the technical data sheet and product safety sheet). The suitable temperature for the application of the product ranges between 15°C and 25°C.
• Join the pieces by applying even pressure.
• Apply a layer of silicone on the joints, so as to eliminate any type of leakage that may occur.
• Clean and remove excess silicone.
• Allow to cure for the period indicated in the technical data sheet of the one-component elastic assembly adhesive (of the chosen adhesive system).

3.2. Installing A Dishwasher Or Sink Undermount In A CompactSlab Countertop



Dishwasher/sinks in stainless steel, fiberglass, plastic and other materials that fit into the underside of the CompactSlab Countertop can be installed using the following instructions.

It is recommended to review and follow the instructions of the dishwasher/sink manufacturer.

• Identify location, the distance between the dishwasher/sink cutout and the seam location (if any) must be a minimum of 75mm, while the distance from the front edge of the CompactSlab Cover must be a minimum of 40mm.
• Make a sink template, using MDF or MDP by copying the dishwasher/sink measurements and transferring them to the template material; use the centers of the transferred measurements as the axis of measurement.
• For best results, all cuts should be made using a router.
• Clamp the template to the front side of the CompactSlab Cover. It is recommended to use a template to support the router, this can be attached to the CompactSlab Top using double-sided tape.
• Start routing the material using a ½" (13mm) bit using depth increments of (4mm). I made the cut very carefully trying to copy the template in detail.
• Overlap dishwasher/sink to ensure proper fit and accurate dimensions.
• The edges of CompactSlab Tops can be polished using a multi-step sanding process that uses a coarse-to-coarse grit sequence to improve the finish.

3.3. General Cutting Requirements

These procedures are for cutting that does not involve tools or items that generate/produce heat.

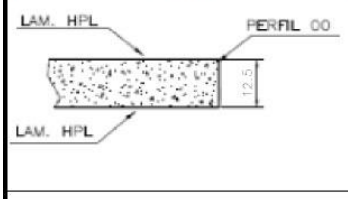
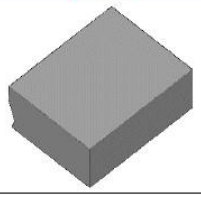
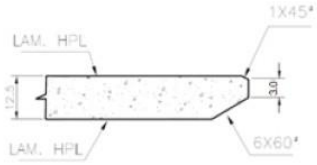
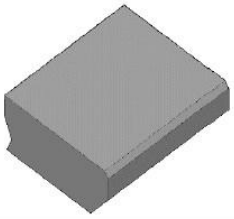
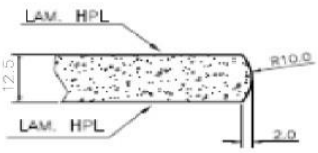
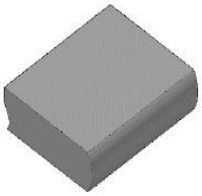
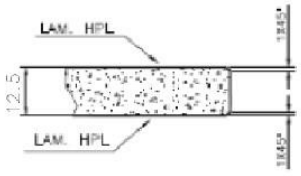
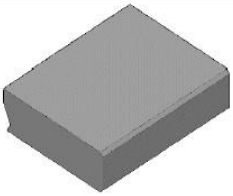
- Cuts must be completed and made only with a router.
- The inside corners of all cuts must be rounded.
- Use 1/2" (9.5mm) or larger diameter drill bits.
- A minimum radius of 1/4" (6.4mm) is required. It is preferable that it be slightly larger on the inside corners that were cut.
- Chamfer the edges both at the bottom and at the top with a minimum radius of 1mm.
- Eliminate any roughness, nicks and/or "chatter" from the routing process with 150 grit and improve the finish using a finer 600 or 1000 grit as required.

3.4. Cooktop Cutouts

- Cuts should only be made with a router.
- A minimum gap of 64mm is required between the edge of the CompactSlab Top and the cooktop.
- The inside corners of all cuts must have a minimum radius of 6.4mm.
- Chamfer the edges both at the bottom and at the top with a minimum radius of 1mm.
- Sand the edges of the cooktop hole cut to remove any roughness, nicks and "vibration" from the routing, use 150 grit or finer sandpaper depending on the finish to be given.
- Place 9mm aluminum heat reflective tape along the edges of the cooktop perforation.
- Place an additional layer of tape at all corners.
- Do not fold the tape below the bottom of the cut.
- The tape should extend beyond the edge of the cooktop flange. Trim the excess.
- If the minimum cutout dimension listed above cannot be met, follow the cooktop manufacturer's instructions.

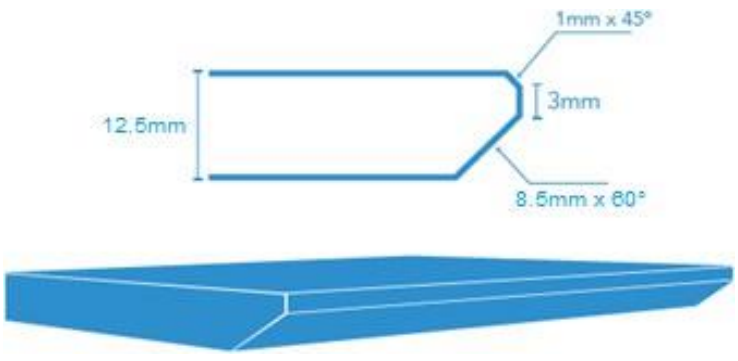
3.5. Border Templates / Milling

The edges must be safe, free of saw marks and jagged edges. For a better appearance, it is recommended to polish the edges. Various edge treatments exist for functional and aesthetic consideration.

Diagram	Detail	Name	Code
		Straight	00
		Bevel Edge	0-CH
		Curve	OC-C (Circular) OC-R (Straight)
		Standard Bezel	0B-R

Some examples below:

3.5.1. Bevel Edge Recommendations



If you want any of the outer edges of the CompactSlab Roof to be beveled, follow these steps:

• Measure the material and define the edge dimension you want the bevel to have. Remember the top tab must be at least 3mm, consider the bevel of the top of the CompactSlab Top (1mm).

• Prepare the router and 60° bevel cutter with bearing. (Read and follow both the technical data sheet and the supplier's safety sheet to determine the personal protection elements and the procedure for handling the tool).

• Rest the CompactSlab Top with the surface against the fixed base that you will use to support the element. (Consider to place paper, cardboard or any material that prevents the surface of the CompactSlab Cover from being exposed to friction).
• Perform a test machining with some scrap of the thickness and material of the CompactSlab Top. This will ensure that the tool setup and angle and dimensions are correct.
• Having everything clear, proceed to make the bevel using the router with a steady hand, trying to reduce vibrations when machining.
• Finally, if there is any type of routing defect, it can be corrected using sandpaper, starting with a coarse grain and going over with finer grain sandpaper.

3.5.2. Edge Profiling

• Clean sanding dust from the edge of the CompactSlab Deck with each sanding.
• Exposed edges can be shaped to improve the appearance and ergonomics of the installation.
• The radius should be limited to the seams and edges in order to minimize the impact on the decorative surface.
•For edge profiling you can use 150 grit sandpaper and improve the finish using a finer 600 or 1000 grit as required.

3.5.3. Edge Finishes

• Edge cutting generally produces light to moderate marks. These edges can be refined using a random orbital sander to improve finishes and give a more visually pleasing appearance.
• To improve edge finishes, a multi-step sanding process can be performed starting with a coarse grit and working up to a smaller grit.

Recommended final finishes:

Finish Type	US Grain	3M™ Micron
Mate	120,180,220 Finising 1000 o Scotch Brite	100,80, 60 micron Finising with Mirka Abralon 360 o Scotch Brite
Satin	120,180,320 Finising 1000 o Scotch Brite	100,80, 60 micron Finising with Mirka Abralon 1000 o Scotch Brite
Semi-gloss	120,180,320 Finising 1000 y 2000 o Scotch Brite	100,80, 60 micron Finising with Mirka Abralon 1000 y 2000 o Scotch Brite

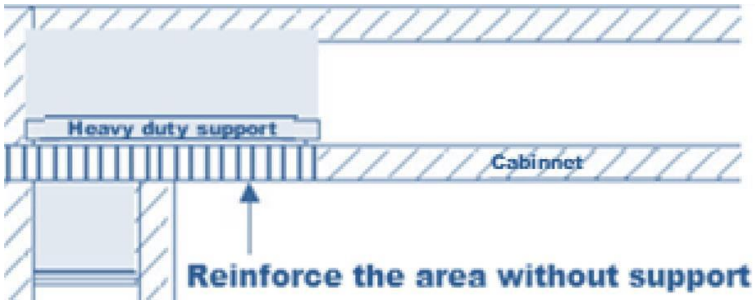
3.6. Top Installation

3.6.1. Work Area Preparation

Taking into account the kitchen area, the furniture and the spaces where the CompactSlab Top will be located, the following steps must be followed before proceeding with the installation:

• Do not install CompactSlab Tops on a solid substrate, air circulation must be allowed at both the bottom and the top. Changes in temperature and humidity can cause deformations in the material. If it is required to install on a solid substrate, perforations must be made to it to allow air circulation
• The installation of the L-shaped panel kit is required at least every 600mm.
• The furniture where the CompactSlab Cover will be installed must be level, if necessary,

wedges can be used to correct uneven areas.
• Frameworks should be strengthened in certain areas where support is not sufficient. Especially in corner cabinets, openings for the dishwasher/sink, base fronts and any area where the cabinet is weakest.



