

TECHNICAL MANUAL 2018

NEOLITH

DESIGN, HANDLING AND MECHANIZATION

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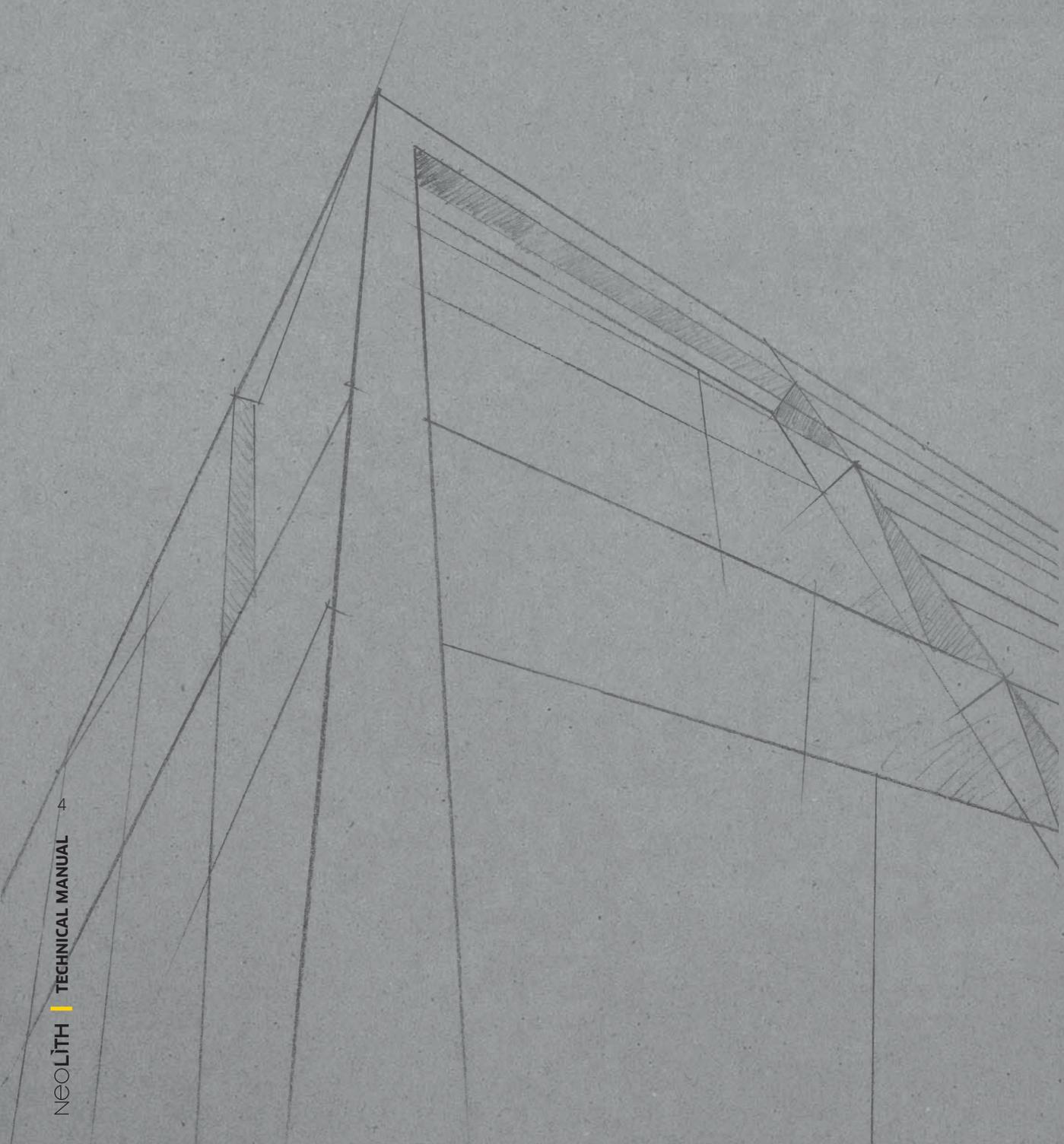
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Due to the uniqueness of the materials used in North America to produce kitchen countertops, a specific countertop manual was created for this market which is only applicable in the USA and Canada. The "Technical Kitchen Countertop Manual" should be used in all other countries of the world.

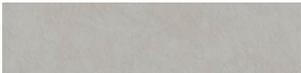
Each marble producer must follow the manual that corresponds to their market in order to ensure proper production pursuant to the typical local materials.

01. PRODUCT



01. PRODUCT

1.1 Product Range

		
Arctic White	Barro	Nero Zimbabwe
		
Avorio	Basalt Beige	Phedra
		
Humo	Basalt Black	Pierre Bleue
		
Nero	Basalt Grey	Pietra di Luna
		
Nieve	Beton	Pietra di Osso
		
Perla	Cement	Pietra di Piombo
		
Arena	Concrete Taupe	Zaha's Stone
		
Aspen Grey	Lava	

01. PRODUCT

1.1 Product Range



Iron Ash



Blanco Carrara



Onyx translucent



Iron Copper



Calacatta



Onyx 001/001-R



Iron Corten



Calacatta Gold



Pulpis



Iron Frost



Estatuario E01/E01R



Strata Argentum



Iron Grey



Estatuario E04/E04R



Travertino Navona



Iron Moss



Estatuario E05/E05R



Steel Marengo



Textil White



Marfil



La Bohème



Nero Marquina

01. PRODUCT

1.2 Finishes



SATIN

Completely matte finish. Highly resistant and ideal for commercial uses.



SILK

A matte finish with a light layer of enamel for subtle shine and a pleasant soft touch. Surface finish which is easy to clean.



RIVERWASHED

Finish with a rugged texture and high relief for surfaces that evoke feelings upon touch.



NATURAL HONED

A honed texture which is typical of natural stones: smooth, soft, shine-free and completely matte.



DÉCOR POLISHED

Décor Polished offers a perfectly linear reflection of the Classtone Collection colors, which gain depth and elegance.



NANOTECH POLISHED

With a high shine level, Nanotech Polished offers the Colorfeel Collection a more sophisticated image.

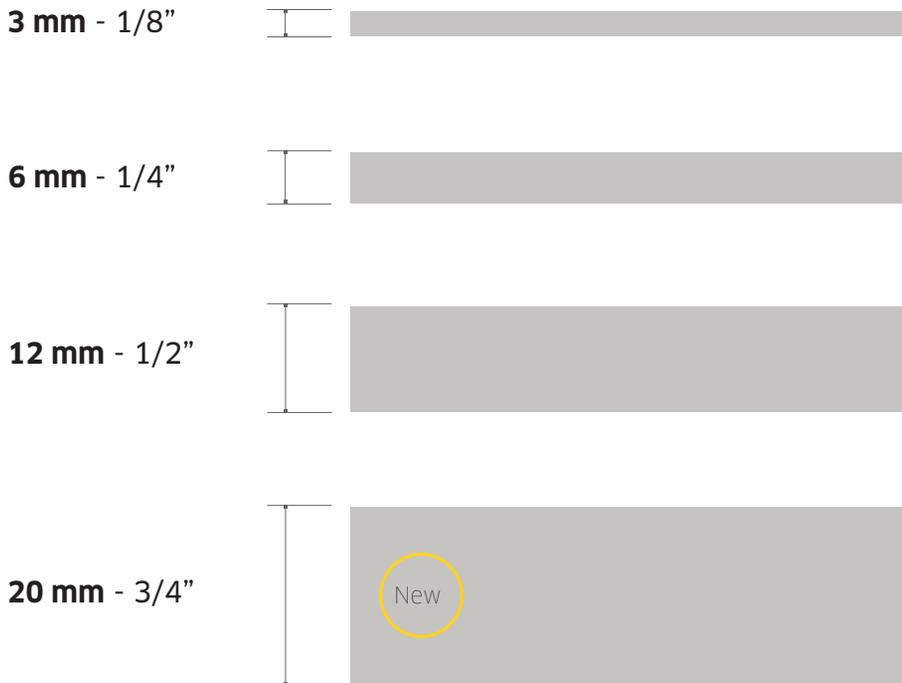
01. PRODUCT

1.3 Formats



01. PRODUCT

1.4 Thicknesses



	3 (1/8")	3+ (1/8")	6 (1/4")	6+ (1/4")	12 (1/2")	20 (3/4")
Indoor paneling	•	•	•	•		
Indoor paving			•	•		•
Outdoor natural stone facade			•	•	•	
Outdoor paving			•	•		•
Ventilated facade with exposed anchor				•	•	
Ventilated facade with hidden anchor				•	•	
Countertops					•	•
High-traffic paving				•	•	•
Indoor paneling over the material	•	•	•	•		
Indoor paving over the material			•	•		
Furniture	•	•	•	•	•	

