Kitchen countertop

Design and installation manual

Vers. US-0/2022

LAPITEC

Introduction

The purpose of this manual is to provide general instructions on how to use Lapitec® to make kitchen tops. For the specific characteristics of the Lapitec material, please refer to the Technical Data Sheet.

It is the responsibility of a qualified professional to assess the suitability for use in a specific project and to verify compliance with the applicable standards in the country where the project will be carried out.

This manual has been designed to provide guidelines and helpful suggestions for the processing of Lapitec slabs.

The information contained herein reflects the highest level of technical/scientific and operational knowledge in possession of the manufacturer at the time of publication. You are therefore invited to consult the latest updated version in the "catalogues" section of the website www.lapitec.com where the following documents can be found:

- Technical data sheet;
- Processing manual;
- Design and installation manual for kitchen countertops;
- Design and installation manual for claddings;
- Design and installation manual for ventilated facades.

Given that Lapitec is a natural sintered material, the user is advised not to limit themselves to the instructions provided in this document, but rather to consult the extensive technical/scientific and operational literature available on the subject, and to rely on professional experts for the various processing and installation phases.

Regarding the above, Lapitec S.p.A. shall not be held liable for any damage which may occur as a result of the application of the information and suggestions in this technical manual, insofar as considered information and suggestions that must always be checked in advance by the user.

Moreover, Lapitec S.p.A. reserves the right to make technical changes of any kind without prior notice and without direct communication to any party.

INDEX

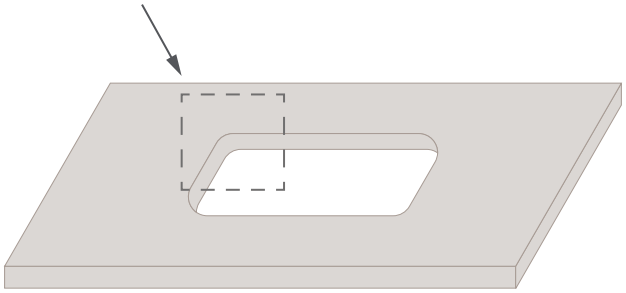
1. DESIGN RULES

1.1. INTERNAL CUT-OUTS AND HOLES

All internal corners relating to a cut-out must have a minimum radius of 3⁄16".

For industrial kitchens the minimum radius is 3⁄8".

A larger radius gives greater structural strength to the workpiece (see figure 1), while any non-radiused corner creates a stress point on the countertop (see figures 2, 3 and 4).



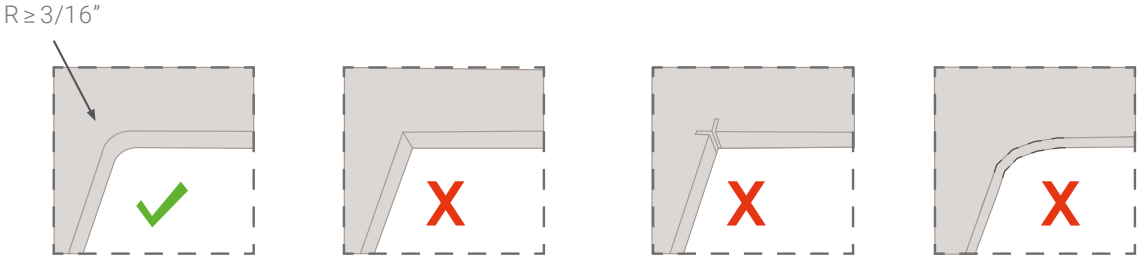
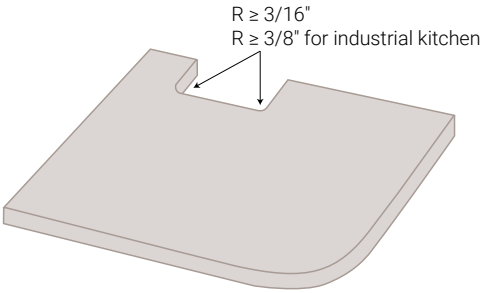


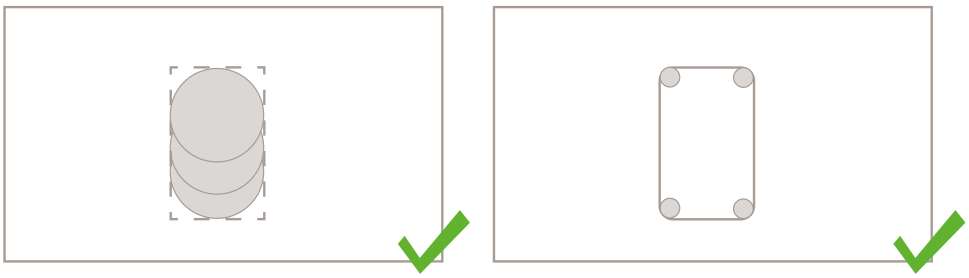
Figure **1** Figure **2** Figure **3** Figure **4**

It is recommended to create a minimum radius of 3⁄16" in the presence of columns or elements requiring the countertop to be cut.



1.2. HOLES FOR ACCESSORIES

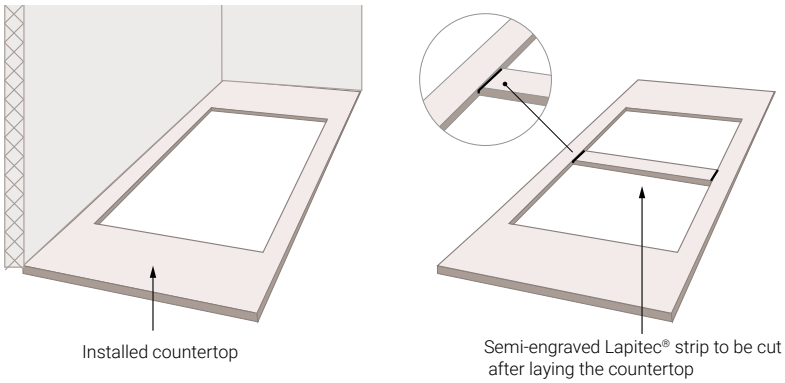
It is recommended to create circular holes for accessories/switches as shown in the pictures below.



1.3. LARGE CUT-OUTS

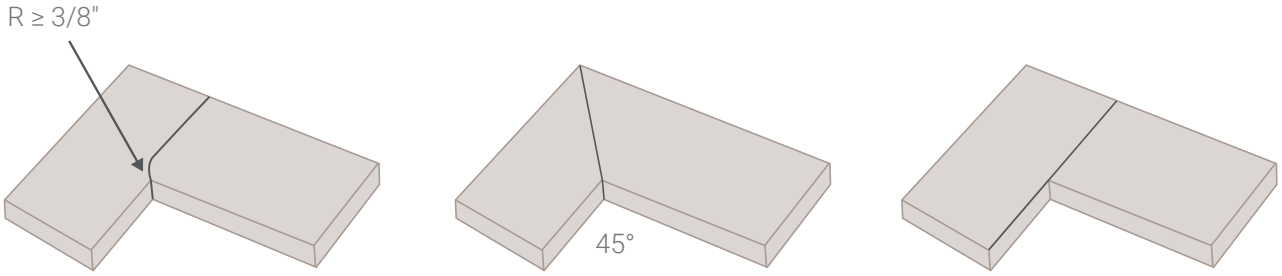
In the case of one or more large cut-outs, it is recommended to leave a strip of material to stiffen the countertop. This strip, already engraved at half the thickness, will be cut after installation is complete.

This limits the possibility of breakage during handling and installation.

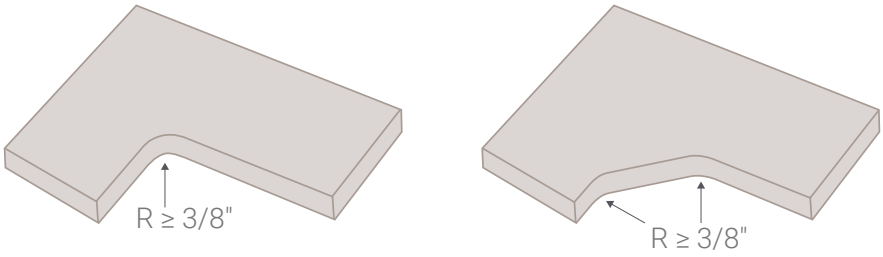


1.4. L-SHAPED WORKPIECES

In the case of an L-shaped kitchen, it is recommended to divide the countertop into two pieces so as not to compromise the strength of the workpiece.

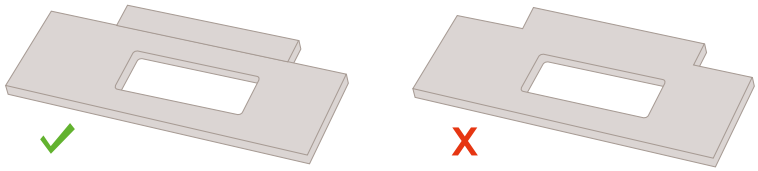


If you want to make a single piece L-shaped countertop, the minimum radii must be ⅜".

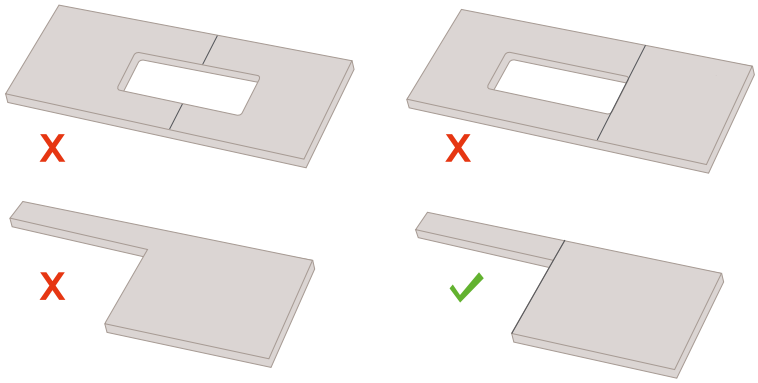


1.5. SPECIAL CASES

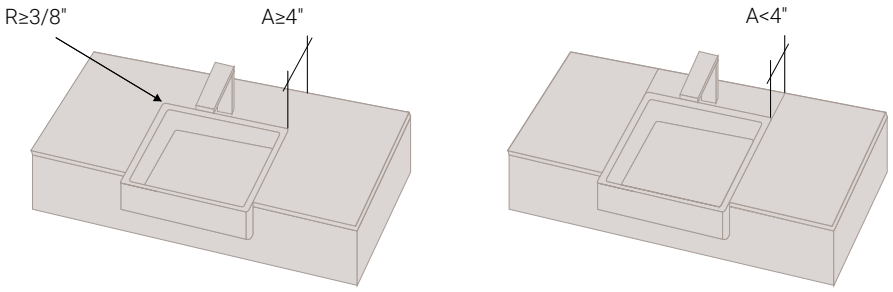
If there are recesses or interior window sills, avoid making the kitchen countertop from a single piece.