• Place additional furniture supports on both sides of all cutouts. Place the supports 25.4mm to 76.2mm from the sides of the cutout.
• Multiple Dishwasher installations require additional bracing to provide proper support.
• Place a brace in the cabinet along both sides of the dishwasher installation.
• Place stands, solid wood, MDF, or plywood between each sink.
• Brackets should be attached to the base of the furniture to reduce flexing.
• Freestanding stoves must be installed at least 1.6mm higher than the surface of the CompactSlab Top.

3.6.2. Overhangs

An additional support must be installed when the CompactSlab Top protrudes from the furniture.

Please refer to the chart below to determine the support required:

Overhang	Support Required
0-152.4 mm	None
152.4 mm-304.8 mm	Brackets or Corbels
457.2 mm - 609.6 mm	Brackets (Corbels) and Supporting legs

When supports (brackets) are used, place them maximum 609.6 mm apart (Figure 1). Also, locate supports 12" from the ends of the CompactSlab Deck and against the ends of the wall (Figure 2).

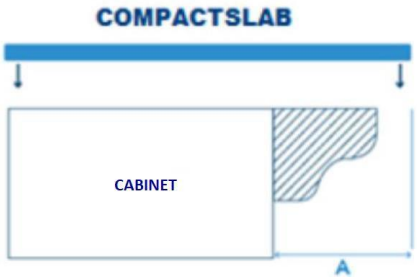


Figure 1

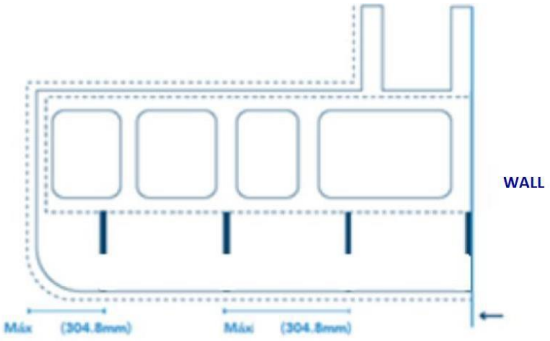


Figure 2

3.6.3. Installation In Cabinet

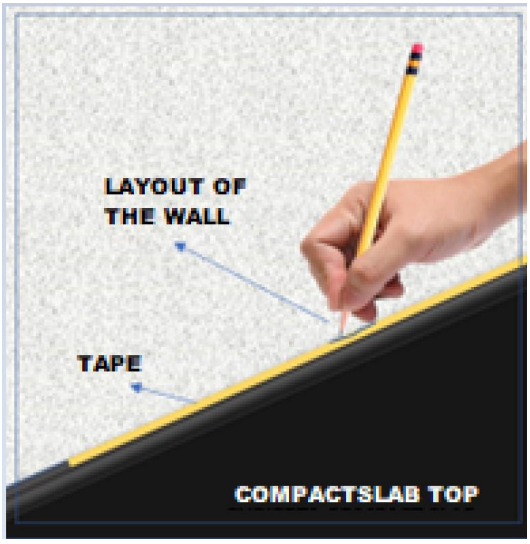
3.6.3.1. Measurement Verification

• Accurately measure the lengths of each section of the cabinet.
• Add 20mm to the measurement, so that the CompactSlab Top protrudes on the end furniture.
• Allow 20mm to be exceeded towards the free space where the kitchen goes, this can be reduced later.
• Also measure the depth of the cabinet and check that the CompactSlab Top is at least 20mm wider than the furniture.

3.6.3.2. CompactSlab Top Cut

• Take the measurement from the corner of the wall to where the cabinet in the other corner extends or ends.
• Leave the CompactSlab Top with an allowance of 20mm at all free ends.
• Put a marking tape along the area where you will make the cut.
• Transfer the exact measurement and mark it on the tape.
• Use the information above on cutting the CompactSlab Top to make the necessary cuts.

3.6.3.3. Fit The Backsplash Of The CompactSlab Top To The Wall



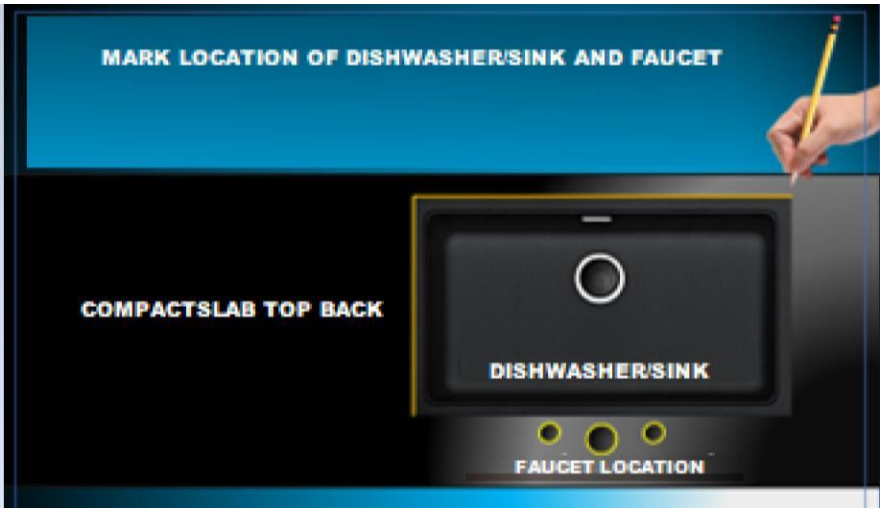
• Before any diagonal cuts you must fit the back of the CompactSlab Top to the back wall.
• Since walls are usually not straight, this step is essential.
• Position the CompactSlab Top against the support wall and check that there are no gaps. If there are, measure the deepest.
• Place tape on the back of the CompactSlab Top and with a pencil go parallel to the wall, marking a line on the tape that transfers the curves or irregularities of the wall.

3.6.3.4. Sand Backsplash Of CompactSlab Top (Or Edge If No Backsplash)

- Sand the backer to the draw line to replicate wall imperfections.
- Be sure to press CompactSlab Top firmly to a firm surface before sanding.
- Hold the sander at 90° to the CompactSlab Top and sand only up to the line you marked.
- Replace the CompactSlab Top and check the joint with the wall.

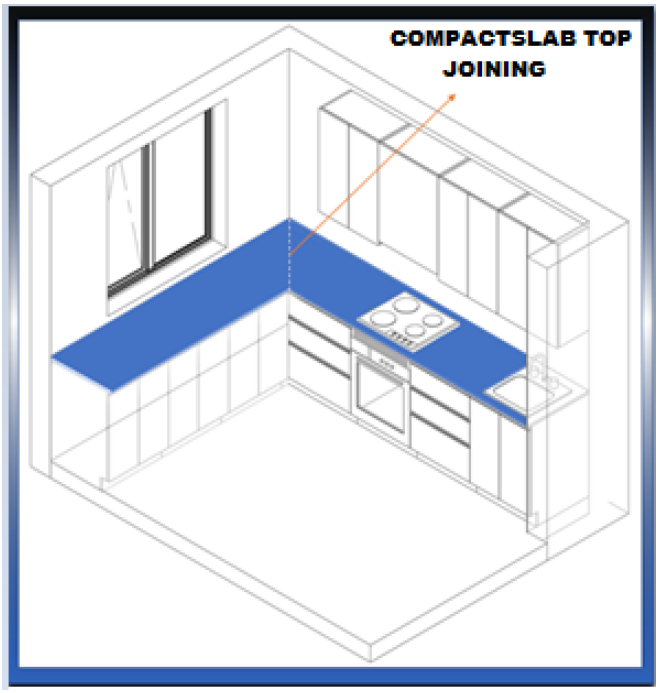
IMPORTANT
If you are going to install ceramic on the CompactSlab Top, you do not need to adjust it to the wall, since the ceramic will take care of correcting the imperfections.