01. PRODUCT

1.5 Product Technical Characteristics

Product characteristics as per the finishes:

TEST	STANDARD	DETERMINATION	Unit	FINISH			
				SATIN	SILK	POLISHED	RIVERWASHED
Determination of Dimensions and Surface Appearance	ISO 10545-2	Thickness*	mm	± 0,2	± 0,2	± 0,2	± 0,2
		Tolerance Flatness Slab width	mm	± 2 (0,1%)	± 2 (0,1%)	± 2 (0,1%)	± 2 (0,1%)
		Tolerance Flatness Slab length	mm	± 4 (0,1%)	± 4 (0,1%)	± 4 (0,1%)	± 4 (0,1%)
		Tolerance Dimensions**	mm	± 1 (0,2%)	± 1 (0,2%)	± 1 (0,2%)	± 1 (0,2%)
Water Absorption	ISO-10545-3	Boiling Absorption	%	≤ 0,1	≤ 0,1	≤ 0,1	≤ 0,1
		Apparent Density	gr/cm3	2,4	2,4	2,4	2,4
Impact Resistance	ISO 10545-5	Coefficient of restitution	-	0,8	0,8	0,6	0,8
Deep Abrasion Resistance	ISO-10545-6	Lost Volume	mm3	130	-	-	-
Surface Abrasion Resistance	ISO 10545-7	Visual Appearance	Clase	PEI III	PEI II	PEI I	PEI II
Linear Thermal Expansion	ISO 10545-8	Expansion 25 - 100oC (Average)	10-6· oC	5,7	5,7	5,7	5,7
Resistance to Sudden Temperature Change	ISO 10545-9	Damage	-	No Damage	No Damage	No Damage	No Damage
Moisture Expansion	ISO 10545-10	Coefficient of Expansion	mm/m	< 0,1	< 0,1	< 0,1	< 0,1
Freeze Resistance	ISO 10545-12	Damage	-	No Damage	No Damage	No Damage	No Damage
Chemical Resistance	ISO 10545-13	Cleaning Products	Clase	UA	GA	GA	GA
		Pool Salts	Clase	UA	GA	GA	GA
		Weak Concentrations	Clase	ULA	GLA	GLB	GLA
		High Concentrations	Clase	UHA	GHA	GHB	GHA
Stain Resistance	ISO 10545-14	Visual Appearance	Clase	5	5	5	5
Release of Lead and Cadmium	ISO 10545-15	Lead Concentration	mg/dm2	<0,01	<0,01	<0,01	<0,01
		Cadmium Concentration	mg/dm2	<0,001	<0,001	<0,001	<0,001
Lightfastness	DIN 51094	Chromatic Change	-	No Change	No Change	No Change	No Change
Anti-Slip Properties	DIN 51130	Critical Angle of Slip (Shoes method)	Clase	R9	R9	-	R10
	DIN 51097	Critical Angle of Slip (Barefoot areas)	Clase	A	A	-	A
	ANSI A137.1	Coefficient of Dynamic Friction	Clase	0,41 - 0,57	0,42	0,21	0,53

* Slabs without mesh

** Cut Slabs/Tiles

01. PRODUCT

1.5 Product Technical Characteristics

Bending Resistance as per the slab thickness:

TEST	STANDARD	DETERMINATION	Unit	3600 x 1200						3200 x 1500			
				3 mm	3+	6 mm	6+	3+3	6+3	6+6	6+	12 mm	20 mm
Weight	-	Grammage	Kg/m ²	7	8	14	15	16	23	30	15	29	
		Mass		34	38	67	72	76	110	143	77	148	
Bending Resistance	ISO 10545-4	Breaking Force	N	353	430	1449	1807	1337	2735	3149	1807	5451	15748
		Modulus of Rupture	N/mm ²	48	54	48	53	47	57	47	53	51	55



02. HANDLING AND STORAGE

02. HANDLING AND STORAGE

Neolith slabs must be loaded, unloaded and transported by means of a forklift, bridge crane or other hoisting device.

Whenever handling and transporting, the slabs must be balanced taking their center of gravity into account.

The following table summarizes the weight per slab and per square meter:

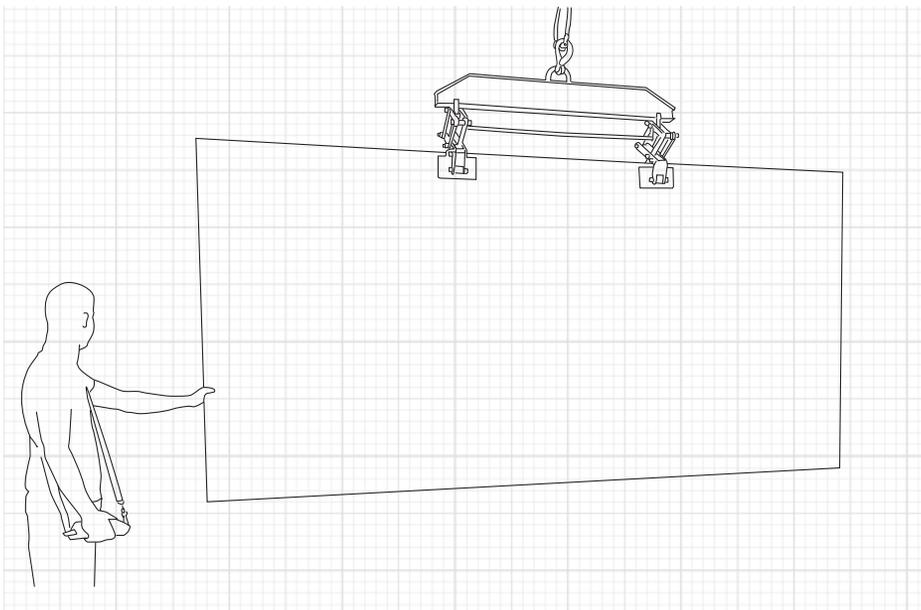
Format	3600 x 1200 mm, 144" x 48"							3200 x 1500 mm, 125" x 60"		
	3	3+	6	6+	3+3	6+3	6+6	6+	12	20
Thicknesses (mm)	3	3+	6	6+	3+3	6+3	6+6	6+	12	20
Weight (kg/m ²)	7	8	14	15	16	23	30	14	29	48
Weight of full slab (Kg)	34	38	67	72	76	110	143	77	148	245

Table 1: Formats and weights per thickness.

2.1 Transporting with a clamp

Always pay attention to the movement and handling of the slabs to prevent splintering or breakage.

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



Neolith Slab handled with a clamp

The additional width of this clamp will prevent the slab from bending during handling to, thus, prevent undesirable breakage.

This clamp is available through TheSize.

Contact TheSize for more details.

Recommendations:

- Clamping more than 2 slabs at the same time is not recommended.
- Before lifting polished slabs with the clamp, remove the protective plastic.