Avoid fork cuts.

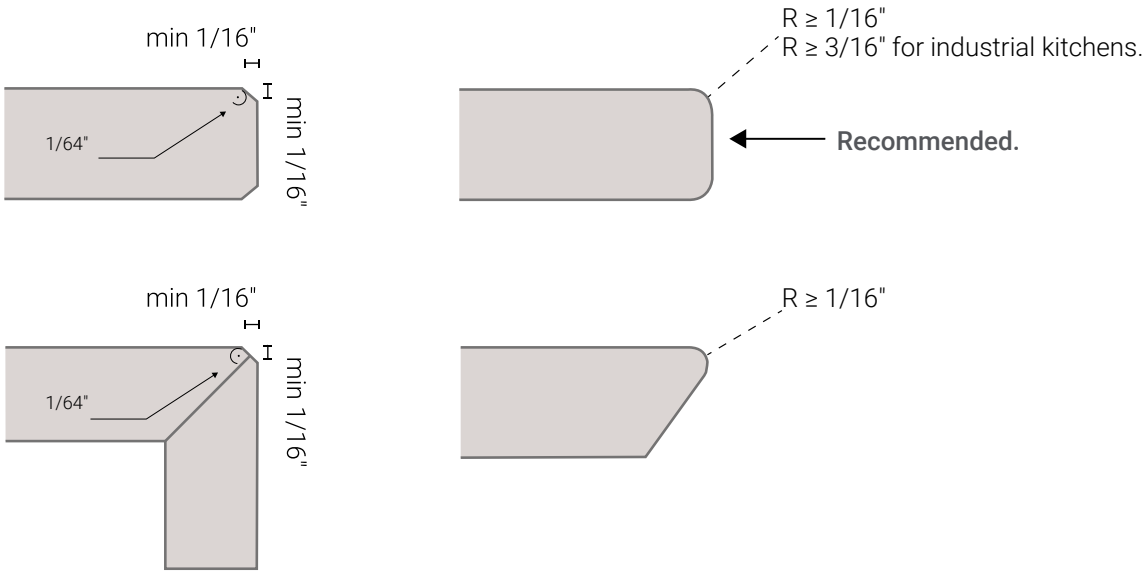


In the case of farm sinks / semi-inset sinks, the countertop can be made from a single piece if the strip behind the sink is at least 4" deep. Otherwise, the countertop can be made in several pieces.



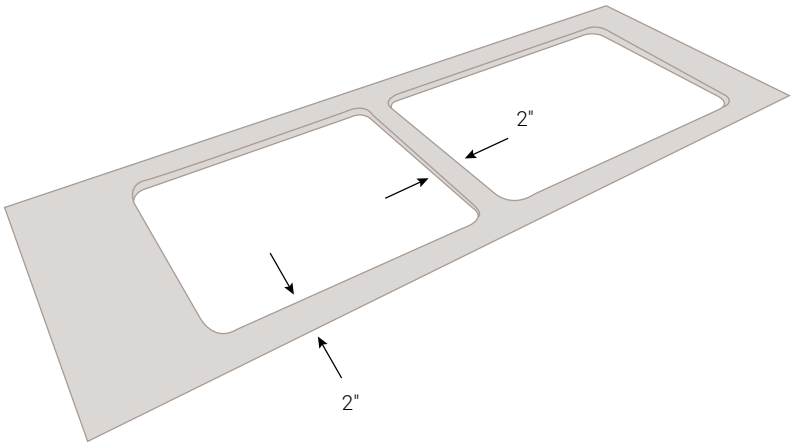
1.6. PROCESSING OF EDGES

It is recommended to process the edges of the workpieces as indicated in the drawing. These instructions are a good compromise between aesthetics and functionality while also guaranteeing a considerable reduction in the risk of chipping.



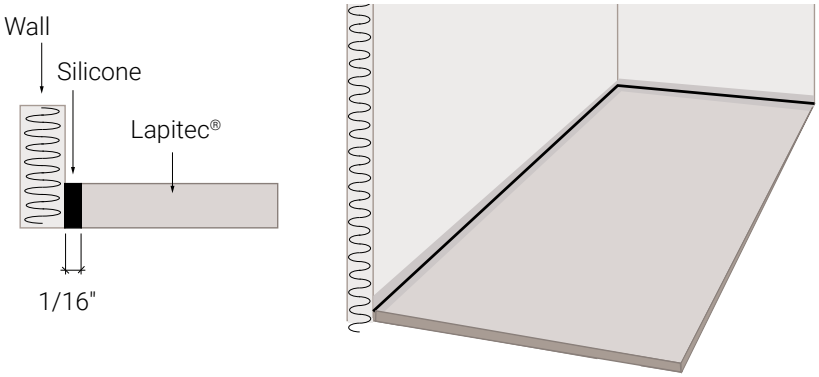
1.7. MINIMUM DISTANCE BETWEEN EDGE AND CUT-OUTS

The recommended minimum distance between cut-out and cut-out and between edge and cut-out is 2”.

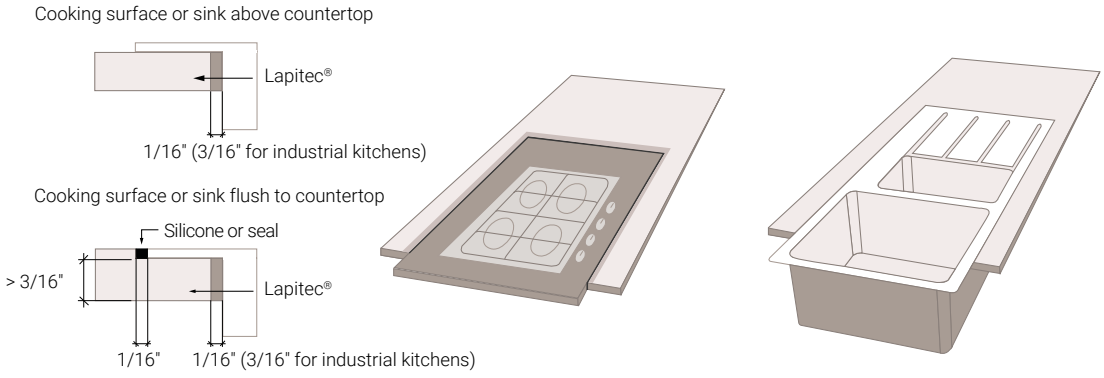


1.8. MINIMUM DISTANCE BETWEEN WALL-SINK-COOKING SURFACE

The recommended minimum distance between the Lapitec® countertop and the wall is 1⁄16".



The recommended minimum distance between the Lapitec countertop and the cooking surface or sink is 1⁄16" (1⁄8" for industrial kitchens). To define the minimum gap with the Lapitec piece, consult the technical manual of the manufacturer of the cooking surface or sink.



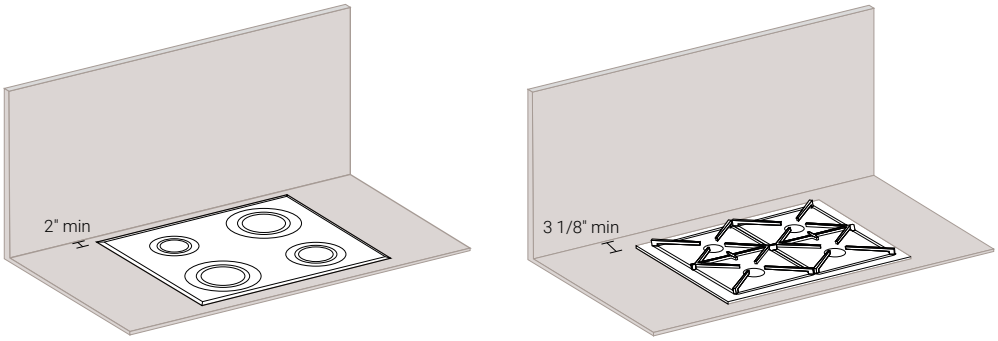
Warnings

In order to compensate for the different thermal expansion due to daily use, a sealant such as silicone or other seals supplied directly by the household appliance manufacturer must be placed between the Lapitec countertop and the elements fitted inside it. When applying silicone to seal the cooking surface, protect the Lapitec countertop surface using adhesive tape.

1.9. MINIMUM DISTANCE BETWEEN SPLASHBACK-COOKING SURFACE

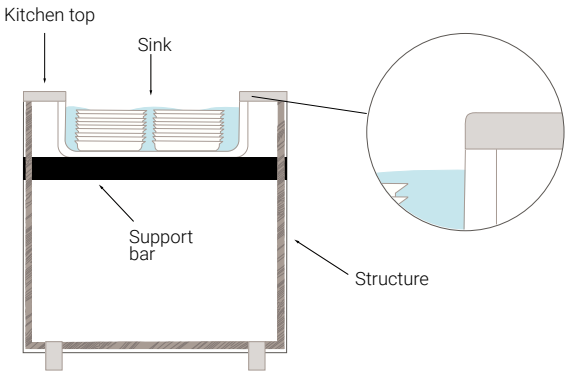
With splashbacks over 4” high, it is recommended to keep a minimum distance of:

- 2” between the Lapitec splashback and the electric hob;
- 3 ⅛” between the Lapitec splashback and the gas hob.