3.6.3.5. Mark The Hole Of The Dishwasher/Sink



- Before Installing the CompactSlab Countertops, drill holes for the sink, faucet and accessories to be installed. (Refer to the section where the installation steps of the dishwashers are indicated)

3.6.3.6. Make CompactSlab Top Joints If Required



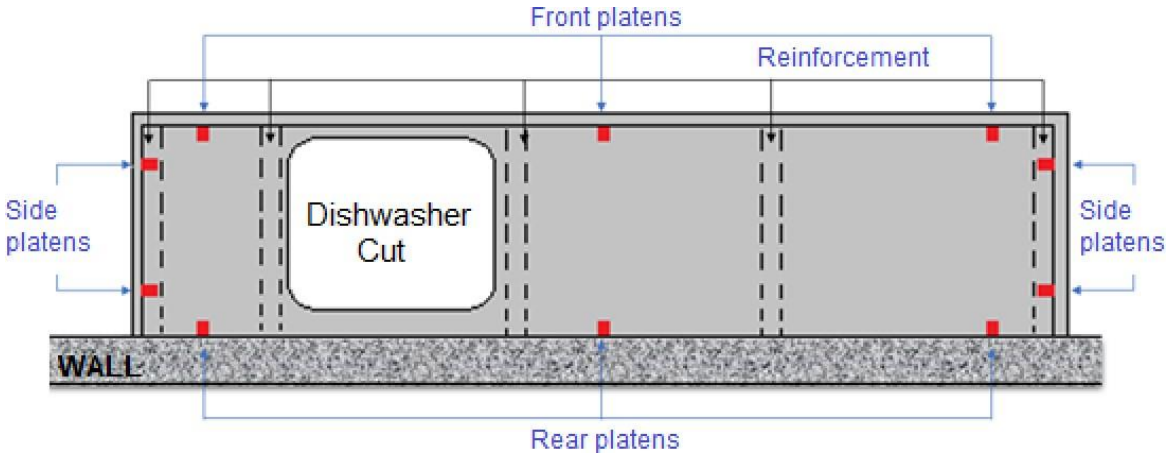
• If you need to join 2 or more CompactSlab Tops so as not to affect the flow of the kitchen design, you can follow the steps described in the CompactSlab Top joining numeral, above.

3.6.3.7. Smooth And Polish The Edges

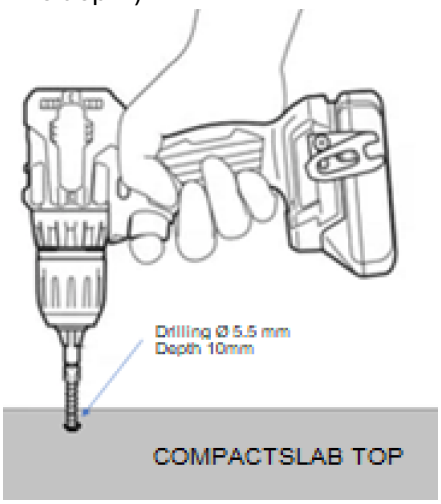
To polish the edges, follow the instructions previously described in the Edge Profiling section.

3.6.3.8. Mechanical Anchorage To The CompactSlab Cover To The Cabinet

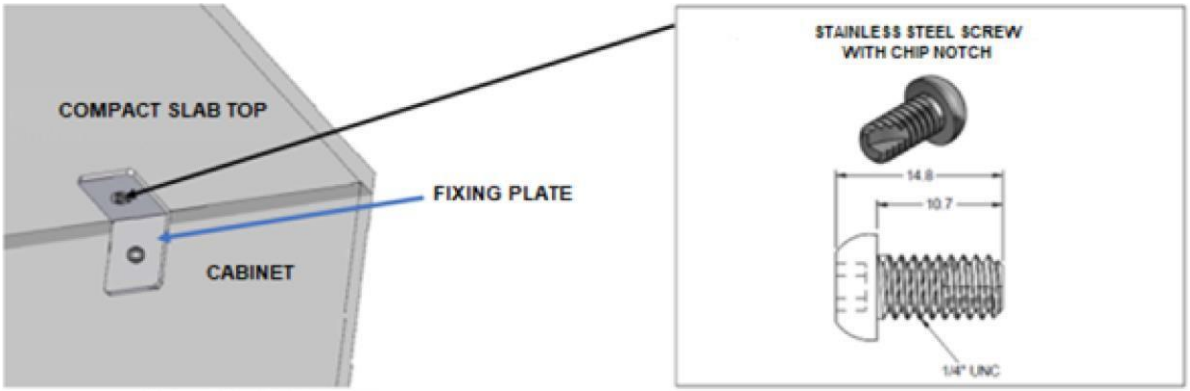
• Take the respective measurements to ensure that the final size of the top is adequate.
• Review the cabinet and define the anchor points you will use for the cover.
• If necessary add reinforcements to the cabinet. MDP or MDF slats of 18mm with a width of 40mm can be used (The use of moisture resistant material is recommended). The reinforcements must be located with an approximate distance between them of a maximum of 600mm, also place additional reinforcements if the installation of a dishwasher is going to be carried out, these must be between 25.4mm and 76.5mm from the cut made.
• Install the fixing plates to the cabinet (you can use the most commercial ones, take into account the dimensions of the holes for the phenolic screws, it is recommended that the plates be made of Stainless Steel), using the screw that suits your needs. 3 plates should be placed at the front of the cabinet, 3 at the back and 2 at each end.
• Then present the CompactSlab Top and mark the places where you will make the holes for the phenolic screws that will fasten the plates to the Top.



• Drill the anchor holes for the CompactSlab Top using the drill with the ø 5.5mm non-through bit. Remember that the drilling depth must be 10mm. (Mark the bit or use some type of supplement that guarantees this depth).

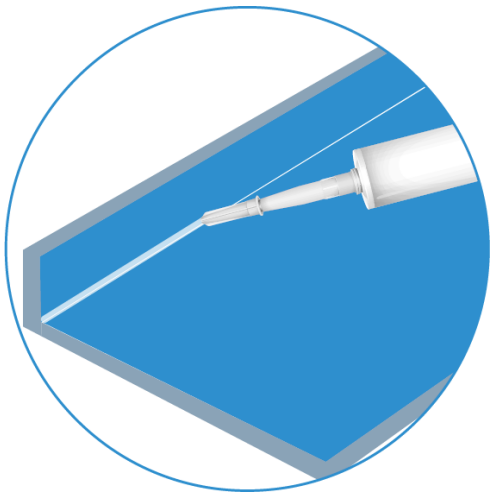


•Locate and screw the CompactSlab Top onto the cabinet. For this, use the electric screwdriver and the respective tip according to the ¼" stainless steel self-tapping screw with chip notch that you are going to use. Be careful when handling the screwdriver so that you do not damage the phenolic screw, it is advisable to screw slowly.



3.6.3.9. Joint Sealing

•To prevent any type of leaks from occurring, it is advisable to seal the joints of the top. For this, use silicone of the color that best suits the CompactSlab Top.
•Keep in mind that silicone sealing of the entire upper edge between the backrest and the wall is essential.
• Gun silicone in one continuous motion.
•Use just enough to fill the gap, then smooth with a wet finger or ice cube. Remove excess adhesive.



3.6.4. Surface Installation

Do not install CompactSlab Tops on a solid substrate, air circulation must be allowed at both the bottom and the top. Changes in temperature and humidity can cause deformations in the material (warping). If installation on a solid substrate is required, holes must be drilled to allow air circulation.

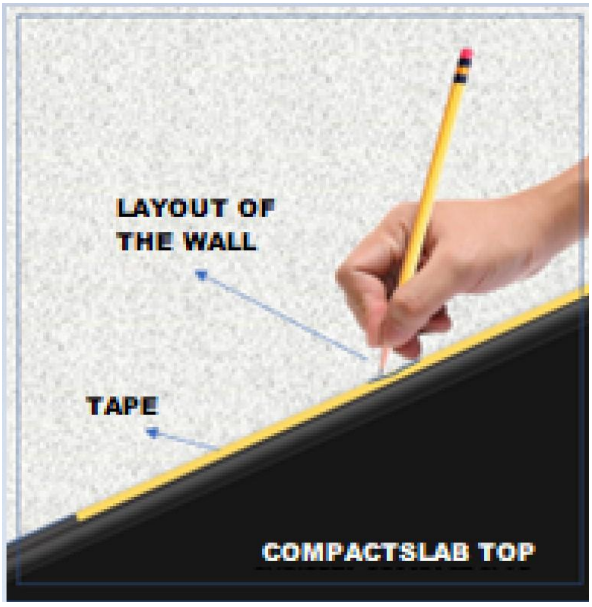
3.6.4.1. Rectification Of Measures

- Accurately measure the lengths of each section of the surface.
- Add 20mm to the measurement, so that the CompactSlab Top protrudes from the base.
- Allow 20mm to be exceeded towards the free space where the kitchen goes, this can be reduced later.
- Also measure the depth of the base and check that the CompactSlab Top is at least 20mm wider.

3.6.4.2. CompactSlab Top Cut

- Take the measurement from the corner of the wall to where the cabinet in the other corner extends or ends.
- Leave the CompactSlab Top with an allowance of 20mm at all free ends.
- Put a marking tape along the area where you will make the cut.
- Transfer the exact measurement and mark it on the tape.
- Use the information above on cutting the CompactSlab Top to make the necessary cuts.