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



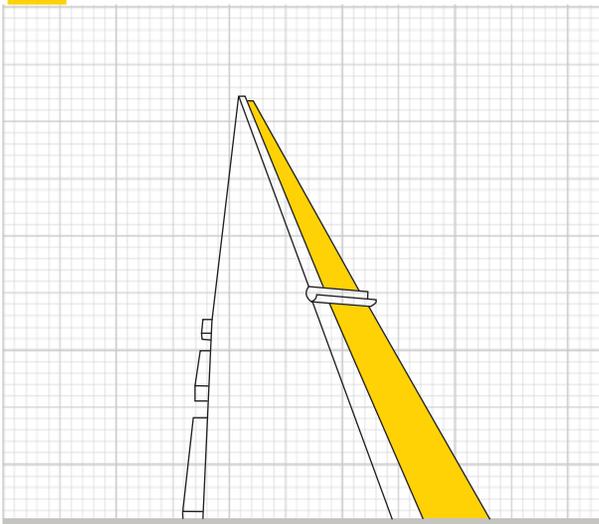
Make sure to cover all metal surfaces that may come into contact with the slab with adhesive foam tape.

If this type of clamp is not available, use a 2 cm thick plank of approximately 3 m x 20 cm so the clamp can catch 12 mm slabs.

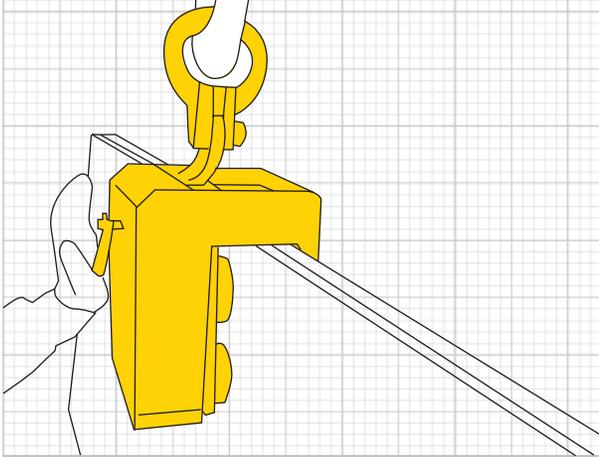
Fixing the ends of the slab with jacks to the plank so the slab doesn't sag during handling is recommended.

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

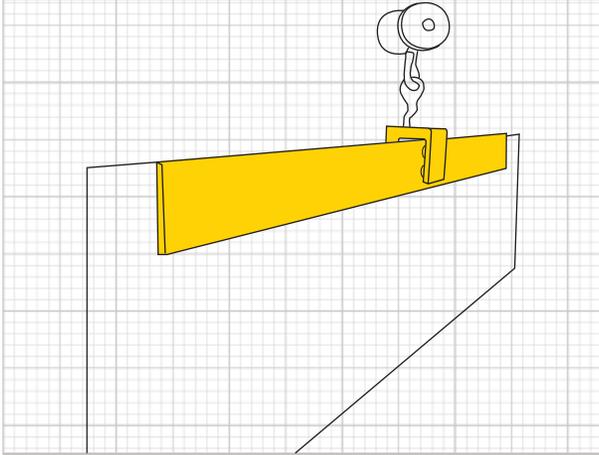
- 1) Place the clamp on the slab and the plank.
- 2) Fix the clamp and lift the slab and plank with care.
- 3) Avoid sudden changes in direction.



1. Plank at the back of the slab



2. Clamping



3. Handling the slab with the clamp

2.2 Transporting with slings

Using canvas slings to move several slabs at the same time is recommended.

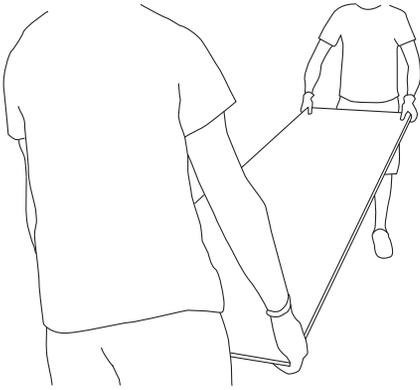
Metal slings must not be used to handle Neolith slabs.



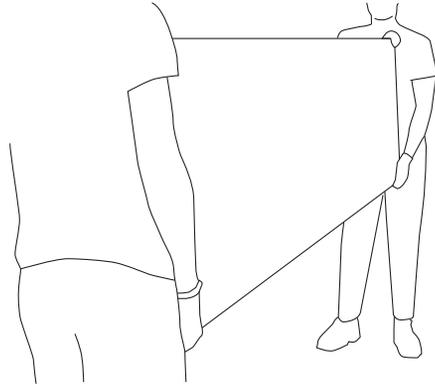
Canvas slings

2.3 Manually transporting a Neolith slab

Moving a Neolith countertop

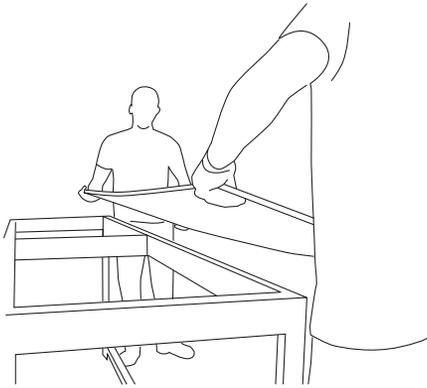


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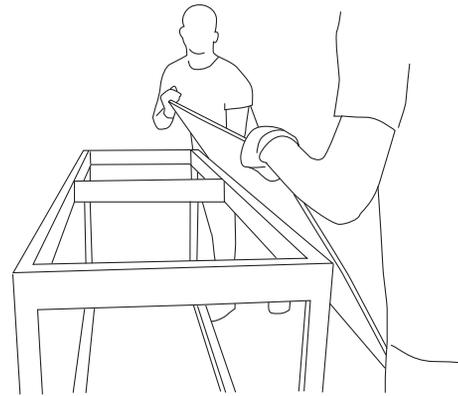


✓ CORRECT

Raising a Neolith countertop onto a bench



✗ INCORRECT



✓ CORRECT

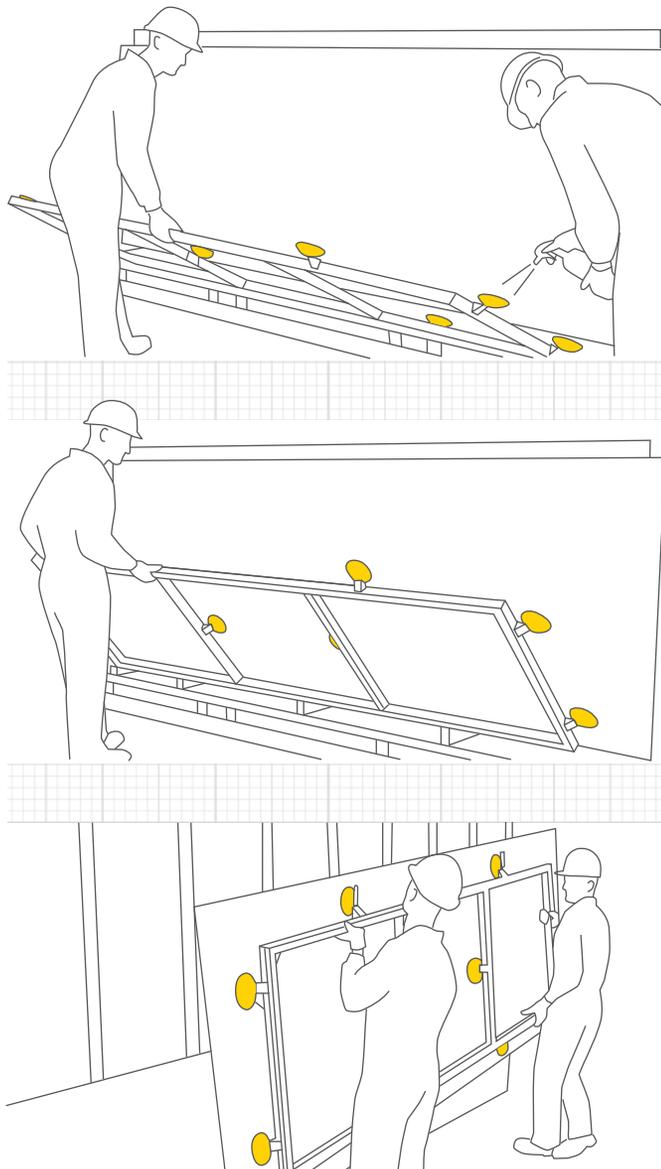
2.4 Suction frame

For easier handling of slabs and finished parts, using a suction frame is recommended (only for 3 and 6 mm slabs).