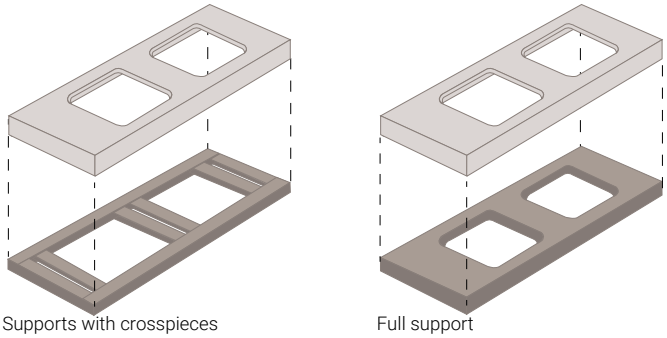
1.10. SUPPORTS

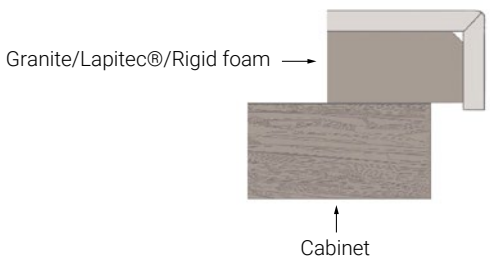
For under-top and flush-mount installations or for large above-tops for sinks or cooking surfaces, it is recommended to use support bars fixed to the structure on which the countertop will be placed, to avoid the risk of detachment and/or breakage risks due to heavy loads (sink full of water and large pans).



1.11. RECONSTRUCTED COUNTERTOP REINFORCEMENT

Depending on the thickness of the Lapitec used and the countertop design, it is recommended to support the countertop with a Lapitec reinforcement or a material with the same expansion coefficient (e.g., granite, Lapitec or rigid foam).





1.12. RECONSTRUCTED SINK

For walls and bases of sinks reconstructed in Lapitec, it is recommended to use workpieces with a minimum thickness of ¾", which can also be obtained by gluing together 2 x ½" pieces.

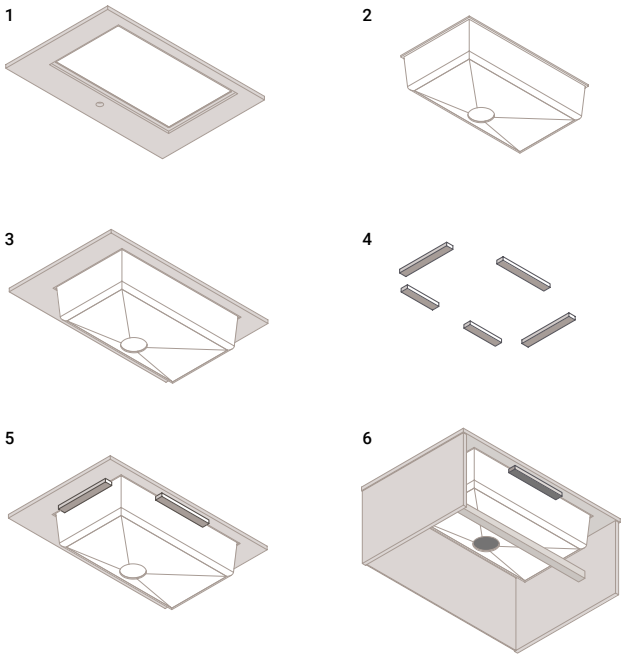
For walls and bases of sinks reconstructed in Lapitec, it is preferable to use smooth finishes, which make care and maintenance easier.

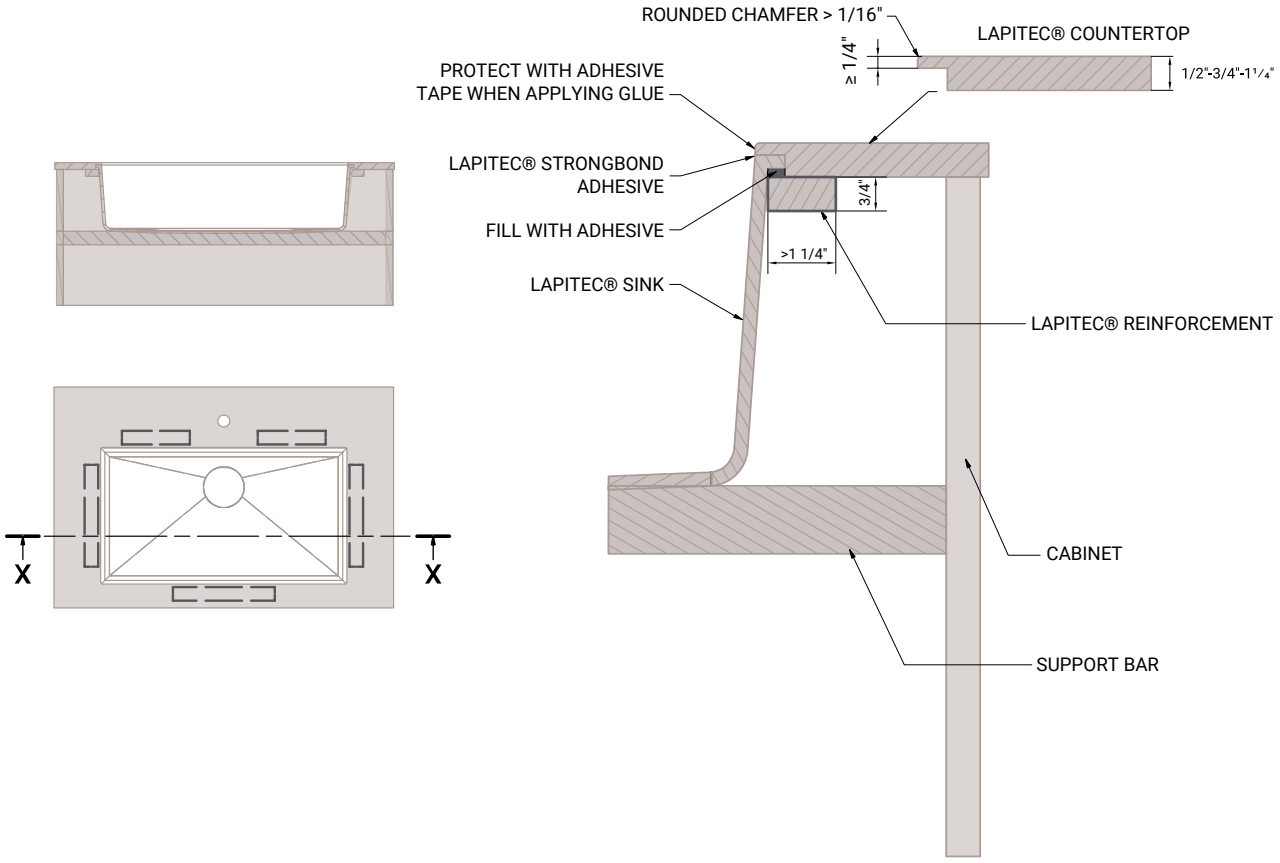
The reconstructed sink must be fixed underneath the countertop, avoiding gluing at 45° to the countertop.

It is recommended that the corners of the sink hole have a radius of at least 3/16".

1.13. ORION SINK 105 AND 130

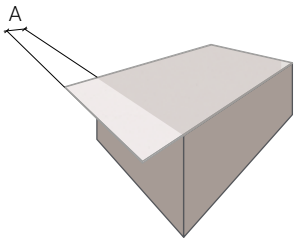
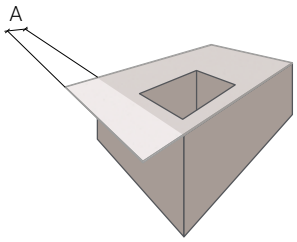
This is a special sink to be integrated with the Lapitec countertop to obtain an effect of uniform continuity between the two. It is recommended to check the dimensions before cutting the hole in the top. Below we show in detail how to create it (see the sequence of drawings). We recommend placing reinforcements, filling with adhesive and putting a support bar below the sink.

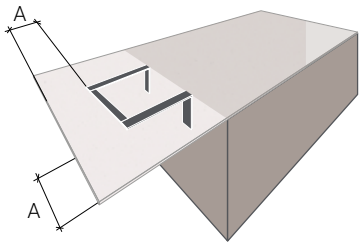


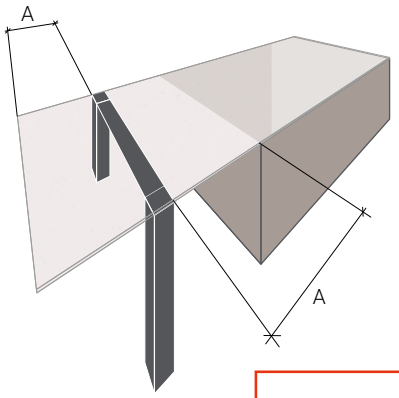

ROUNDED CHAMFER > 1/16"
LAPITEC® COUNTERTOP
≥ 1/4"
1/2"-3/4"-1¹/₄"
PROTECT WITH ADHESIVE TAPE WHEN APPLYING GLUE
LAPITEC® STRONGBOND ADHESIVE
FILL WITH ADHESIVE
LAPITEC® SINK
3/4"
>1 1/4"
LAPITEC® REINFORCEMENT
CABINET
SUPPORT BAR
X
X

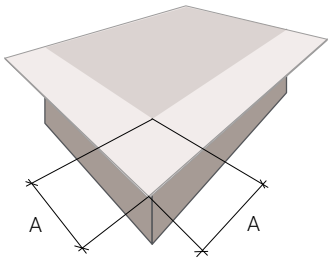
1.14. OVERHANGS

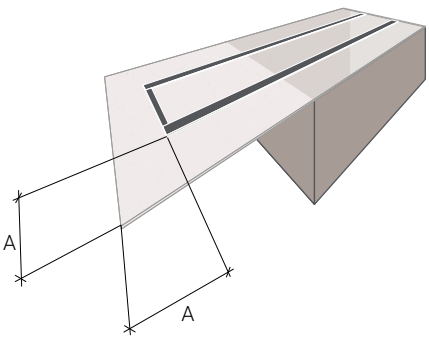
When designing the countertop it is advisable to dimension the overhangs according to the following table so that the workpiece is not exposed to the risk of breakage during daily use.