3.6.4.3. Fit The Backsplash Of The CompactSlab Top To The Wall



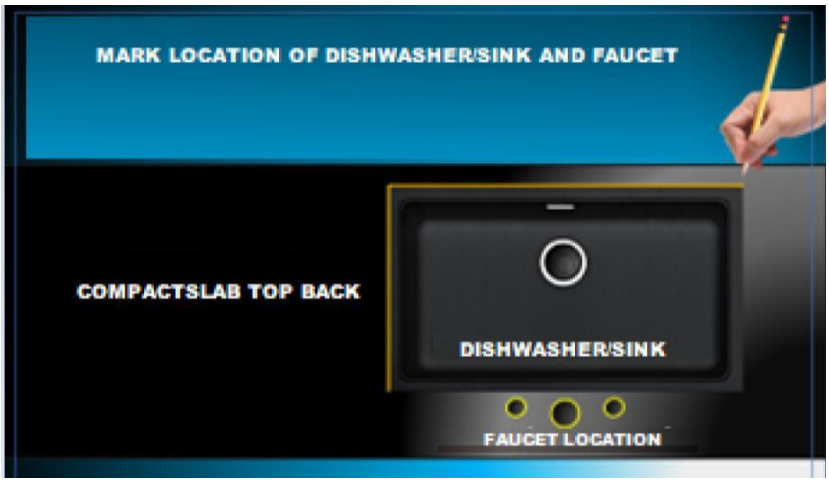
- Before any diagonal cuts you must fit the back of the CompactSlab Top to the back wall.
- Since walls are usually not straight, this step is essential.
- Position the CompactSlab Top against the support wall and check that there are no gaps. If there are, measure the deepest.
- Place tape on the back of the CompactSlab Top and with a pencil go parallel to the wall, marking a line on the tape that transfers the curves or irregularities of the wall.

3.6.4.4. Sand Backsplash Of CompactSlab Top (Or Edge If No Backsplash)

- Sand the backer to the draw line to replicate wall imperfections.
- Be sure to press CompactSlab Top firmly to a firm surface before sanding.
- Hold the sander at 90° to the CompactSlab Top and sand only up to the line you marked.
- Replace the CompactSlab Top and check the joint with the wall.

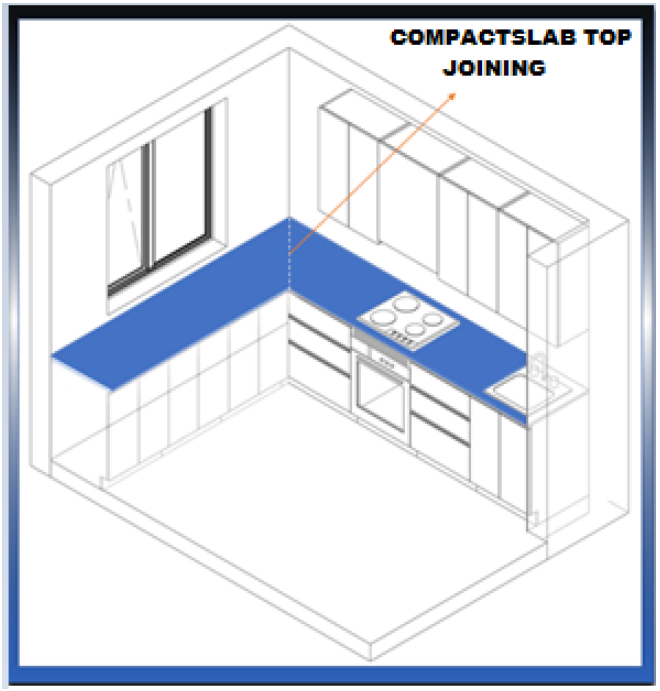
IMPORTANT
If you are going to install ceramic as a backsplash/splash on the CompactSlab Cover, you do not need to adjust it to the wall, since the ceramic will take care of correcting the imperfections of the wall. The backsplash must be installed first.

3.6.4.5. Mark The Hole Of The Dishwasher/Sink



- Before Installing the CompactSlab Countertops, drill holes for the sink, faucet and accessories to be installed. (Refer to the section where the installation steps of the dishwashers are indicated)

3.6.4.6. Make CompactSlab Top Joints If Required



• If you need to join 2 or more CompactSlab Tops so as not to affect the flow of the kitchen design, you can follow the steps described in the CompactSlab Top joining numeral, above.

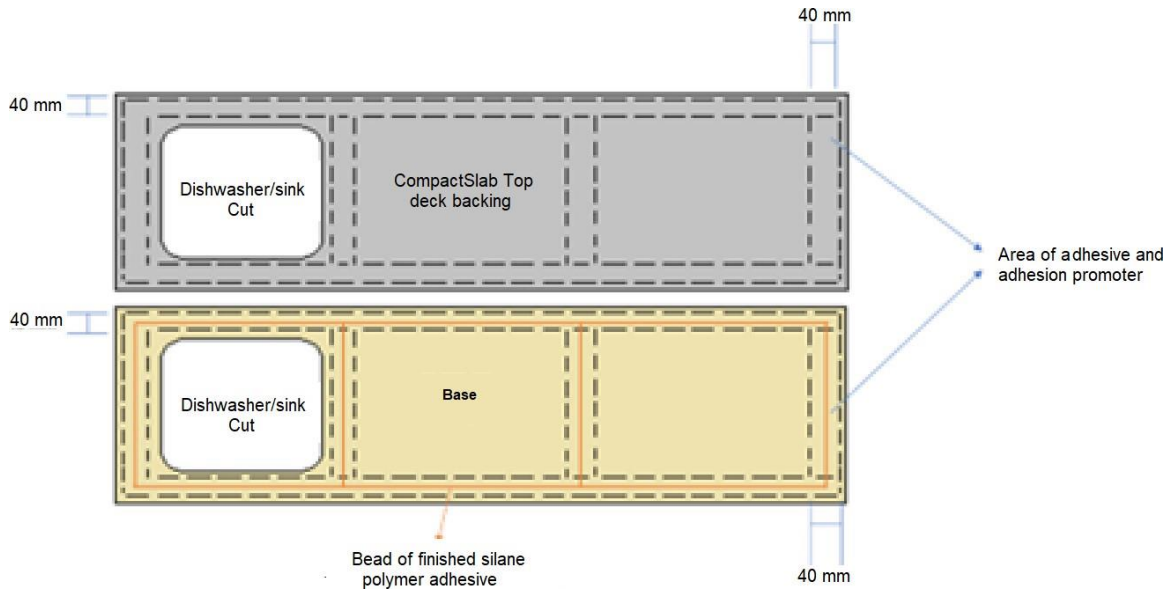
3.6.4.7.

3.6.4.8. Smooth And Polish The Edges

To polish the edges, follow the instructions previously described in the Edge Profiling section.

3.6.4.9. Anchoring The CompactSlab Top To The Base With Adhesives

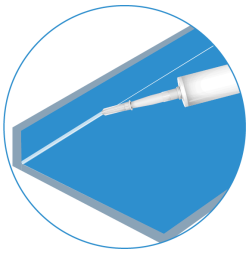
• Take the respective measurements to ensure that the final size of the cover is adequate.
• Inspect the base and trace the lines through which the threads of the finished silane polymer adhesive will pass (The adhesive will be applied to the contour of the CompactSlab Top leaving a space of 30mm from the edge and perpendicular to the front of the base at 600mm intervals. from the first bead on one side), measure 20 mm on each side of the line you established for the passage of the adhesive and mark them. (do the same for the back of the CompactSlab Top).



• Consult and follow the Technical Data Sheets and Safety Data Sheets of the products that you will use for the job.
• Using the adhesion promoter, clean the marked perimeter section of both the base and the backing of the CompactSlab Top. Let act for a period of 10 minutes.
• After the time has elapsed, apply the primer in the previously marked area in the perimeter section of the base area and in the same way apply to the underside of the CompactSlab Top.
• Using the caulking gun, apply a bead of finished silane polymer adhesive to the perimeter of the base where the CompactSlab Top will be installed.
• Carefully position the CompactSlab Top, making sure it is positioned exactly where it is required.
• Using a rubber mallet, tap the surface of the CompactSlab Top in the areas where the adhesive was applied to ensure proper adhesion and no separate sections.
• Remove excess adhesive.
• Let dry for a period of 24 hours.

3.6.4.10. Joint Sealing

•To prevent any type of leaks from occurring, it is advisable to seal the joints of the top. For this, use silicone of the color that best suits the CompactSlab Top.
•Keep in mind that silicone sealing of the entire upper edge between the backrest and the wall is essential.
• Gun silicone in one continuous motion.
•Use just enough to fill the gap, then smooth with a wet finger or ice cube. Remove excess adhesive.



3.7. Backsplash And Drop Edge

3.7.1. High Backsplash Of 12.5mm CompactSlab

The CompactSlab laminate in 12.5mm thickness can be used as a high backsplash as a complement to the CompactSlab Top. Given its resistance to humidity and its antimicrobial quality. The backsplash of the same material as the CompactSlab Top is a very functional and elegant alternative that you can use to complement the installation of the countertop.