The suction cups can move easily along the frame which helps adapt the frame to any size slab needed.

This frame can be purchased from TheSize.

*Contact TheSize for more details.



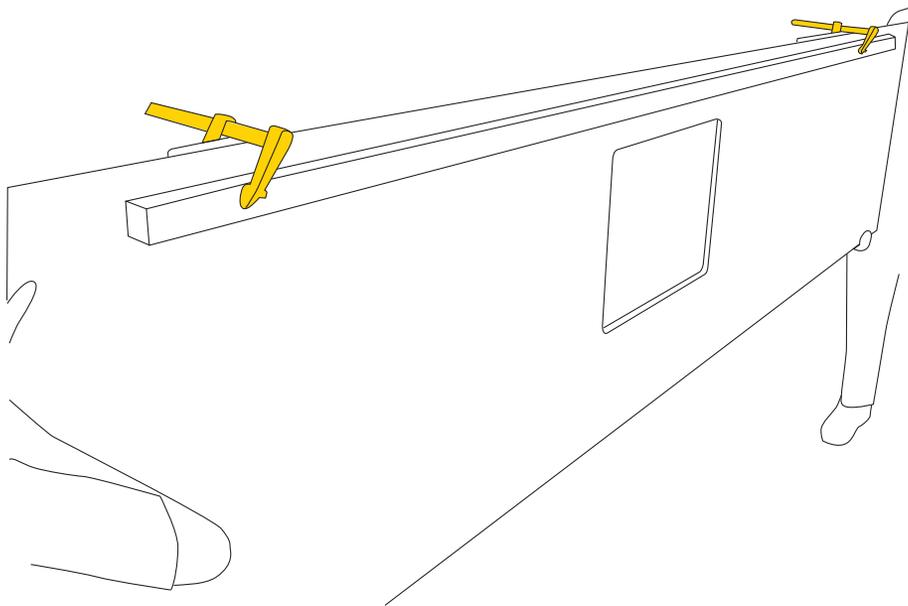
Handling and installing a piece with a suction frame

If this type of frame is not available, an aluminum rod or similar element, secured with several jacks, can also be used.

This will prevent the part from bending too much during handling.

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

This will prevent the part from bending too much during handling.



Handling a part with a rod secured with jacks

2.5 Slab storage

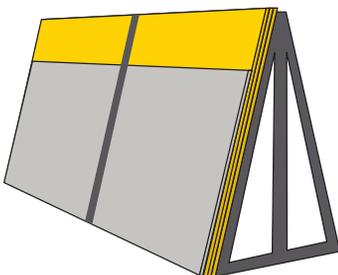
Place the slabs length-wise on wooden beams to prevent the slabs from splintering.



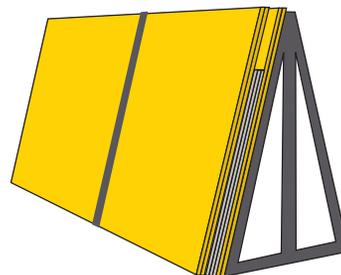
3 mm and 6 mm slabs need at least three support points, distributed evenly along the back of the slab; a full support is recommended - an unused granite or marble slab with sufficient width, for example. The best way to maintain the integrity of the slabs is to keep them in their original packaging or use a full support on the back of the slab such as an unused granite or marble slab which is wide enough.

Avoid positioning large slabs against smaller slabs:

✓ CORRECT

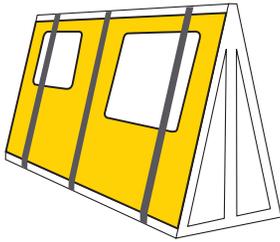


✗ INCORRECT

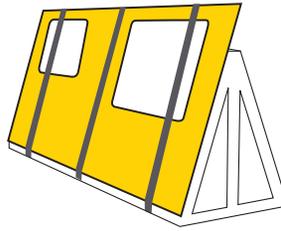


The supports must be able to hold the entire surface of the part during transport. Supports that are too small may cause the part to break:

✓ CORRECT



✗ INCORRECT



Storage of Neolith slabs in the shop

2.6 Transport by road

When in a truck, the slabs must be completely supported and securing the slabs mechanically (with jacks or belts) is recommended as they could become loose with strong wind and break.

Lightweight slabs and tiles may easily fall from a truck or to the ground so always secure the slabs to a sawhorse while unloading. Pay special attention in the shop if the slabs are stored outdoors; secure the slabs to sawhorses to protect them from gusts of wind.

03. INSPECTION

Before beginning production, TheSize recommends deep-cleaning the slab and doing a meticulous visual inspection of the slab to check whether the slab complies with the quality requirements. Check these items when visually inspecting a slab:

- Fissures
- Stains
- The tones of the different slabs
- Thickness
- Shine variations
- Flatness
- Pollution
- Pricks
- Imperfections

This should be the first step prior to starting production. Doing the inspection against the light to identify possible imperfections not seen when flat is recommended.

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

3.1 Slab characteristics

3.1.1 Flatness

To check the flatness of a slab, it should be positioned horizontally on a completely flat base.

The flatness is measured by placing an aluminum rod or similar object on the surface of the slab, covering the entire width or length of the slab.



Image 9: Set-up for correct measurement of the warp.

MAXIMUM TOLERANCE IN THE SLAB WIDTH: 2 mm
MAXIMUM TOLERANCE IN THE SLAB LENGTH: 4 mm

3.1.2 Tone

TheSize is constantly working so the tone of the current batches matches the tone of previous batches. Despite our efforts, slight variations in tone may occur between different batches of the same model due to the use of natural raw materials.

Deviations in tone are more noticeable among the various thicknesses of a single model given the way in which each thickness is produced.