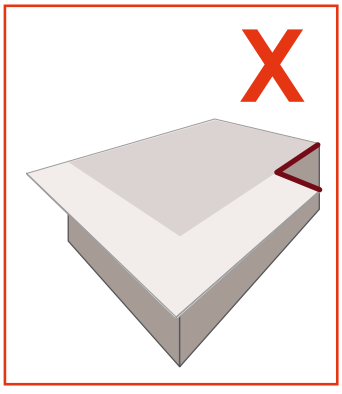
	Thicknesses			Drawing
	1/2"	3/4"	1 1/4"	
Countertop with unsupported overhang	A ‹6"	A ‹13 1/2"	A ‹19 1/2"	
Cut-out countertop with unsupported overhang	A ‹3 1/2"	A ‹8 1/4"	A ‹11 1/2"	









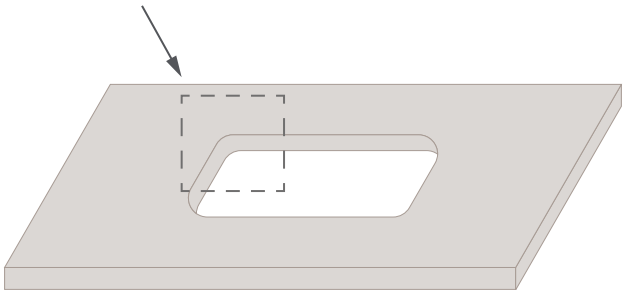


1.15. OUTDOOR KITCHEN (BBQ)

Design

When making worktops for outdoor kitchens with a grill or barbecue, follow the recommendations given below.

All internal corners in holes must have a minimum radius of ⅜".



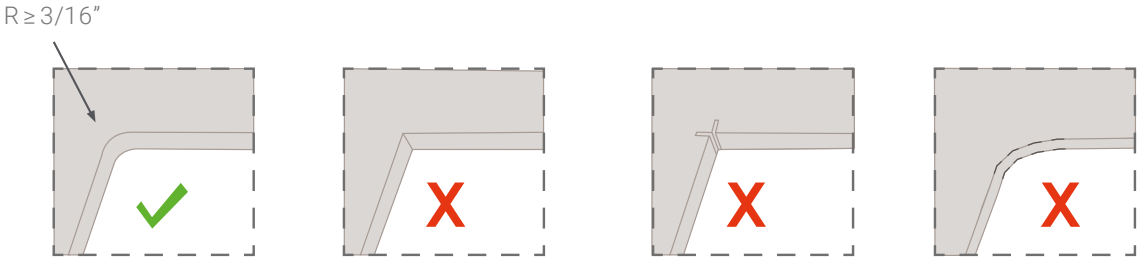
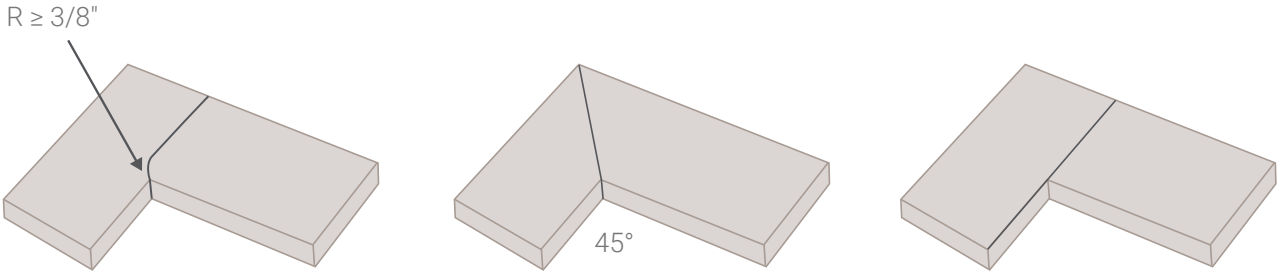


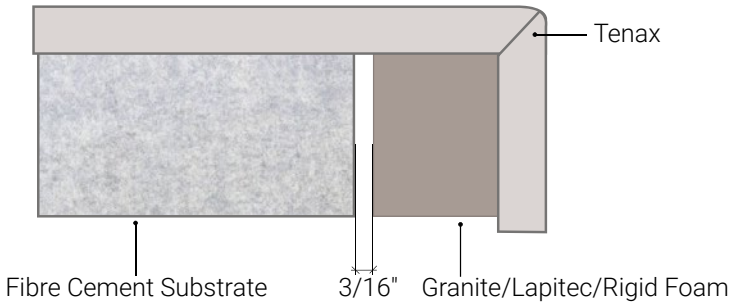
Figure **1** Figure **2** Figure **3** Figure **4**

When possible, we would recommend applying a seam for L-Shaped tops to avoid reducing the structural strength of the top, due to leveling concerns.



In the case of aprons or laminations, the recommended practice is to create fibre cement substrate under the top and leave a gap of at least 3⁄16" between top and the apron substrate to absorb possible thermal expansion.

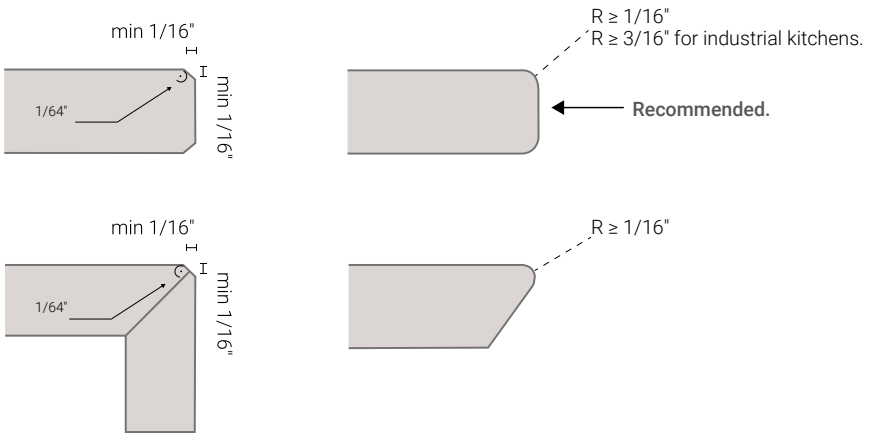
Use suitable adhesives for outdoor applications, choosing the type based on the local weather conditions (such as Strongbond and Frozebond adhesives, developed by Lapitec S.p.A. in collaboration with Tenax - see specific indications in the heading ASSEMBLY USING ADHESIVES in the processing manual).



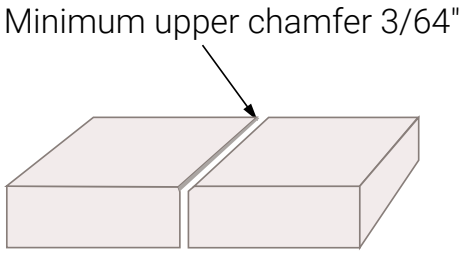
Warnings:

If the working temperatures exceed the temperatures stated in the adhesive technical datasheets, Lapitec S.p.A. suggests adopting a solution without apron, with exposed edges and no use of adhesive bonding.

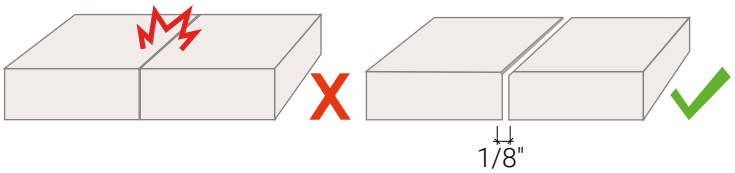
Finish the edges as per the indications in the drawing. The indications are the best compromise between appearance and function, while also greatly reducing the risk of chipping the edges.



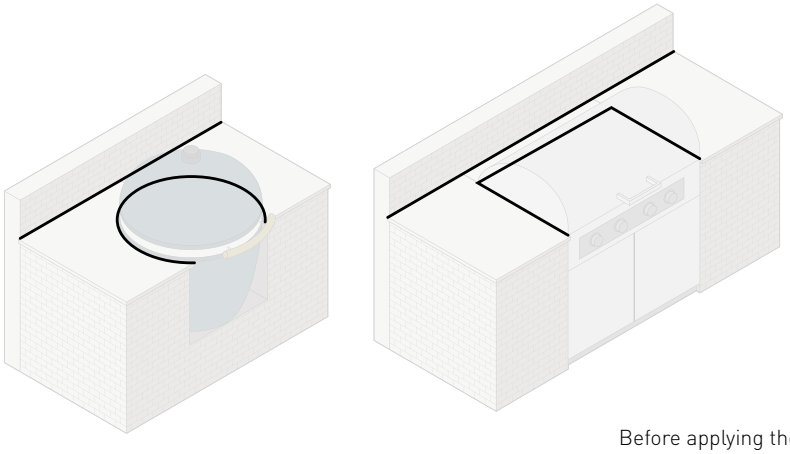
Provide for a chamfer of at least 3⁄64" on the top edges for joints between two adjoining worktops. This will reduce the risk of edge chipping during installation.



Since the surface is exposed to big temperature differences, make joints at least 1⁄8" wide. Joints should be sealed with silicone in the required color.

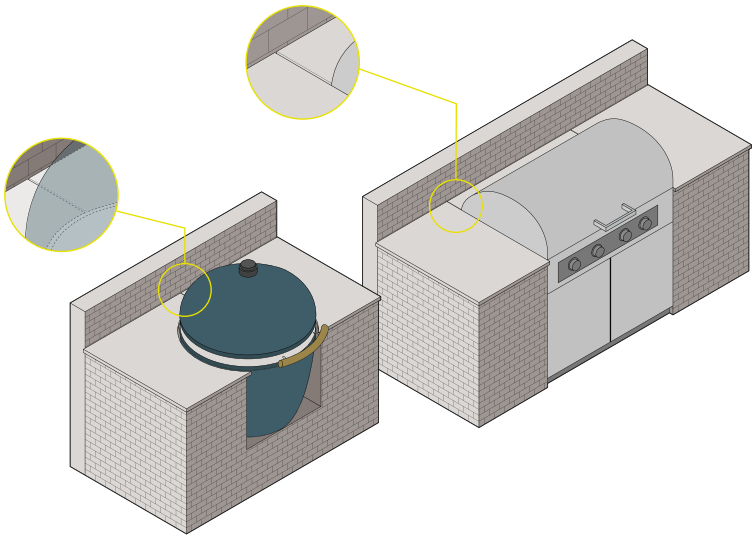


Avoid direct contact between Lapitec tops and barbecues, metal structures, and any materials subject to significant thermal expansion. Leave a gap of at least 3⁄16" between the Lapitec worktops elements of this type, sealing it with colored heat-resistant silicone to prevent water infiltration. Also, when installing Lapitec worktops against a wall, leave a 3⁄16" gap and seal it with silicone.



Before applying the silicone, protect the worktop surface with adhesive tape.

For partially recessed barbecues, cut the part of the top behind the barbecue as shown in the drawing.