3.7.1.1. Advantages Of Using CompactSlab As Backsplash

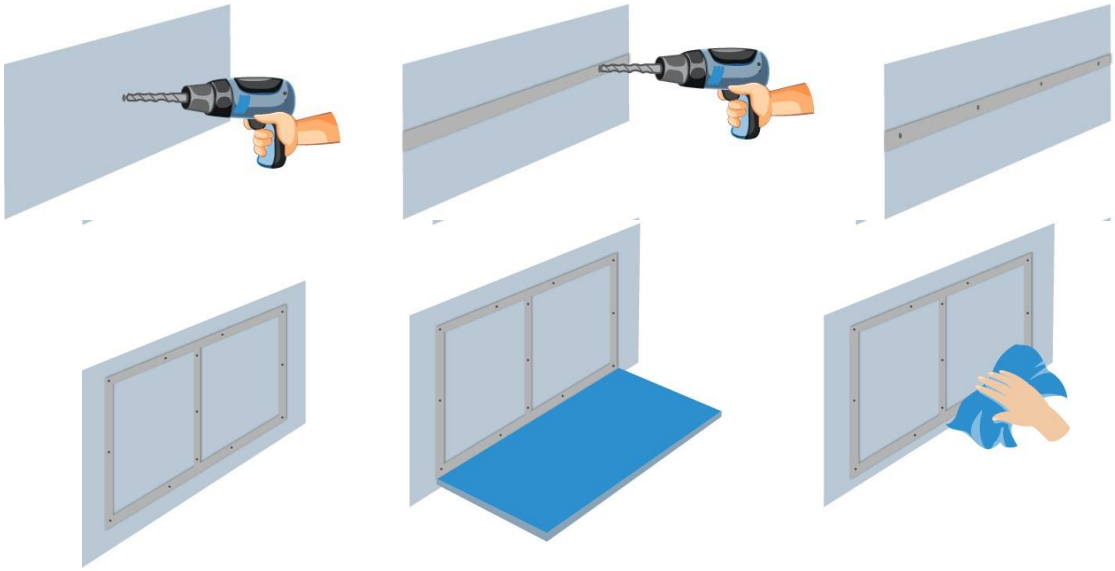
By using 12.5mm CompactSlab laminate backsplash, splash problems that affect the masonry in the area where the CompactSlab Top is installed will disappear.

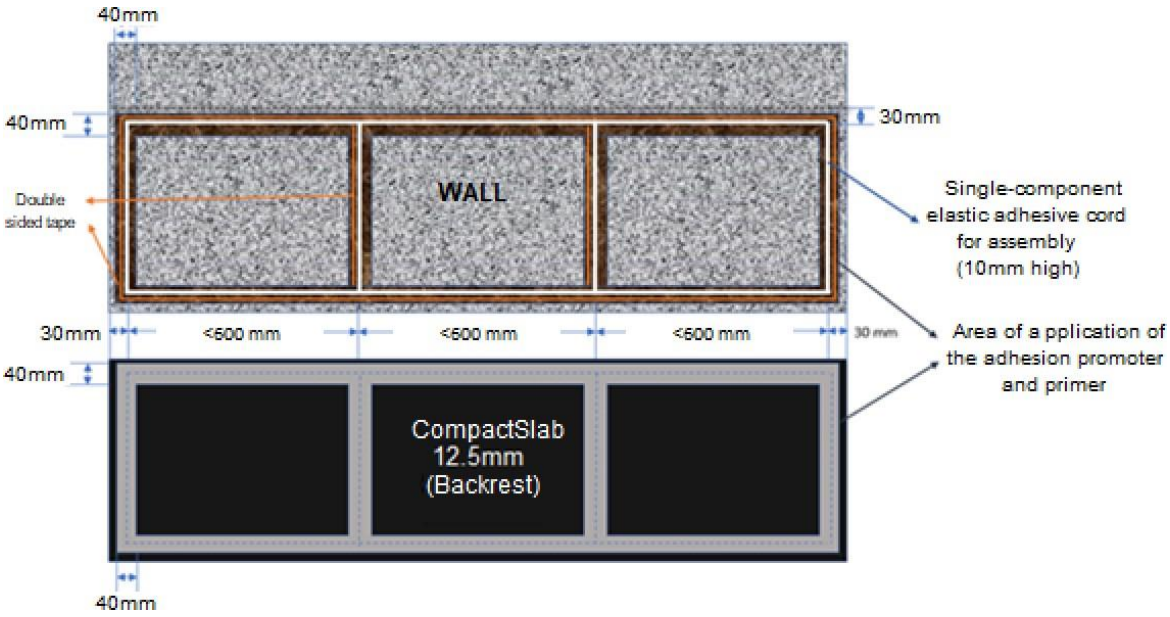
- They are a design element that highlights the space where they are installed.
- They maintain an impeccable appearance of the space since they are easy to clean.
- They are cheaper and easier to install than those made of marble and ceramic.

3.7.1.2. Installation

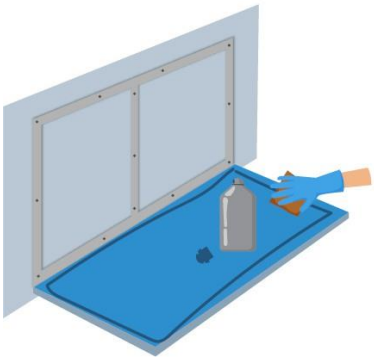
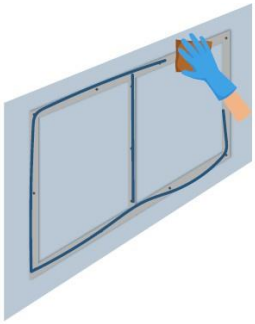
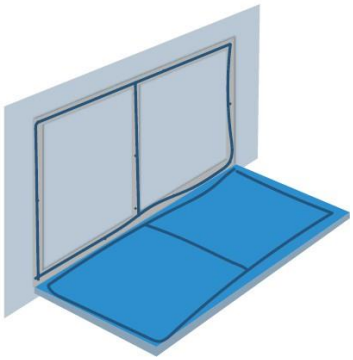
• Thoroughly clean the backing of the 12.5mm CompactSlab and the wall where it is to be installed using industrial spirits and a clean white cloth.

• Mark the space where the one-component elastic adhesive bead will be applied for mounting on the aluminum platens to the wall, by means of a fixing screw and using the adequate anchorage for the materiality of the wall where the Compact Slab backsplash will be installed. Remember that the width of the platens must be 40mm, once the plates are installed in this space, the adhesion promoter and primer will be used. Vertical reinforcing beads must be applied at a maximum of 600mm from each other, starting 30mm from one side and following the sequence.

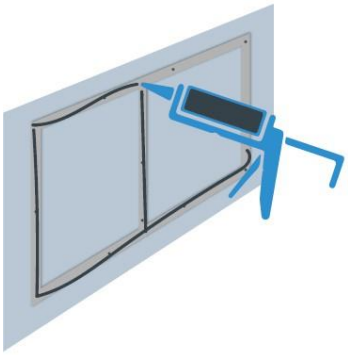
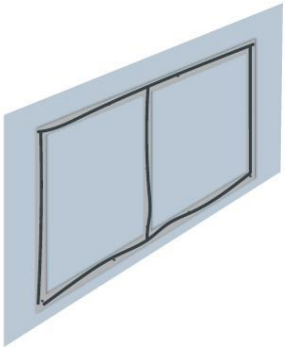
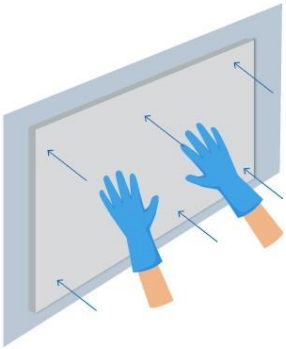




• Apply adhesion promoter to the areas to be glued on both the 12.5mm CompactSlab backing and the wall platen. Let act for a period of 10 minutes. Consult the technical data sheet and product safety sheet.
• With a foam, apply the primer in the areas where the adhesive will be applied on the wall platen and on the back of the CompactSlab 12.5mm, in the part that will come into contact with the adhesive. Consult the technical data sheet and product safety sheet.
• Place double-sided tape on the inside of the area you determined to apply the adhesive bead 10mm from where the bead will be applied. (This will support the tack while the adhesive cures.)

• Subsequently, using the caulking gun, apply the one-component elastic mounting adhesive to the wall in the area marked out for the installation of the 12.5mm CompactSlab, avoiding air being trapped in the joint. (Consult the technical data sheet and product safety sheet). The suitable temperature for the application of the product ranges between 15°C and 25°C.
• Place the 12.5mm CompactSlab on the wall and make sure it is evenly attached, using the rubber mallet.
• Allow expansion of at least 3mm at the top (against the top cabinet) and 3mm vertically between CompactSlab modules. Apply a layer of silicone on the joints, so that any type of leakage that may occur is eliminated.
• Clean and remove excess silicone.
• Allow to cure for the period indicated in the technical data sheet of the one-component elastic assembly adhesive.