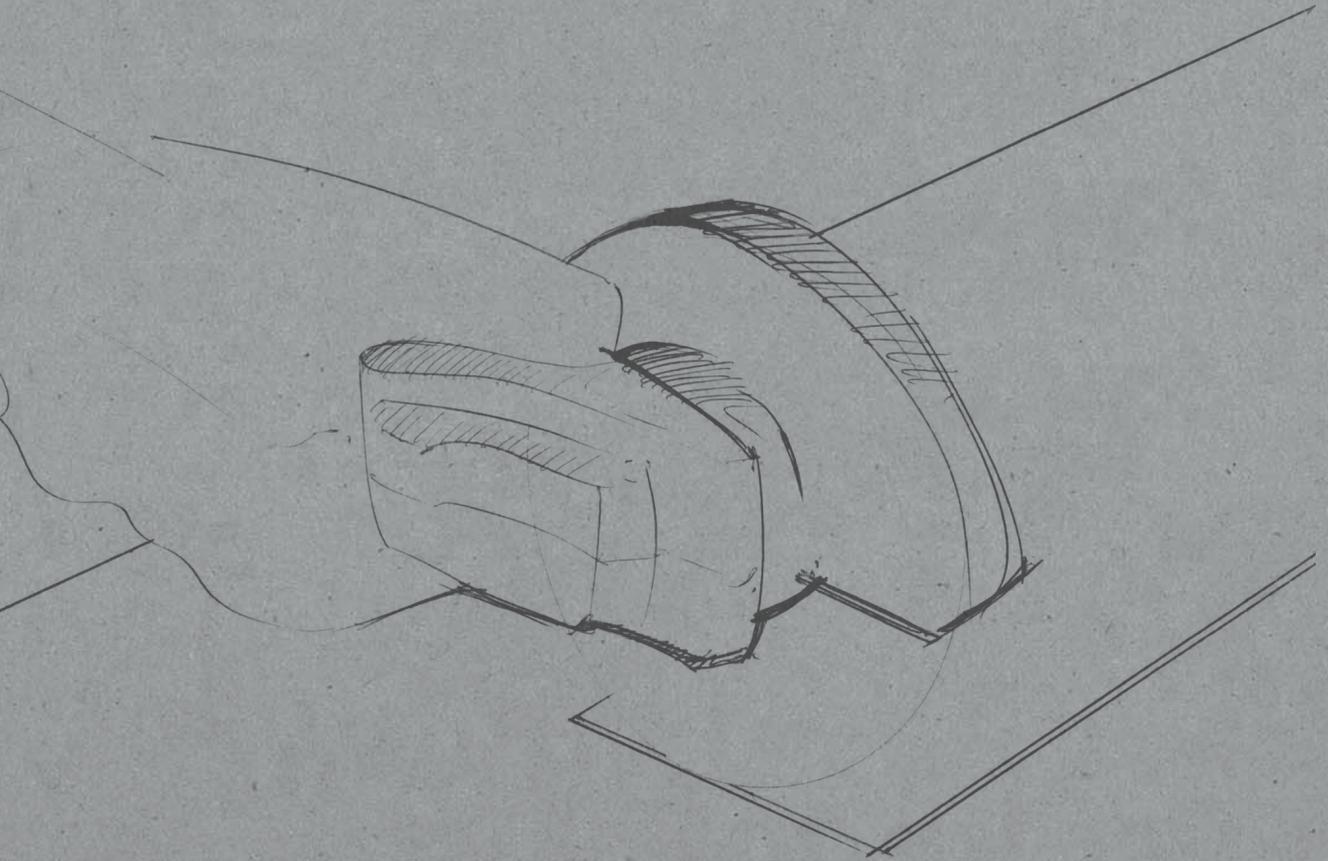
Before cutting, visually inspect the slabs to ensure the tone of the different slabs is acceptable. Do this inspection under lighting conditions that are similar to what would be found at the place of installation. We recommend not combining slabs from different batches.

3.2 Slab identification

Each slab has a label with important information related to each slab. The labels must be recorded for future reference.

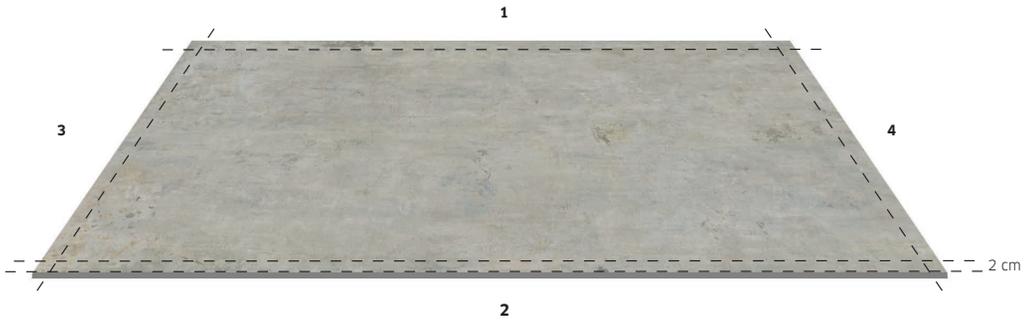


04. MECHANIZATION PARAMETERS



04. MECHANIZATION PARAMETERS

Before producing a 12 mm or 20 mm slab, it is important to remove 2 cm of each side from the slab:



Cuts to loosen a 12 mm or 20 mm slab.

When cutting 12 mm or 20 mm slabs with a disc, it is important to reduce the speed to half at the beginning and end of the cutting process.



These recommendations only apply to 12 mm and 20 mm slabs. Any other thickness can be cut without having to take these steps into account.

4.1 Parameters for the Ultra-compact Neolith disc

Thickness	Straight Cut Speed (m/min)	45° Angle Speed (m/min)	Ø Disc (mm)	RPM	Surface Speed (m/s)
3+	3,5	1,7	300	2400 - 2600	35 - 40
6 mm	1,5	0,7			
6+ and 3+3 mm	3,0	1,5	350	2300 - 2500	
6+3 mm	2,5	1,4	400	2000 - 2150	
12 mm /12+	1,5	0,7			
20 mm	1,0	0,5			

Table 3: Disc parameters.

4.2 Waterjet parameters

Thickness	Speed (m/min)	Pressure (Bars)	Abrasive flow rate (kg/min)
3 mm 3+	2	2800	0,4
6 and 3+3 mm, 6+	2		
6+3 mm	2		
12 mm	1		
20 mm	0.7		

Table 4: Waterjet parameters.

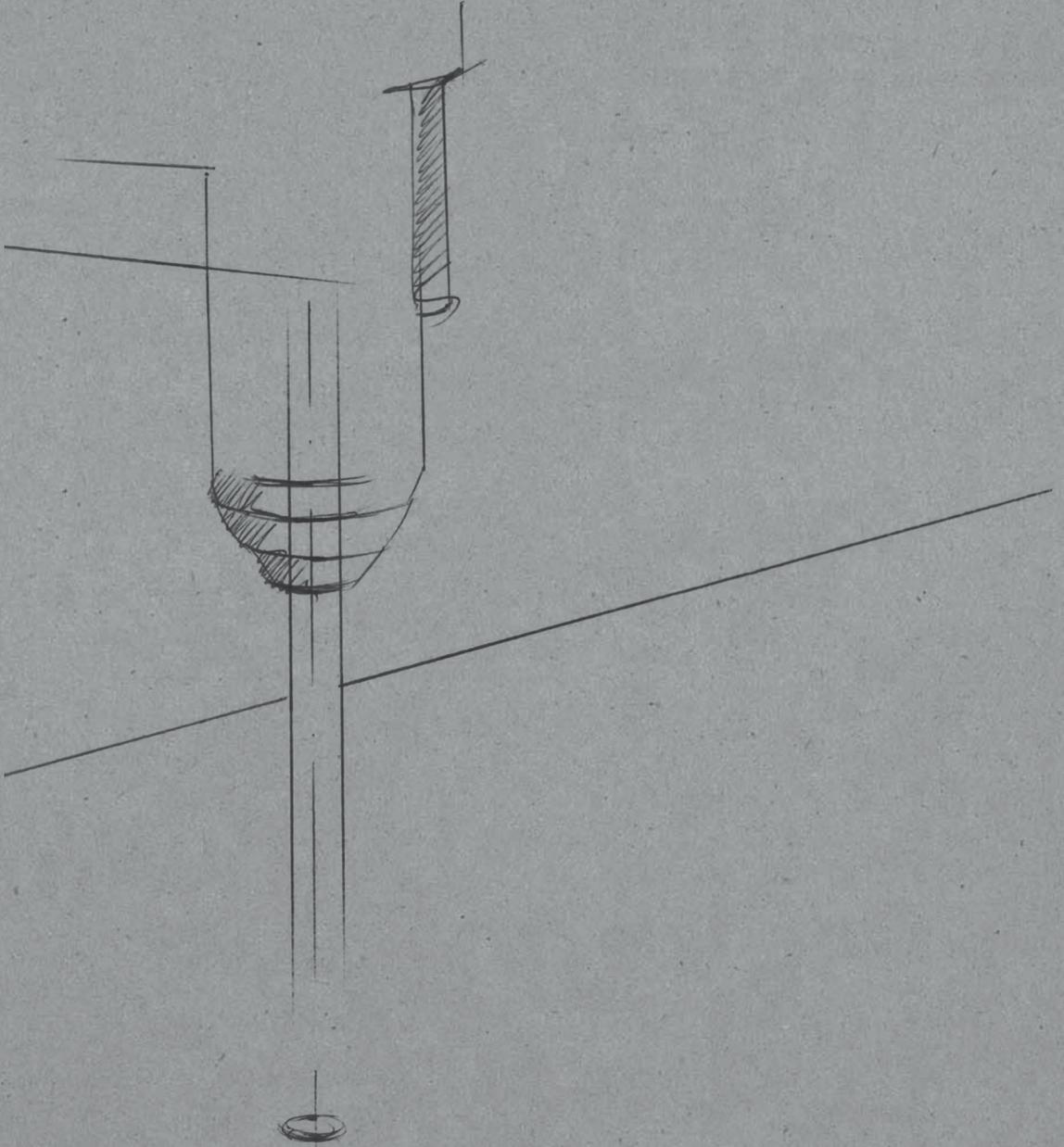
The values indicated are suggestions. The cutting speeds and abrasive flow rates can be adjusted for a cleaner finish.