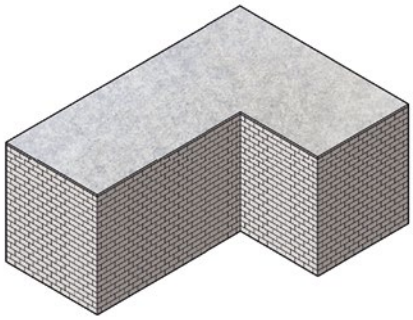


Lapitec S.p.A. recommends Mapei MAPESIL LM, Sika SIKASIL C, Ardex SX Sealant, Laticrete LATASIL, or an equivalent product. Make sure the temperature range of the above products is suitable for the requirements of your project.

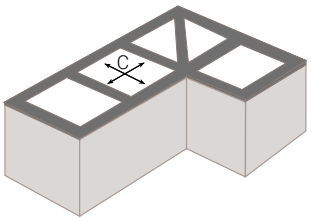
Installation

Important: the resting base on which the Lapitec worktop is resting must be flat, level, and structurally robust.

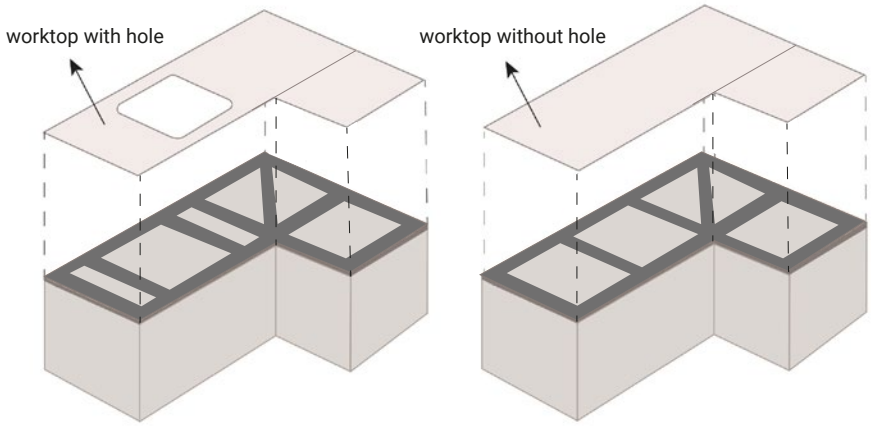
For brick-built kitchens, provide for a substrate for the entire area of the worktop. Lapitec S.p.A. suggests using GRC panels at least ½" thick as supporting surface adequately fixed to the resting base. If the resting base is insufficiently solid, add support bars. Do not use marine plywood. A supporting substrate is required for all Lapitec thicknesses, and check with the supplier that this support is suitable and stable for outdoor application.



In the case of kitchens composed of modular units, use units with a solid top to provide greater support for the Lapitec worktop. If solid top units are not available, use supports as per the table below.

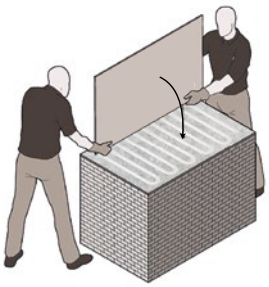
Required support	Thicknesses ½"	¾"	1 ¼"	Drawing
Max recommended spans Maximum load 286 lb	C ≤ 10"	C ≤ 17 ¾"	C ≤ 23 ½"	

If the worktop has one or more holes (sink, barbecue, etc.) the parts most subject to stress must be adequately supported to ensure the worktop is sufficiently stable.

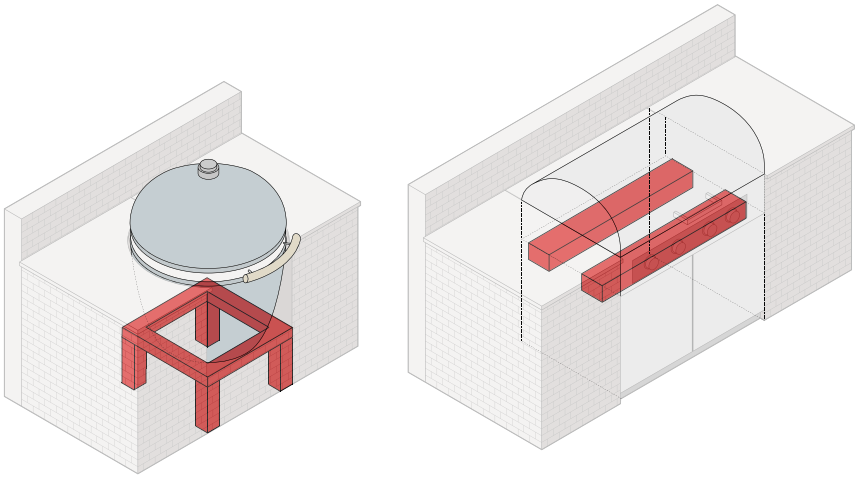


The Lapitec top must be bonded to the substrate using polyurethane adhesives: avoid cement-based or epoxy adhesives, which may be too rigid and unsuitable for the temperatures reached by the worktop (see adhesive manufacturers). Lapitec S.p.A. recommends Mapei ULTRABOND ECO PU 2K, Sika SikaForce 479 L45, Ardex 90, Laticrete LATAPOXY 300, or an equivalent product. Make sure the temperature range of the above products is suitable for the requirements of your project.

It is important to check that the substrate is perfectly flat before bonding on the worktop. Whether the support is a full-size solid substrate, or a structural frame, apply a full bed of adhesive to ensure the adhesive is evenly distributed over the entire support.



Lapitec S.p.A. recommends that the barbecue be held by a suitable support rather than resting directly on the finished surface. With this method, the weight of the barbecue is not supported directly by the worktop, and provides the ease of pulling out the BBQ without potentially scratching the surface or damaging the BBQ.

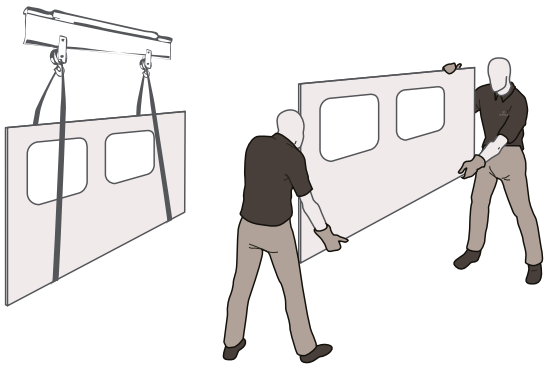


For more details on assembly of the barbecue resting base, see the related manufacturer's manual.

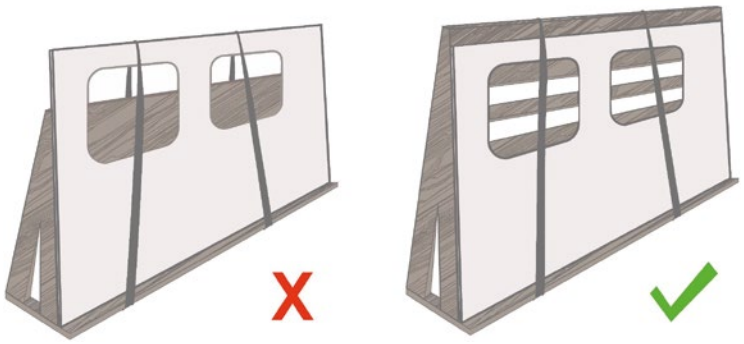
2. HANDLING AND LAYING

2.1. HANDLING AND PACKAGING OF THE WORKPIECE

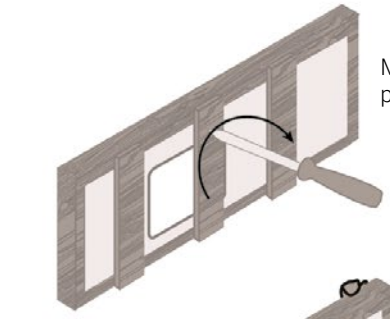
At all times, when handling and transporting the workpiece, whether by hand or by means of belts and suction cups, it must be kept in an upright position, as shown in the drawing below. Any holes inside the workpiece must always be facing upwards.



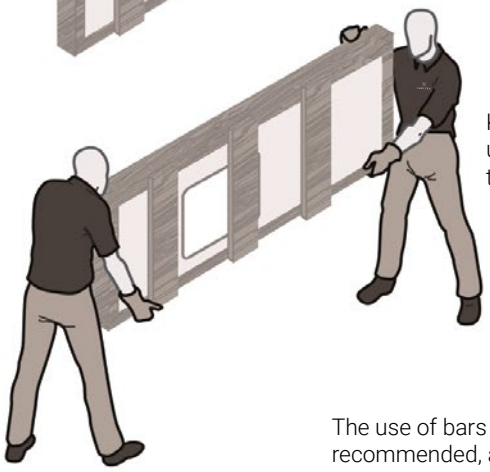
The slabs are packaged on stands and/or in crates. They must be transported individually with care and stacked on their side, regardless of their format, making sure to insert materials (e.g. wooden shims) between the different pieces and between the slabs and the support to prevent any breakages. The slabs should always be properly supported to avoid bending and stored in areas that are not subject to accidental impacts (workplace transport or manoeuvring areas).



If stored outside, the slabs should always be protected from rain by a sheet, thus preventing any stagnation. If the slabs get wet during packaging, the packaging must be completely removed and the slabs must be arranged so that they can dry perfectly.

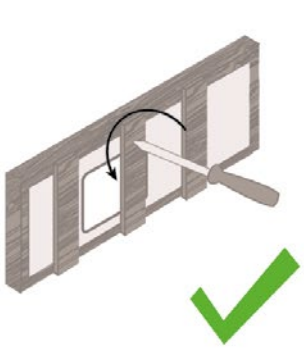


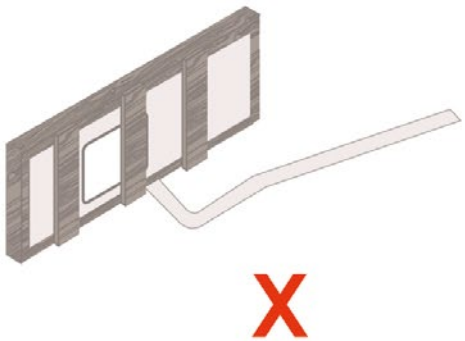
Make sure the wooden crate is properly secured.



Keep the workpiece in an upright position during transport.