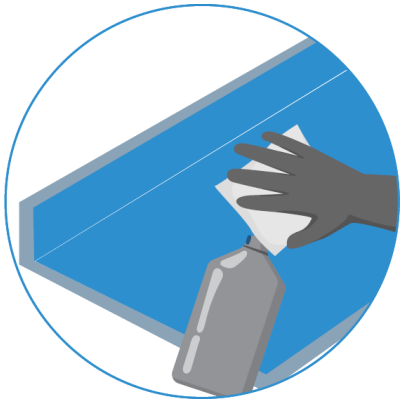




Keep in mind that the backsplash must not come into contact with the fire generated by the stove, it is recommended to leave the stove at least 6cm from the backsplash and the pots must not come into direct contact with the backsplash.

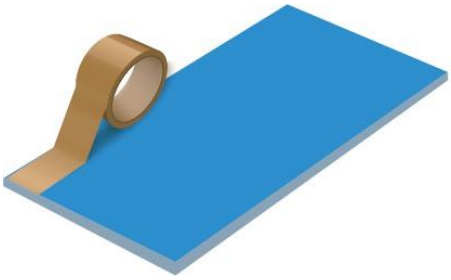
3.7.2. 12.5mm CompactSlab Low Backsplash

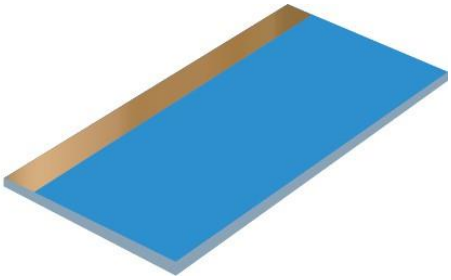
Use two-component epoxy adhesive to adhere the low backsplash, consult and follow both the product data sheet and the safety sheet provided by the supplier before starting the work.

• Clean the surfaces where the adhesive will be applied using industrial alcohol and a clean white cloth.



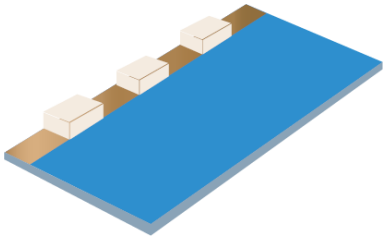
• To guarantee the joint butt and in the proper position, place transparent adhesive tape on the back of the elements to be joined, so that when gluing the pieces do not move.



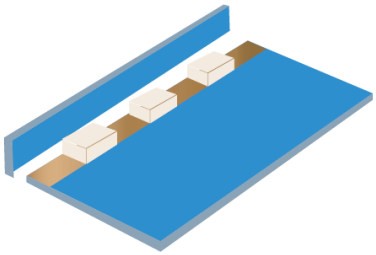


•Prepare the two-component epoxy adhesive using the same amount of each of the components. (Follow the provider's instructions.)

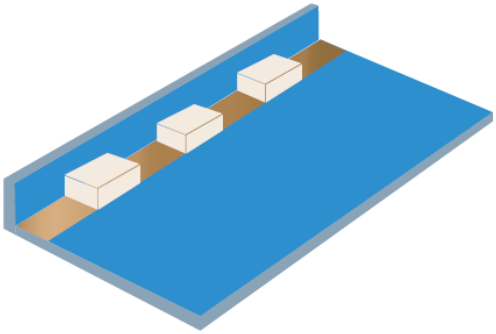
• Place a supplement adhered with double-sided tape that guarantees the joint at 90° at the time of the backsplash assembly.



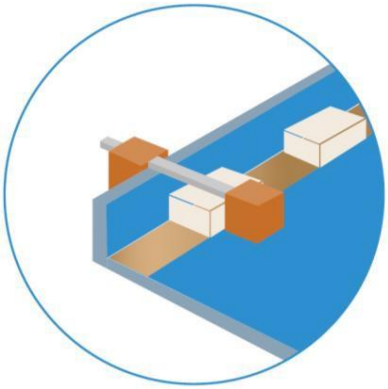
• Apply the two-component epoxy adhesive evenly to both the underside of the backsplash and the part of the CompactSlab Top to which it is to be adhered.



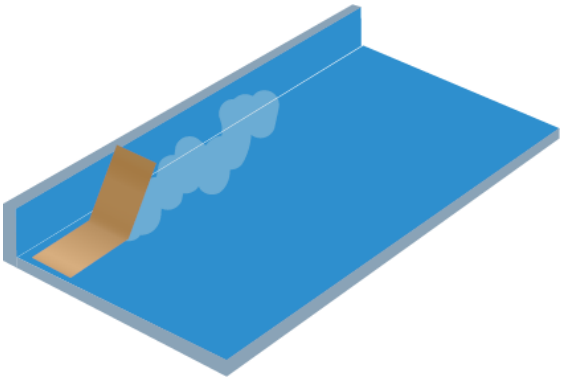
• Put the pieces together.



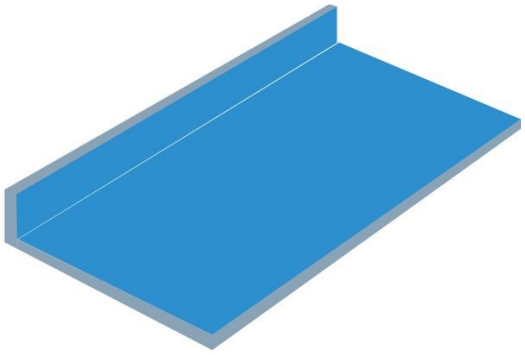
• Use a fastener to secure the material to the shims while the adhesive cures.



• Remove excess adhesive with industrial spirits and a clean white cloth. (This should be done right after the fastener is secured, while the adhesive has not yet cured.)

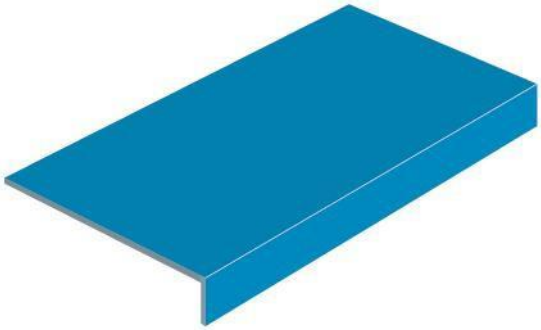


• Two-part epoxy adhesive has a 24-hour cure time.
• Do not scrape, chisel, or remove adhesive before it is fully cured.

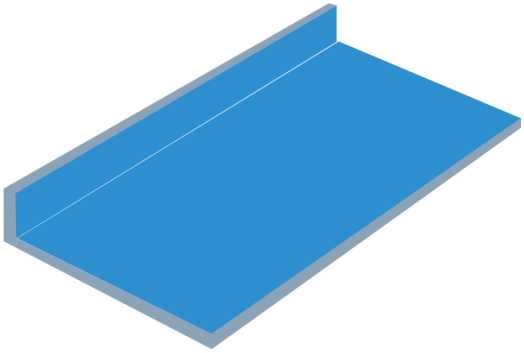


3.7.3. Drop Edge

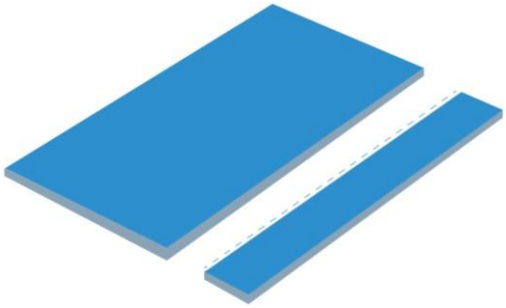
If you want drop edge on the front part (nose) of the CompactSlab Top, you can follow the steps below:



• This procedure is recommended to be done in a workshop (it is not recommended to do it on site).
• Make the measurement of the piece you want to install the drop edge.

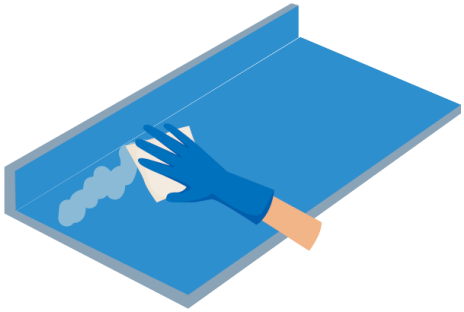


•Cut the piece of CompactSlab that you will use as a supplement, taking into account an oversize of 3mm.



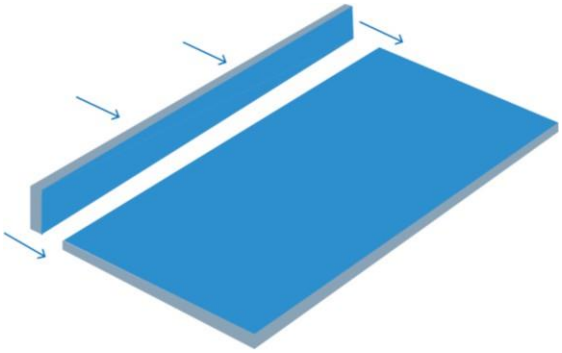
• Carry out the routing of the piece to give it the final measurement, in this way you will guarantee the proper splice.
•Prepare clamping tools such as hand vises, vice grips, suction cups, wooden blocks, etc. that allow it to maintain stability while the adhesive cures.
•Prepare the two-component epoxy adhesive using the same amount of each of the

components. (Follow the provider's instructions.)
•Thoroughly clean the areas to be joined using industrial spirits and a clean white cloth.