4.3 Parameters for CNC tools.

Tool		RPM	Speed (mm/min)
Crown bit		4500 - 5500	10
Cutting bit	12 mm	4500 - 5500	150
	20 mm	4500 - 5500	125
Router bit		8000- 10000	250

Table 5: CNC parameters.

05. CUTTING RECOMMENDATIONS



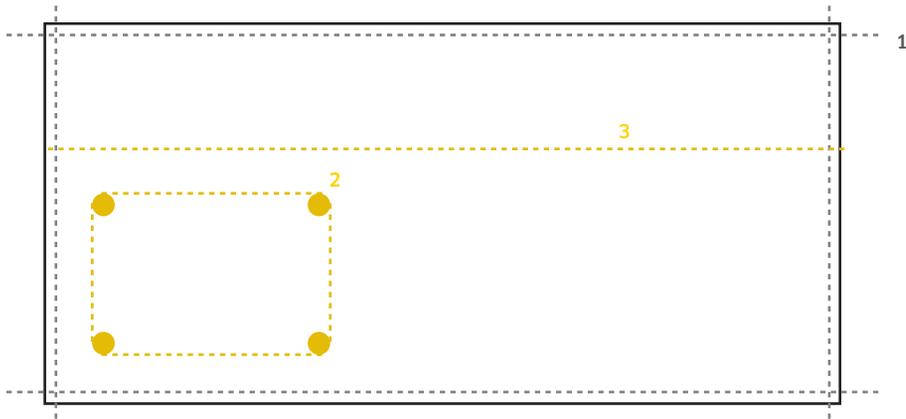
05. CUTTING RECOMMENDATIONS

5.1 Bridge disc or similar

Before beginning

Check that the bench is straight, level and free of any debris. Check that there is enough support for the slab.

While cutting, it's important to use the maximum water flow to cool the disc. Be sure the water flow is aimed at the cutting area.



CUTTING SEQUENCE:

Steps:

1. Perimeter cut, minimum 2 cm. (only for 12 mm and 20 mm).
2. Prepare the holes on all **inner corners**, minimum 3 mm bit diameter.

We recommend bits larger than 3mm when the kitchen design allows, as it will make the countertop firmer.

3. Prepare the **remaining cuts**.



RECOMMENDATIONS:

- Make sure the disc rotation coincides with the cutting direction.
- The cutting disc should be at least 1.5 mm more than the slab thickness to guarantee a clean cut.
- To release stress, the perimeter cut of the slab may be used as a final cut for the part to be made.
- In the exceptional case that the disc is lowered directly onto the slab, do it in automatic mode at the slowest possible speed.
- Periodically check the support plates and don't use the disc if it does not easily fit into the support plate.
- Cutting 45° angles in Neolith requires a slower cutting speed. It also helps to have something at the head and tail of the cut to keep the disc aligned.
- When using a new disc, do a few cuts so the disc segments can adapt and the diamonds open.
- Use something made of limestone at the head and tail of the cut to enhance the segments if the segments become blunt faster than normal during straight cuts.

All cutouts must have previously drilled holes:

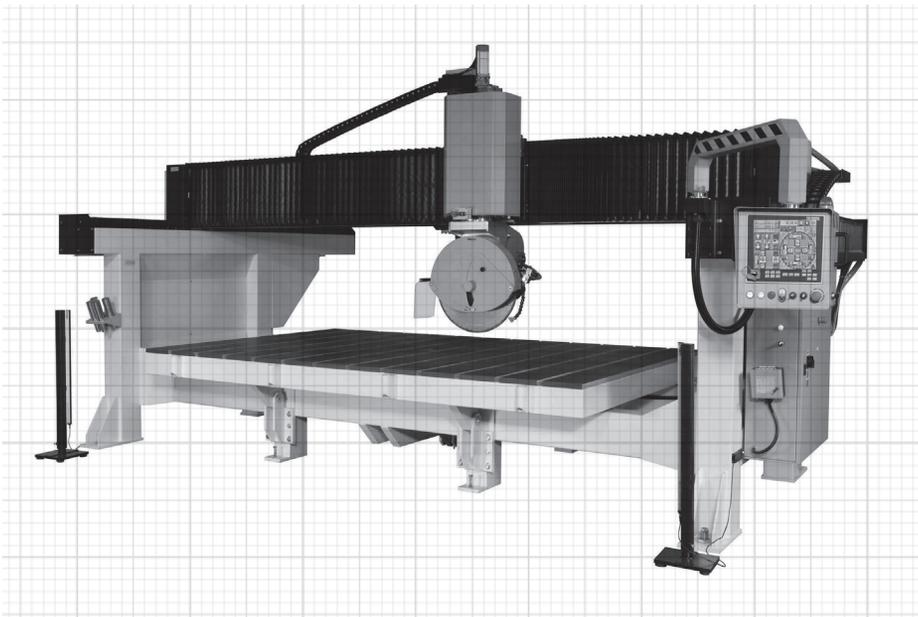
- - A minimum radius of 3 mm.
- - **Never lower the disc directly on the slab before drilling the corners.**

No squared inner corner means:

- No "L"-shaped countertop with 45° angled edges.
- No squared cutout for a sink.
- No inner 45° angled edge for the sink.
- **Absolutely NO 90° CORNER.**

- The clearest models (Arctic White, Estuario, Calacatta) are harder for tools given the specific raw materials used.

TheSize recommends lowering the cutting speeds to 75% for these models to prevent the disc from overheating.



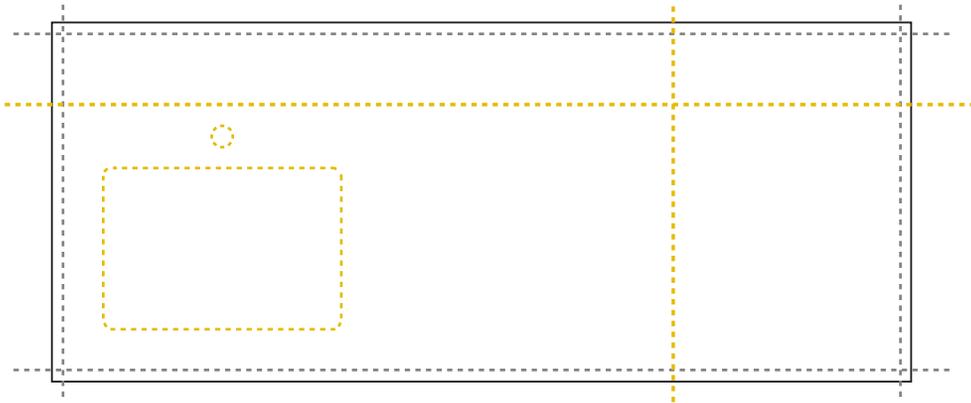
Bridge disc

5.2 Waterjet

Before beginning:

Check that the bench is straight, level and free of any debris. Check that there is enough support for the slab.