The use of bars to open the crate is not recommended, as these may damage the workpiece.



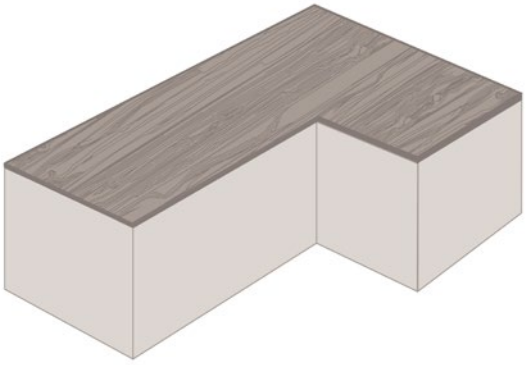


2.2. PRE-LAYING

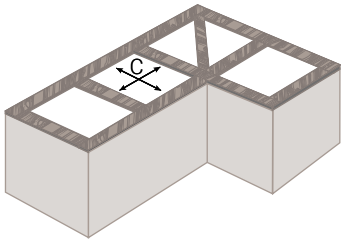
It is essential that the support base on which the Lapitec® countertop is to be laid is flat, level and structurally solid. Most breakages during assembly and post-laying are due to an uneven or inadequate support, or the presence of debris or process residues. The surface of the countertop must rest perfectly on the support, any unsupported points may weaken the workpiece. It is therefore not advisable to apply isolated silicone dots. Apply the adhesive over the entire support area so that it adheres completely to the countertop.

For countertops with a thickness of ½", it is advisable to ensure full support across the entire surface of the workpiece for greater stability. Use marine plywood with a minimum thickness of ¾" mm that supports the countertop over the entire area.

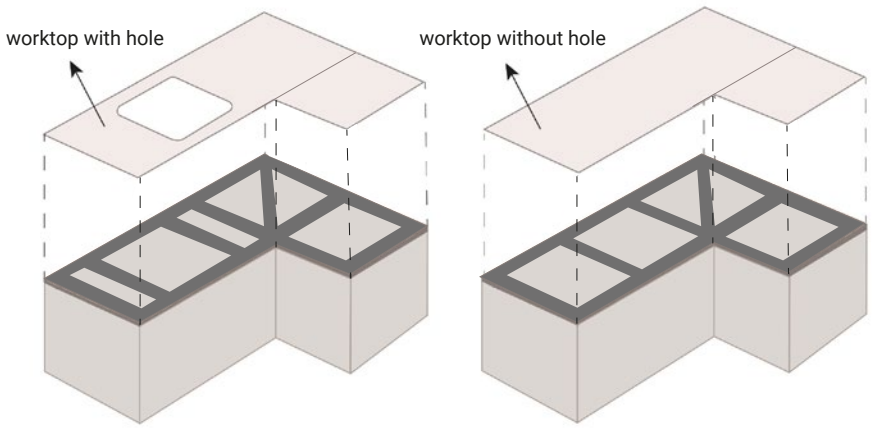
It is also important that the adhesive used to fix the Lapitec to the support is sufficiently elastic (e.g., silicone) to compensate for any differences in expansion between the two materials.



If a slatted structure is used, observe the maximum distance between the C crosspieces as shown in the following table:

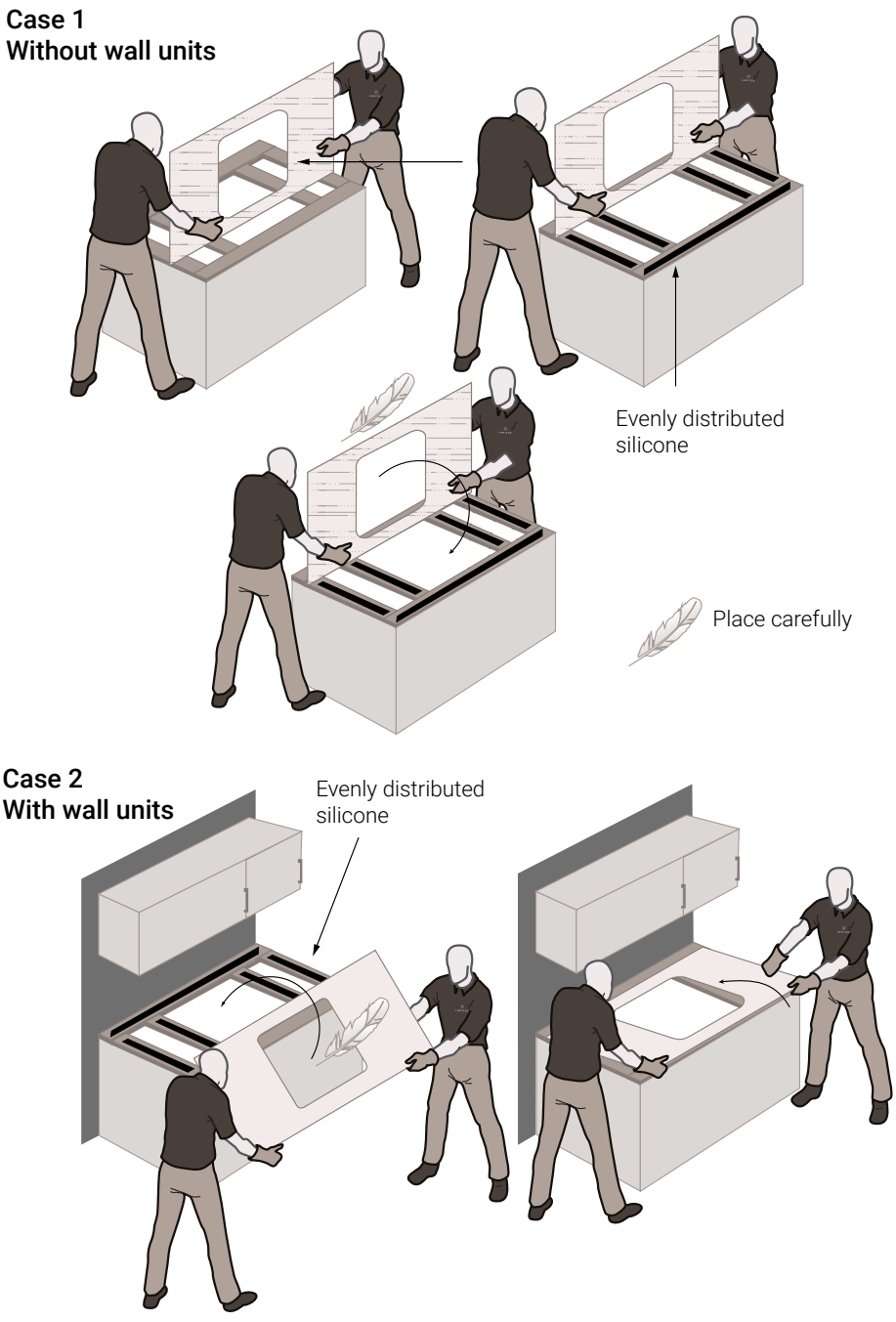
Required support	Thicknesses ½"	¾"	1 ¼"	Drawing
Max recommended spans Maximum load 286 lb	C ≤ 10"	C ≤ 17 ¾"	C ≤ 23 ½"	

If there are one or more holes (sink hole, gas hole) in the countertop, the most stressed parts must be properly supported to provide adequate stability.



2.3. LAYING

When laying the workpiece, follow the advice below to ensure optimal positioning.

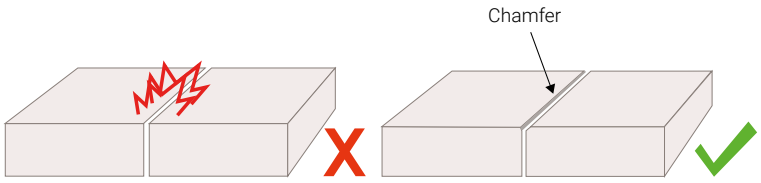


2.3.1 LAYING PIECES WITH ZERO GAP

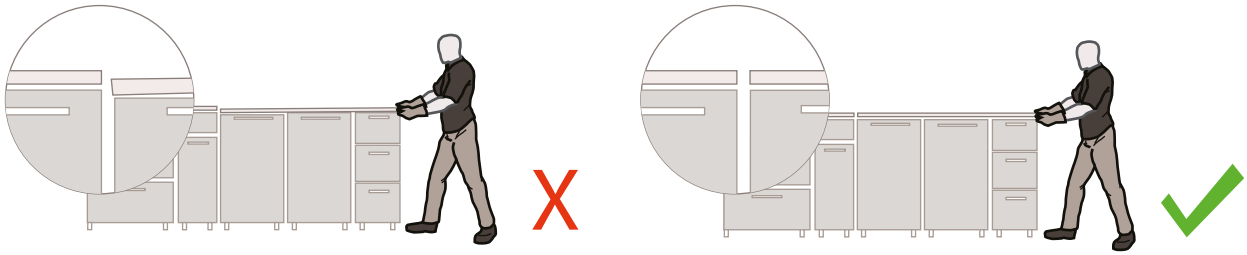
The process of handling and laying workpieces is intricate, both in the laboratory when testing their performance and during installation on site.

It is always recommended to handle the workpieces with care, paying attention to the corners and observing the following instructions.

Each corner must have a minimum chamfer on the edge to ensure the solidity of the workpiece.



Before laying, ensure that the support is level and perfectly flat, otherwise it is necessary to intervene with adjustments or shims. The flanked edges must fit perfectly and not have different angles that could lead to breakages.



To avoid hard impacts between two workpieces and to facilitate the approach of adjacent workpieces, it is always advisable to place shims between them, which will only have to be removed when applying silicone and making subsequent final adjustments with minimum displacements.

Care and attention during installation remains a decisive factor.

Joining workpieces with suction cups

Another way to join workpieces with zero gap is to use special equipment with suction cups for the calibrated approach of the workpieces.