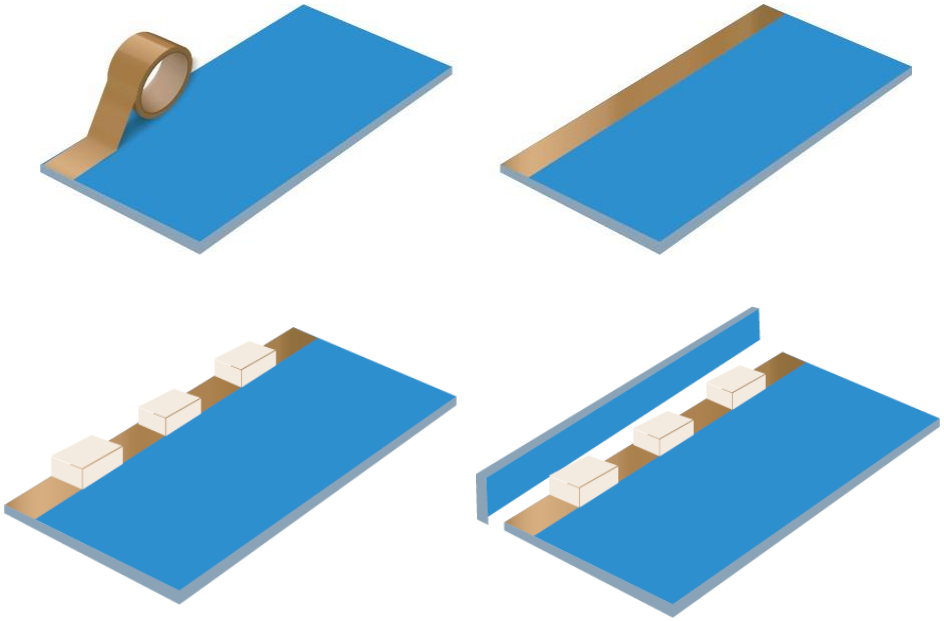


• Apply the two-component epoxy adhesive evenly on the faces of the parts to be glued.

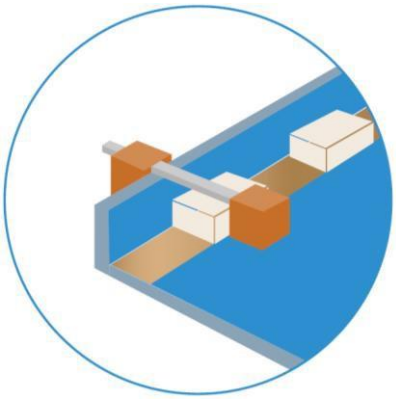
• Put the pieces together.



• Place a supplement adhered with double-sided tape that guarantees the adequate union of the 2 elements.



- Secure them using the fastener you selected. You can use a support element on the back,



(A piece of wood, MDP, MDF, etc.) so that the joint does not move.
- Remove excess adhesive with industrial spirits and a clean white cloth.
- Two-part epoxy adhesive has a 24-hour cure time.
- Do not scrape, chisel, or remove adhesive before it is fully cured.

4. Caution

Do not sand or polish the surface of a CompactSlab Top. This material comes with a factory finish, any sanding or polishing process will irreparably damage the decoration.

A CompactSlab Top should NEVER be cleaned with products cont abrasives, metal wool, sandpaper or steel wool.

Avoid strong acids or alkaline substances as the surface may be irreversibly stained.

Chlorinated substances handled in the wrong concentrations can degrade and discolor the surface. Sodium hypochlorite should not be used in concentrations above 5%, continuous contact should not be allowed for more than 5 minutes, and after cleaning, surfaces should be rinsed with plenty of lukewarm water and a soft cloth.

Hydrogen peroxide should not be used in concentrations above 3%, nor should continuous contact be allowed for more than 10 minutes, and after cleaning, surfaces should be rinsed with plenty of warm water and a soft cloth.

Do not use dirty cloths. When using solvents, the cloth must be very clean to avoid residual marks on the surface. It is recommended to wash and rinse with warm water.

Do not use furniture refinishing products or wax-based cleaners because they tend to leave residual grease on the surface that traps dirt particles.

Do not use metal scrapers, wire brushes, or any other metal tools to remove surface debris such as dry plaster or paint, as irreversible damage to the surface may occur.

5. Maintenance And Cleaning Instructions

CompactSlab Tops are for use in highly active and multifunctional areas, so it is important that you maintain proper hygiene. Each cover requires special care so that the life of the material from which it is made is extended. Here are some helpful tips for caring for your CompactSlab Top:

1. Immediately wipe up any excessive water runoff on interiors and doors.
2. Wipe up any excess water or drips to prevent staining the covers. Please note that the outer cover material cannot be polished in case of this problem.
3. The use of cutting boards or cutting surfaces is recommended to avoid damage to the CompactSlab. Never cut directly on the surface.
4. Hot pot stands must be used, it is not recommended to leave hot items on the surface for long periods of time. (above the standard requirements stated in the technical data sheet), likewise, the following must be done:
   - Avoid direct contact with metal parts of electric grills, cooking hobs or ovens that touch directly on the material due to poor installation.
   - Avoid direct radiation of very high temperatures such as fireplaces, barbecues, etc.
   - Avoid direct contact with a flame.

5.1. Daily Maintenance

Like many other design materials, CompactSlab must be cleaned regularly. Since its application is mainly in kitchens, bathrooms or countertops, daily cleaning is recommended. Clean only with a soft, damp cloth, warm water, and if necessary, use a mild detergent. Almost all common non-abrasive household cleaning and disinfecting products can be used. For common blemishes, simply clean the surface with warm water using a non-abrasive cloth, tougher stains can be removed with the help of solvents and non-abrasive household cleaners. When you have old stains dry and build up, use a magic sponge or soft cloth to get them out. After using any solvent, it is mandatory to rinse the surface with warm water and a mild detergent and repeat the rinse with water. CompactSlab has outstanding cleaning performance.

5.2. Helpful Cleaning Tips

To get the best results when cleaning CompactSlab, it is very important to remember the following tips:

At first, use a dry cloth or paper towel, then use water between 35-40°C (95-105°F) with mild soap or household detergent, allowing to soak until soil begins to soften.

If stains and blemishes remain, use an organic solvent such as varsol and then use water between 35-40°C (95-105°F) with mild soap or household detergent, allowing to work until soil begins to soften.

If stains and dirt remain, wipe the surface with a soft cloth or use a 50:50 mixture of alcohol and organic solvent, so as not to affect its original tone and design. The resistance to staining is high, however we DO NOT recommend its use on laboratory-type work surfaces where oxidizing chemicals, alkalis and strong acids are used in their daily work.

5.3. Magic Sponge Maintenance Instructions

The CompactSlab having an external layer of closed porosity allows it to be kept clean with daily care. In case of persistent stains, the use of a specific cleaning product is recommended to remove any trace of stain. In case of micro scratches, follow the surface maintenance instructions below. After cleaning or after using the Magic Sponge, rinse thoroughly with clean water, preferably lukewarm, to remove any residual detergent, solvent or other cleaning agent.

1. Defectos superficiales causados por microarañazos / *Superficial defects caused by micro-scratches*

2. Frotar la esponja mágica sobre el área en la que se puedan ver los microarañazos. La esponja se puede usar seca o ligeramente humedecida / *Rub the magic sponge over the area where the micro-scratches can be seen. The sponge can be used dry or slightly moistened*

3. La superficie ahora deberia quedar reparada / *The surface should now be repaired*

5.4. Cleaning And Disinfection Instructions

For cleaning stubborn stains such as: Tea, coffee, pencil, chalk, grease stains, dust or soap scum, use cleaning agents commonly used in households such as grease-removing soaps, odorless varsol, kitchen cleaner, windows, liquid soaps or a 0.1% concentration sodium hypochlorite solution. It is important that cleaning is done for a maximum of 5 minutes and then clean the surface well with water and a clean cloth.

Our full range of CompactSlab contains silver phosphate glass antimicrobial technology (Antimicrobial Plus) and is resistant to highly effective common disinfectants for the removal of SARS-CoV-2, the cause of Human Coronavirus disease, meeting EPA criteria. (United States Environmental Protection Agency (1*). For disinfection work, use disinfectant agents such as:

• Sodium hypochlorite, brands such as Clorox Bleach, which comes in concentrations between 4.5% and 5.5%. This product must be mixed one part of hypochlorite with 10 parts of water. Disinfection is obtained with 0.5% sodium hypochlorite in water.
• Ethyl alcohol (70% Ethanol), to disinfect the surface of the laminate use this solution and a clean cloth.
• Quaternary ammonium at 0.1% concentration, it is recommended to use products such as Durobacter TC - 31 which comes with a 10% concentration of active component, for this, mix one part of the product with 99 parts of water and clean with a cloth. smooth.
• Hydrogen peroxide, this product contains hydrogen peroxide in a concentration of less than 3%. The solution is applied to the surface of the laminate with a clean cloth.