If using the waterjet to remove the 3/4" perimeters from 1/2" and 3/4" slabs, the cut should begin and go off the slab.



STEPS:

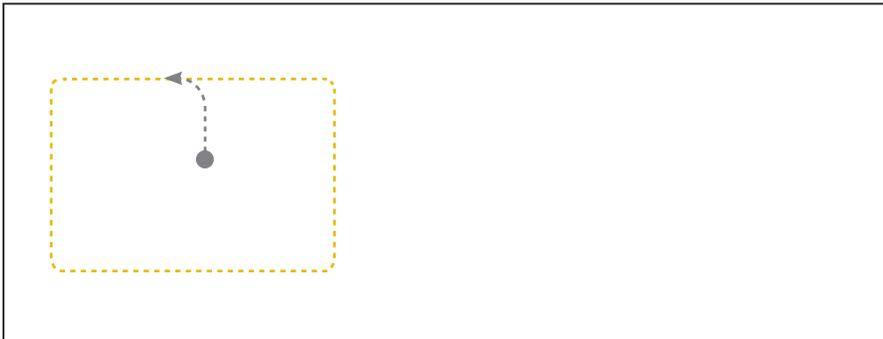
- 1 Perimeter cut, minimum 2 cm. (only for 12 mm and 20 mm)
- 2 Cutting.
- 3 Preparing the cutouts.
All inner corners require a minimum radius of 3 mm.

We recommend radiuses of more than 3 mm when the kitchen design allows as it will make the countertop firmer.

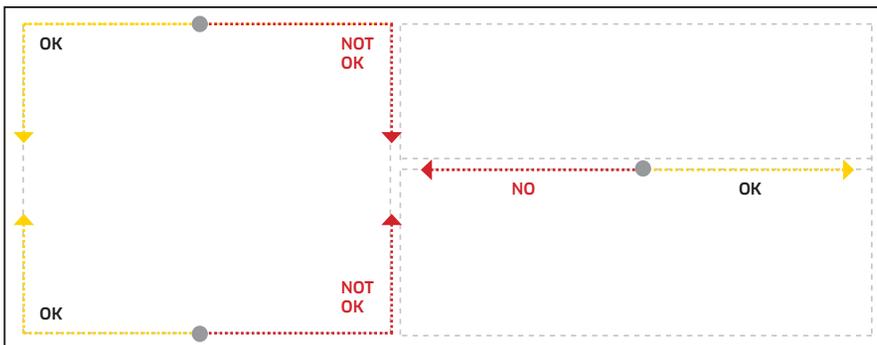
Remember that the perimeter cut of the slab to release stress may be used as a final cut for the part to be made.

Lower pressure is recommended for drilling holes.

To do the cutouts, beginning the cut at an internal point in the cutout and then getting closer to the cut perimeter is recommended:



To do large cutouts or large parts, you must remember the following cutting sequence:



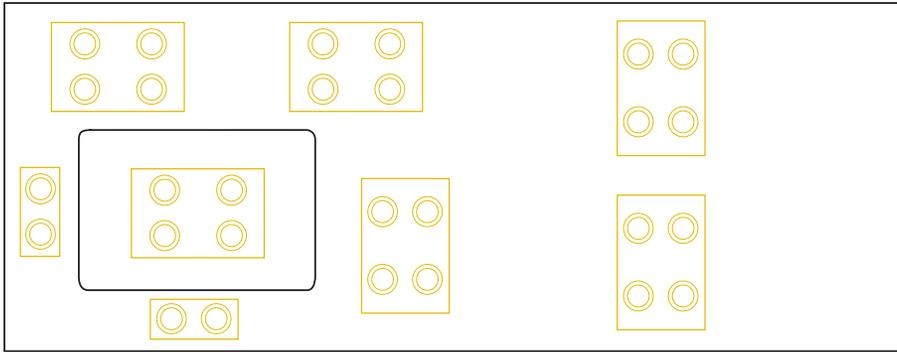
First cutting towards the edge of the slab from the hole or in parallel to the edge of the slab and following this direction to finish the part is recommended. Making the first cut towards the center of the slab is not recommended.

5.3 Digital control bit

Before beginning:

Check that the bench is straight and level and that the suction cups are free of any debris. Check that there is enough support for the slab.

Make sure there are suction cups below the entire slab, especially below the part to be cut.

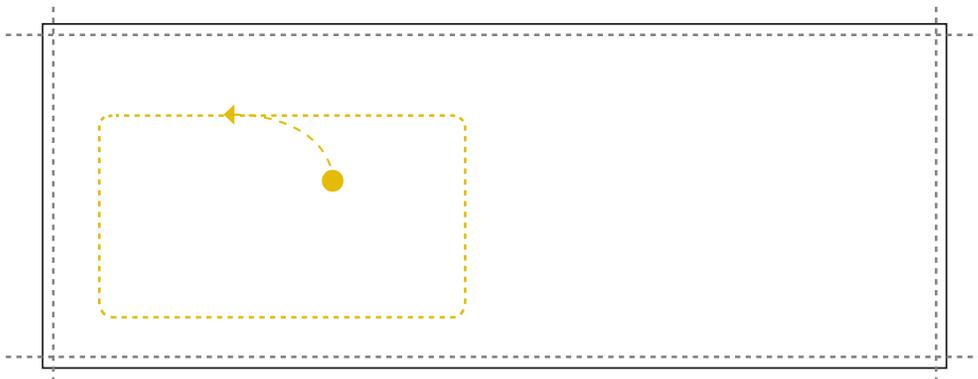


Use plenty of water to cool the tool during production in the inside and outside of the tool.

STEPS:

1. **Perimeter cut**, minimum 2 cm. (only for 12 mm and 20 mm)
2. **Drilling** with a crown bit.
3. Preparing the **cutouts**. All inner corners require a minimum bit of 3 mm.

We recommend bits larger than 3 mm when the kitchen design allows, as it will make the countertop firmer





First drill a hole inside the cutout, using the crown bit. Afterwards, use the router bit to get closer to the cutting line.

As you get closer to the cutting line, curve a bit; do not use a perpendicular approach as this could create a notch.

At the end of the cut, reduce the speed to 50% as you complete the cutout.

Tips for digital control bits.

- **Crown bit:**
Drill the slab with the lowest downward speed possible, especially at the end of drilling. Before completing the drilling, raise the crown a bit to remove the pressure from the inside of the crown.

- **Router bit:**
Always begin from a hole previously made with a crown bit.

Never lower the router bit directly onto the surface.

The first two times, eliminate only 0.5 mm; then 2 mm per pass.