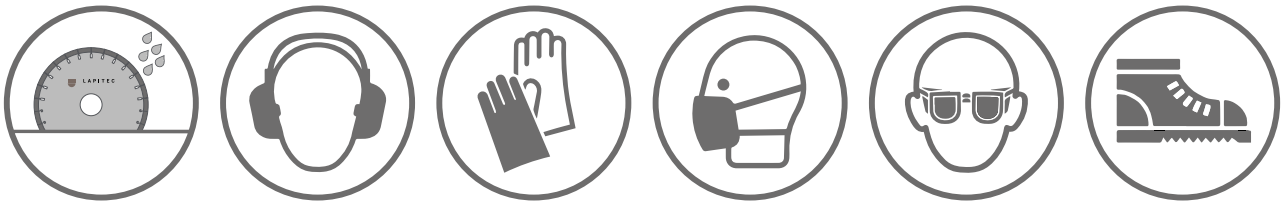
3. MANUAL PROCESSING

3.1. INTRODUCTION

Lapitec® is a sintered stone product supplied to the site ready for installation (cut, drilled and processed). A good design and accurate site survey enable processing to be carried out in the factory, therefore avoiding needless and critical adjustments on site.

Should processing be necessary on site, it is recommended to strictly follow all the instructions provided in this manual, using the tools supplied and/or recommended by Lapitec S.p.A. If any processing becomes necessary, it is good practice to carry out preliminary tests for both cutting and drilling in order to acquire familiarity and avoid any problems. On request, the company can provide processing waste to use for this purpose.

For manual processing it is recommended to follow the health and safety regulations in force. Each worker must have specific PPE (Personal Protective Equipment) for the work to be performed. Our recommendations are as follows.

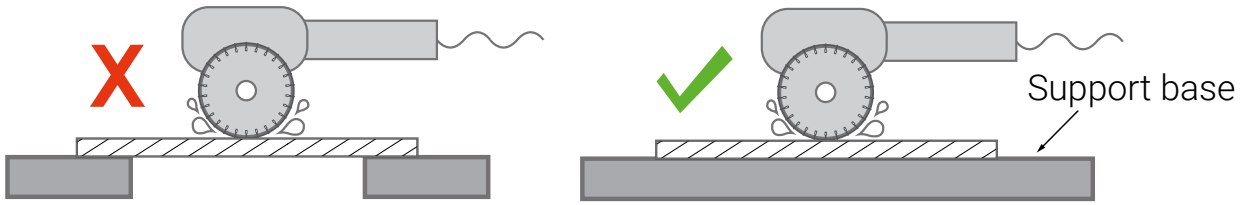


3.2. MANUAL CUTTING

The instructions provided in this paragraph refer to manual cutting only; for benchtop processing (saw, water jet or CNC), refer to the specific sections.

To proceed, the cutting tools supplied and recommended by Lapitec S.p.A. must be used, or, alternatively, tools whose full compatibility with those indicated has been checked. Always use plenty of water for cooling and dust suppression. Lapitec S.p.A. does not recommend resorting to dry cutting.

The slabs must be properly supported during any manual processing. The support should be sufficiently rigid, perfectly flat and in good condition. A wooden support is preferable to a metal one to prevent scratches from friction on the Lapitec surface.



Disclaimer

Always work from the finished surface towards the raw surface.

Square or rectangular holes (e.g. electrical installations) must have a rounded edge with a radius of 3/16'' at all four corners.

Once the cut has been completed, it is recommended that the upper and lower edge of the newly cut edge is lightly sanded using 60/120 grain diamond sandpaper. This will prevent unwanted chippings and cuts (the hardness of Lapitec leaves rather sharp edges).

3.2.1 TOOLS – BLADES FOR CUTTING ON SITE

For processing on site, Lapitec S.p.A supplies and suggests using specific tools that are tested and guaranteed. The approved tools are available at Lapitec S.p.A., which declares their suitability for use.

Continuous rim diamond blades for manual equipment (angle grinders, hoses, etc.)

Ø 4" attachment Ø 7/8" (*) RPM from 11,000 to 13,000

Ø 5" attachment Ø 7/8" (*) RPM from 11,000 to 13,000

Ø 6" attachment Ø 7/8" (*) RPM from 9,000 to 11,000

(*) adapter for Ø 13/16" also available.

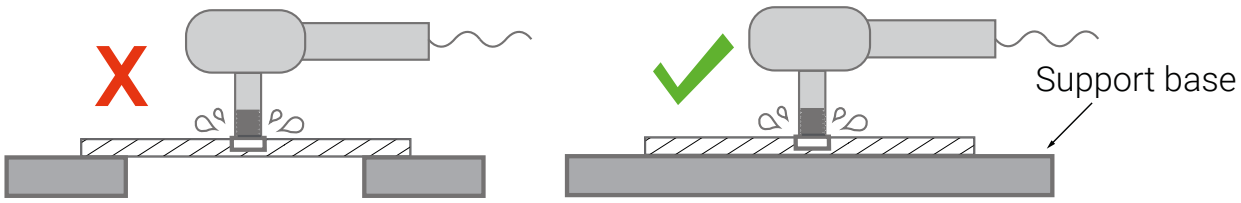
Disco per taglio manuale Lapitec

Diameters: 4", 5", 6".

The sequences are subject to variations due to ongoing research aimed at improving processing products. It is recommended to contact the supplier or the Lapitec Academy service for any clarifications.

3.3. MANUAL DRILLING

If it is necessary to drill holes (for piping, air vents, etc.), Lapitec can be drilled using the tools listed below in the manner indicated. The part to be drilled must be properly supported, as is the case when cutting; during drilling operations avoid any hammering to avoid breakage. When drilling, use water for cooling and dust suppression. Lapitec S.p.A. does not recommend resorting to dry cutting.



Disclaimer

Always work from the finished surface towards the raw surface.

Square or rectangular holes (e.g. electrical installations) must have a rounded edge with a radius of 3⁄16'' at all four corners.

3.3.1 TOOLS – DRILL BITS AND HOLE CUTTERS FOR DRILLING ON SITE

For processing on site, Lapitec S.p.A. supplies and suggests using specific tools that are tested and guaranteed. The approved tools are available at Lapitec S.p.A., which declares their suitability for use.

Diamond bits and cutters for drilling with manual equipment (drills, disc cutters, etc.)

Holes Ø ¼" attachment HEX RPM 1,800–2,000 (for drill)
Holes Ø 5⁄16" attachment HEX RPM 1,800–2,000 (for drill)
Holes Ø ⅜" attachment HEX RPM 1,800–2,000 (for drill)
Holes Ø ½" attachment HEX RPM 1,800–2,000 (for drill)
Holes Ø 9⁄16" attachment HEX RPM 1,800–2,000 (for drill)
Holes Ø ¼" attachment M14 RPM 1,800–2,000 (for flex)
Holes Ø 5⁄16" attachment M14 RPM 1,800–2,000 (for flex)
Holes Ø ⅜" attachment M14 RPM 1,800–2,000 (for flex)
Holes Ø ½" attachment M14 RPM 1,800–2,000 (for flex)
Holes Ø 9⁄16" attachment M14 RPM 1,800–2,000 (for flex)
Holes Ø 13⁄16" attachment M14 RPM 3,000–11,000 (for flex)
Holes Ø 1" attachment M14 RPM 3,000–11,000 (for flex)
Holes Ø 1 3⁄16" attachment M14 RPM 3,000–11,000 (for flex)
Holes Ø 1 ¼" attachment M14 RPM 3,000–11,000 (for flex)
Holes Ø 1 ⅜" attachment M14 RPM 3,000–11,000 (for flex)
Holes Ø 1 9⁄16" attachment M14 RPM 3,000–11,000 (for flex)
Holes Ø 2" attachment M14 RPM 3,000–11,000 (for flex)

Workshop drill bits, for use with water only

Ø 1 ⅜" M14 1.500-2.500

3.4. FINISHES

3.4.1 FINISH FOR COUNTERTOP AND EDGE - LUX

Supplier	Tool	Sequence used
Sanwa- Kenma - (Alpha Tools)	Dia Ceramica - Ex Ceramica Series	150R - 300R - 500R - 1000R - 2000R - 3000R
Weha	Es Wet Use - Ex Series - Hybrid Flash	1 - 2 - 3 - 4 - 5 - 6 - 7 50 - 100 - 200 - 400 - 800 - 1500 - 3000 H1 - H2 - H3
Italdiamant	Ds Series	50 - 100 - 200 - 400 - 800 - 1500 - 3000

3.4.2 FINISH FOR COUNTERTOP AND EDGE - SATIN

Supplier	Tool	Sequence used
Sanwa- Kenma - (Alpha Tools)	Dia Ceramica - TF Ceramica Series	150R - 300R - 500R
Weha	Es Series - Hybrid Flash	50ES - 100ES - 200ES - 400ES - 800ES H1 - H2
Italdiamant	Ds Series	50 - 100 - 200 - 400 - 800

Refer to the technical manual of the listed tool manufacturers to define the appropriate processing parameters.

3.5. ASSEMBLY USING ADHESIVES

This section focuses on the bonding together of Lapitec slabs to make elements such as edges, steps, suspended corners, etc. For instructions on how to bond Lapitec onto different supports, see the specific sections of the Finishes Manual.

Lapitec S.p.A. has performed bonding tests on numerous products, checking their technical performance as well as shade compatibility with the colours of Lapitec slabs.

Below are several proposals from the Tenax range of products, specifically made for Lapitec slabs and for our colour range, for which the technical specifications are provided.

3.5.1 GOOD PRACTICES FOR THE USE OF ADHESIVES

Before applying the adhesive, make sure that the surface to be bonded is clean, dry and free from any type of treatment. If you need to bond on a treated surface, you must sand it first with coarse grit sandpaper in the 60-80 range to remove the treatments and create a rough surface that guarantees secure and lasting adhesion.

For greater effectiveness on overhang bondings (45°), it is good practice to place a square or L profile of approximately 1 ¼" x 1 ¼" on the non-visible rear of the material, along the entire bonding length of the apron.

Where it is not possible to use Lapitec to support the finished piece, choose a material with the same expansion coefficient as Lapitec (e.g., granite).

NB:

When choosing the adhesive, the functionality and use of the workpiece should be considered in order to identify the suitable product.

3.5.2 STRONGBOND CARTRIDGE

Lapitec bonding mastic indicated for indoor and outdoor applications, including persistent exposure to UV rays.

The Strongbond cartridge provides excellent adhesion in very short times (1 hour, 1 hour and 15 minutes), allowing the cutting and polishing of bonded pieces. The hardened product has a smooth, glossy and polishable surface.