After 5 minutes of having carried out the disinfection process, proceed with the cleaning process, prolonged exposure times of sodium hypochlorite, hydrogen peroxide, quaternary ammonium and other disinfection products can cause deterioration of the surface.

(1*) https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2

5.4.1. Cleaning and Disinfection Chart

Product Name	*Active Ingredient*	*Purpose*	*Recommended concentration (%)*	*Max contact time (minutes)*	*Formulation Type*	*Should it be cleaned after using the product?*
Blanqueador Clorox / *Clorox Bleach*	Hipoclorito de sodio / *Sodium hypochlorite*	Limpieza rutinaria / *Routine cleaning*	<0,1	N.A.	Diluir una 1 parte de Blanqueador en 50 partes de agua / *Dilute 1 part bleach in 50 parts water*	No
Blanqueador Clorox / *Clorox Bleach*	Hipoclorito de sodio / *Sodium hypochlorite*	Limpieza de manchas dificiles/ *Difficult stains cleaning*	0,1	3	Diluir una 1 parte de Blanqueador en 50 partes de agua / *Dilute 1 part bleach in 50 parts water*	Si / Yes
Blanqueador Clorox / *Clorox Bleach*	Hipoclorito de sodio / *Sodium hypochlorite*	Desinfección / *Disinfection*	0,5	5	Diluir 1 parte de Blanqueador en 10 partes de agua / *Dilute 1 part of Bleach in 10 parts of water*	Si / *Yes*
Alcohol Etílico / *Ethyl alcohol*	Etanol / *Ethanol*	Desinfección / *Disinfection*	70	5	Usar formulación comercial al 70% / *Use 70% commercial formulation*	No
Agua Oxigenada / *Peroxide*	Peróxido de Hidrogeno / *Hydrogen peroxide*	Desinfección / *Disinfection*	<3	5	Usar formulación comercial al 3% / *Use 3% commercial formulation*	Si / *Yes*
Durobacter TC- 31	Amonio cuaternario / *Quaternary ammonium*	Desinfección / *Disinfection*	0,1	5	Diluir una parte del producto en 99 partes de agua / *Dilute one part of the product in 99 parts of water*	Si / *Yes*

5.5. Instructions To Remove Difficult Stains

Acetone or nail remover, alcohol, gasoline, turpentine, Varsol, trichloroethylene, perchloroethylene, and trichloroethane are all suitable for removing neoprene residue.

Paint thinner are some commercial substances that can be used. Always remember to rinse with enough water.

It is the responsibility of the distributor/installer to verify the current technical documents updated on the respective website.

6. Technical Data Sheet

Test	*Standard*	*Field*	*Unit*	Decotone
Densidad / *Density*	**ISO 1183**	**Masa /** *Mass*	**g/cm³**	**≥ 1.35**
Largo y ancho / *Lenght and width*	**EN 438 2-6**	**Magnitud /** *Size*	**mm**	**+5/-0**
Rectitud de Bordes / *Straigtness of edges*	**EN 438 2-7**	**Magnitud / Size**	**mm/m**	**≤ 1.5**
Cuadratura / *Squareness*	**EN 438 2-8**	**Magnitud /** *Size*	**mm/m**	**≤ 1.5**
	Lamitech	**1530 x 3660 mm**	**mm**	**≤ 6.0**
Resistencia a la abrasión / *Abrasion resistence*	**EN 438 2-10**	**Desgaste inicial acabado OPAK /** *Initial point OPAK finish*	**Ciclos /** *Cycles*	**> 400**
		Desgaste inicial otros acabados / *Initial point other finishes*	**Ciclos /** *Cycles*	**> 1800**
Resistencia al rayado / *Scratch resistance*	**EN 438 2-25**	**Unidad /** *Unit*	**Grado/N /** *Grade/N*	**≥ 3N**
Calidad de la superficie / *Surface quality* *	**EN 438 2-4**	**Manchas, suciedad, defectos similares en la superficie /** *Stains, dirt, similar defects on the surface*	**mm²/m²**	**≤ 1**
		Fibras, pelos y rayas / *Fibers, hairs and stripes*	**mm/m²**	**≤ 10**
Espesor / *Thickness*	**EN 438 2-5**	**Espesor /** *Thickness* **= 12.5**	**mm**	**tol +/- 0.8**
Planitud / *Flatness*	**EN 438 2-9**	**10 ≤ e**	**mm/m**	**<5**
Resistencia a la inmersión en agua hirviendo / *Resistance to boiling water inmersion*	**EN 438 2-12**	**Incremento de masa /** *Increase gain*	**%**	**<3**
		Incremento de espesor / *Thickness increase*	**%**	**<4**
		Apariencia otros acabados / *Appearance other finishes*	**Grado /** *Grade*	**≥4**
		Apariencia de bordes / *Appearance of edges*	**Grado /** *Grade*	**≥3**
Resistencia electrica / *Electric resistance*	**EN 613140 4-1**	**RV (23°C / 50% RH)**	**0hm**	**1×10^{9} - 1×10^{11}**
Estabilidad dimensional a elevada temperatura / *High temperature dimensional stability*	**EN 438 2-17**	**Longitudinal**	**%**	**≤ 0.25**
		Transversal	**%**	**≤ 0.25**
Resistencia al impacto (Bola de gran diametro) / *Impact Resistance (Large diameter ball)*	**EN 438 2-21**	**Altura de caida /** *Drop height*	**mm (min)**	**2000**
Resistencia a las manchas / *Resistance to stains*	**EN 438 2-26**	**Apariencia grupo 1-2 /** *Appearance group 1-2*	**Grado /** *Grade*	**5**
		Apariencia grupo 3 / *Appearance group 3*		**≥4**
Resistencia a las fijaciones con tornillos / *Screw retention*	**ISO 13894-1**	**Espesor ≥ 10mm /***thickness*	**Newtons**	**≥3000**
Resistencia al choque climatico / *Resistance to the climatic shock*	**EN 438 2-19**	**Indice R a la flexión /** *Flexural strenght index*	**Indice /** *Index*	**1.02**
		Indice modulo flexion / *Flexion module index*	**Indice /** *Index*	**0.97**
		Aspecto / *Appearance*	**Grado /** *Grade*	**5**
Coeficiente de expansión lineal térmica / *Lineal thermal expansion*	**ASTM D 696**	**Variación dimensional /** *Dimensional Variation*	**$°K^{-1}$**	**L = 1.6×10^{-5}**
				T = 3.4×10^{-5}
Suceptibilidad al agrietamiento / *Cracking susceptibility*	**EN 438 2-24**	**Aspecto /** *Appearance*	**Grado /** *Grade*	**≥4**
Resistencia a la luz (Lámpara de arco Xenon) / *Resistance to light (Xenon arch lamp)*	**EN 438 2-27**	**Contraste (Escala de grises) /** *Contrast (Grayscale)*	**Grado /** *Grade*	**≥4**
Modulo de elasticidad / *Modulus of elasticity*	**EN ISO178**	**Longitudinal**	**Mpa**	**≥9000**
		Transversal	**Mpa**	**≥9000**
Resistencia a la flexión / *Flexural strength*	**EN ISO178**	**Longitudinal**	**Mpa**	**≥80**
		Transversal	**Mpa**	**≥80**
Resistencia a la tracción / *Tensile strength*	**EN ISO527-2**	**Longitudinal**	**Mpa**	**>70**
		Transversal	**Mpa**	**>70**
Resistencia al fuego / *Reaction to fire*	**ASTM E84**	**Clasificación /** *Rating*	**Clase /** *Class*	**Compacto estándar B /** *Standard Compact B*
	EN 13501-1			**Compacto Estándar e≥12mm B-s1, d0 /** *Standard Compact t≥12mm B-s1, d0*
Emisiones de formaldehido / *Formaldehyde emissions*	**EN 438-7:2015 EN 717-2**	**Clasificación /** *Rating*	**Clase /** *Class*	**E1**
Conductividad térmica / *Thermal conductivity*	**EN 12664 : 2001**		**W/mK**	**0.3**
Resistencia al calor seco (180°C/356 °F) / *Resistance to dry heat (180°C/356 °F)*	**EN 438 2-16 / UNE 56785**	**Aspecto /** *Appearance*	**Grado /** *Grade*	**≥4**
Resistencia a productos alimenticios calientes (200°C/ 392 °F) / *Resistance to hot food products (200°C/ 392 °F)*	**EN 438 2-16 / UNE 56785**	**Aspecto /** *Appearance*	**Grado /** *Grade*	**≥4**
Resistencia al calor humedo (100°C/212 °F) / Moist heat resistance *(100°C/212 °F)*	**EN 438 2-18**	**Aspecto /** *Appearance*	**Grado /** *Grade*	**≥4**

*** La longitud total admisible de contaminacion puede estar concentrada en un defecto, o dispersada en una cantidad no limitada de defectos mas pequeños /** **** The total allowable length of contamination may be concentrated in one defect, or dispersed in an unlimited number of smaller defects.***