3.5.3 STRONGBOND A+B

New generation two-component adhesive with zero yellowing in the sun for Lapitec bonding, indicated for both indoor and outdoor use. Solvent-free paste product with medium reactivity. Good hardness. The adhesive hardens even at 32° F. The appearance of the hardened film is still glossy and dry even in poor humidity and temperature conditions. Recommended for use on white materials where it is necessary to ensure that the resin does not yellow in the sun. Does not leave streaks and does not alter the colour. Hardening of the resin is only marginally affected by temperature. Zero VOC product.

3.5.4 FROZEBOND A+B

Extra strong two-component epoxy adhesive in very soft and spreadable thixotropic paste, indicated for both indoor and outdoor use and particularly suitable for cold climates. Recommended for outdoor use. High adhesive strength on multi-materials and resistant to weathering. Can be applied even on damp surfaces. Also suitable for bonding different types of materials such as Lapitec-stone, Lapitec-glass, Lapitec-cement, Lapitec-honeycomb-type composite panels, Lapitec-wood panels or wood laminates. Surfaces to be bonded should be sanded beforehand.

3.5.5 FIREBOND

Mastic for bonding Lapitec. Indicated for indoor use. High resistance to heat and fast processing times. Excellent adhesion in very short times (60-90 minutes), with excellent workability, thus enabling the rapid processing of bonded pieces even at low temperatures. The hardened product has a smooth, glossy and polishable surface. Good sunlight resistance.

3.5.6 RAINBOW

The systems described above can be coloured with universal Rainbow colourants in a range of colours aligned with Lapitec colours. The colouring paste mixes very well with all mastics, making it easy to colour them. For correspondence between the glue colour and the Lapitec colours, please refer to the relevant section in the Processing Manual.

3.6. BIO-CARE

Bio-Care is an innovative technology that gives Lapitec antibacterial properties, making the surface hygienic and easy to clean. The functions of Bio-Care can be reactivated at any time using the Bio-Care kit, which must be applied to the visible parts each time the material is processed (drilling, surface processing and cutting), to maintain the qualities attributable to Lapitec.

How to apply

Make sure the surface is clean, dry and free of dust. Spread the Bio-Care One product evenly using a solvent-resistant cloth. When the product takes on a more viscous consistency (due to the evaporation of most of the solvent after about 2 minutes), remove the excess Bio-Care One with a clean cloth, taking care to remove any stains or shadows.

Caution: any shadow or stain left on the surface will become permanent once the treatment has completely hardened.

Treatment	Quantity oz/ft^2	Post-treatment handling time
Bio-Care One	1.90 - 2.28W	40 min

The surface can be handled 40 minutes after application. Wait 7 days for the treatment to be completely set before carrying out any tests. Manual application of the treatment can be carried out on smaller surfaces. Treatment on slabs must applied with special machines. As the quantity of product is minimal, it is recommended to apply Lapitec Bio-Care One on several pieces to be treated in sequence.

Precautions

Do not turn upside down. Store in a cool, dry place away from heat sources.

3.7. REPAIR KIT

The repair kit is composed of a 395 nm UV torch, a coloured Lapitec filler, 1 trowel and 1 sheet of 400 grit diamond sandpaper (usable on all finishes except Lux).

Instructions for use

Using the trowel supplied, mix the filler thoroughly until all the internal components are completely blended, then apply in small quantities (drops) on the area to be repaired. Turn on the UV lamp and move it over the repair area to activate the solidification process (about 15-20 seconds). Manually check the compactness of the filler. Repeat the procedure until the chip has been completely filled. Next, protect the part of the Lapitec top that has not been repaired with masking tape to prevent the sandpaper from damaging the surface. Use the sandpaper supplied to remove any excess filler. Then apply Bio-Care only on the repaired area to prolong the aesthetic effect of the repair over time.

Disclaimer

Failure to mix the filler may result in a different shade with respect to Lapitec. The characteristics of the UV lamp must be the same as those indicated by Lapitec, otherwise the filler may not cure completely. For the Lux finish use polishing paper for granite up to 3000 grit. An inadequate chamfer on the edge of the workpiece may be the cause of the chipping. For more information see the specific sections in this manual.

Filler shelf life: 3 months in closed container.

Watch the video tutorial

4. CLEANING, MAINTENANCE AND CARE

4.1. ROUTINE CLEANING

Daily care is essential for the correct maintenance of Lapitec® surfaces. To facilitate the removal of stains, do not let them dry and clean them as soon as possible.

For the routine cleaning of Lapitec it is recommended to use a microfibre cloth to remove dust from the surface, then rinse with warm water and a neutral detergent such as FilaCleaner. Rinse with clean water and dry with a damp microfibre cloth or non-abrasive soft sponge. Alternatively, neutral, no-rinse detergents such as Vetril, Glassex or FilaBrio can be used. In any case, follow the instructions of the detergent manufacturer.

For small areas cleaning can be carried out manually. For large areas it is recommended to use a pressure washer outdoors or a floor washer indoors.

What not to do

Do not use washing up liquid, waxes, oily soaps, impregnating agents or other treatments. Some detergents available on the market contain wax or polishing additives that after several applications may leave an oily film on the surface, preventing Lapitec from being cleaned.

Avoid using ceramic knives or other objects of similar hardness to Lapitec, as they may damage the surface.

Do not use abrasive sponges that may scratch the surface. Use blue scratch-resistant Scotch-Brite sponges.

Do not hit the material with sharp or heavy metal objects as they may chip the material or, in some cases, cause it to break.

Remember that the edges are the most delicate part of the Lapitec workpiece.

4.2. SPECIAL CLEANING

When routine cleaning is not enough, specific procedures must be followed depending on the stain to be removed. The use of recommended products, even if aggressive, will not compromise the beauty of the piece. The length of time the dirt is left on the surface plays an important role, therefore it is advisable to clean as soon as possible. It is recommended to start by cleaning a small area and check its effectiveness before cleaning the whole surface.

Do not under any circumstance use concentrated hydrochloric acid or caustic soda, or products containing hydrochloric acid and its derivatives.

Lapitec S.p.A. has collaborated with Fila Industria Chimica S.p.A., a company specialised in surface cleaning, to identify the most suitable and effective products for the correct cleaning of Lapitec workpieces.

Below is a table identifying the types of stains that may occur on surfaces and the products recommended by Fila Industria Chimica S.p.A. for their removal. Data sheets are available on the website www.filasolutions.com. The choice of detergent must either be one of those listed in the table or an alternative product with identical characteristics.

Before proceeding, it is always recommended to obtain the most up-to-date documentation from the provider of the cleaning products and follow the instructions. After cleaning, the surfaces must be properly rinsed in order to remove all traces of the detergent used. In case of special requirements, contact Lapitec S.p.A. customer care at customercare@lapitec.com.

Notes

Ink, paint, wax, oil/grease, enamel and adhesive stains can also be removed using solvents such as nitro thinner, acetone or white spirit. Test effectiveness on a small area before applying on the whole surface.

Warnings

Lapitec S.p.A. accepts no responsibility for the effectiveness of subsequent cleaning and maintenance operations if the surface is not cleaned after laying or if cleaning is not carried out properly.

Type of dirt	Type of detergent	Smooth surfaces (Lux, Satin, Velluto)	Textured surfaces (Lithos, Vesuvio, Arena, Meridio)
Limescale deposit	Descaler detergent (e.g. Fila Deterdek)	Damp scratch-resistant Scotch-Brite	Sorghum or plastic bristle brush
Metal marks	Descaler detergent (e.g. Fila Deterdek)	Damp scratch-resistant Scotch-Brite	Sorghum or plastic bristle brush
Pencil	Descaler detergent (e.g. Fila Deterdek)	Damp scratch-resistant Scotch-Brite	Sorghum or plastic bristle brush
Grease	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp cloth	Damp Scotch-Brite non-scratch scrub sponge
Coffee	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp cloth	Damp Scotch-Brite non-scratch scrub sponge
Ice cream	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp cloth	Damp Scotch-Brite non-scratch scrub sponge
Fruit juice	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp cloth	Damp Scotch-Brite non-scratch scrub sponge
Blood	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp cloth	Damp Scotch-Brite non-scratch scrub sponge
Tomato	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp cloth	Damp Scotch-Brite non-scratch scrub sponge
Wine	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp cloth	Damp Scotch-Brite non-scratch scrub sponge
Beer	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp cloth	Damp Scotch-Brite non-scratch scrub sponge
Ink	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp cloth	Damp Scotch-Brite non-scratch scrub sponge
Nicotine	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp cloth	Damp Scotch-Brite non-scratch scrub sponge
Marker pen	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp cloth	Damp Scotch-Brite non-scratch scrub sponge
Cola	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp cloth	Damp Scotch-Brite non-scratch scrub sponge
Hair dye	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp cloth	Damp Scotch-Brite non-scratch scrub sponge
Rubber	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp scratch-resistant Scotch-Brite	Sorghum or plastic bristle brush
Chewing gum	Degreasing detergent (bleach-based/Fila PS87 Pro)	Damp scratch-resistant Scotch-Brite	Sorghum or plastic bristle brush
Rust	Rust removal detergent	Damp scratch-resistant Scotch-Brite	Sorghum or plastic bristle brush
Silicone	Specific detergent for silicone removal (e.g. Fila Zerosil)	Damp scratch-resistant Scotch-Brite	Sorghum or plastic bristle brush
Candle wax	Zerosil	Damp scratch-resistant Scotch-Brite	Sorghum or plastic bristle brush


OBBIADENE
Superiore
di Cartizze

5. CUSTOMER CARE

Lapitec Academy

Lapitec Academy is the division that trains and supports professionals working with Lapitec® through in-company training and direct support. Every single experience gained on international projects and through different uses is used to perfect the product and accessories marketed by Lapitec S.p.A.

Through direct involvement with its customers, Lapitec S.p.A. is constantly searching for new solutions to make the service increasingly complete and effective for the various needs of use.

Thanks to the Academy Community service, any technical news and developments are promptly shared with the entire network of collaborators.

Professionals participating in the training course held by Lapitec Academy can earn Approved Fabricator certification and learn useful tips and techniques for processing Lapitec.

Contacts:

academy@lapitec.com
+39 0423 703811

LAPITEC
ACADEMY

Customer Care

For any particular requirements, please contact Lapitec S.p.A. customer care.

Contacts:

customercare@lapitec.com
+39 0423 703811

LAPITEC

NATURALLY ITALIAN

Lapitec S.p.A.
via Bassanese, 6
31050 Vedelago (Treviso) Italy
tel. +39 0423 703811
fax. +39 0423 709540
info@lapitec.com - www.lapitec.com