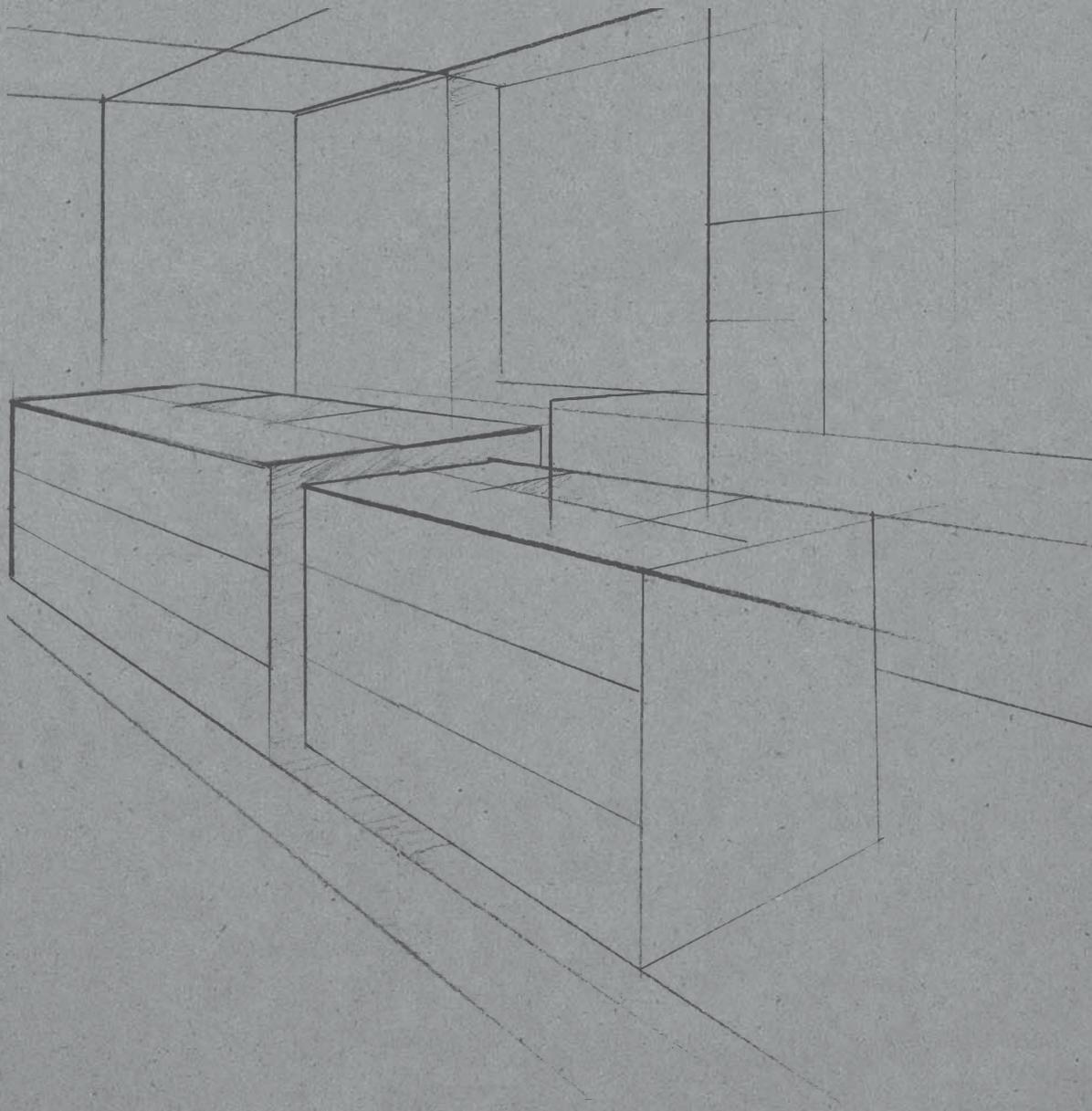
Removing more than 6 mm on a 12 mm slab or 10 mm on a 20 mm slab is not recommended.

- **Cutting bit:**
Do not use the oscillation option during cutting; this could cause splintering.

The clearest models (Arctic White, Estuario, Calacatta) are harder for tools given the specific raw materials used;

TheSize recommends lowering cutting speeds for these models to prevent tool overheating.

06. DESIGN AND PRODUCTION OF A NEOLITH
COUNTERTOP



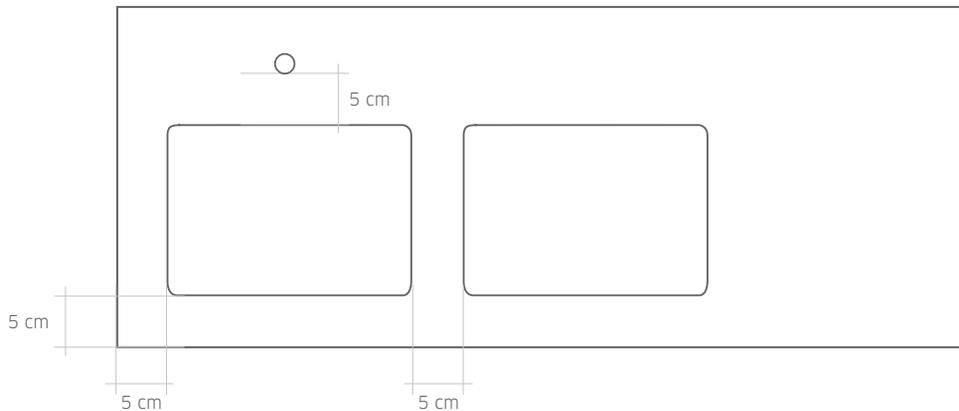
TheSize Surfaces recommends the following end uses for the various Neolith thicknesses:

- Paneling: 3mm, 3+, 6 mm and 6+
- Paving: 6 mm, 6+, 12 mm and 20 mm
- Countertops: 3+3, 6+3, 6+6, 12 and 20 mm.

6.1 Gaps

The minimum distance between a cutout and the edge of the slab must be at least 5 cm.

TheSize recommends distances greater than 5 cm when the kitchen design allows as it makes the countertop firmer.



IMPORTANT



All cutout corners must have a minimum radius of 3 mm. Never leave 90° angles.

We recommend radiuses of more than 3 mm when the kitchen design allows as it will make the countertop firmer.



✓ CORRECT



✗ INCORRECT



✗ INCORRECT



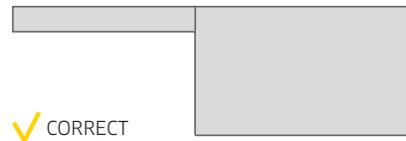
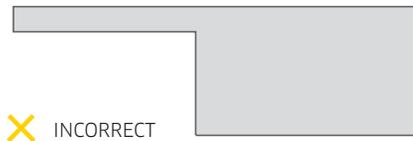
✗ INCORRECT

The correct way to create a cutout, except with waterjet and digital control bits, is to first drill the corners and then the rest of the cuts.

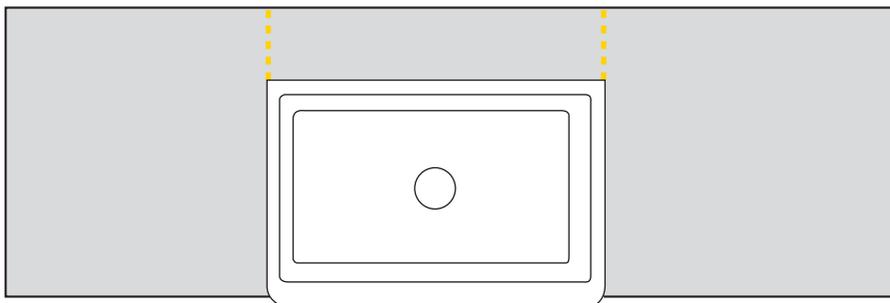
Guidelines for cutouts:

- Two straight cuts must never be joined.
- No squared inner corners.
- All inner corners must have a minimum radius of 3 mm.

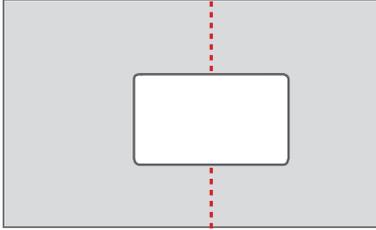
If the countertop design so allows, avoid Neolith countertops with unbalanced weights:



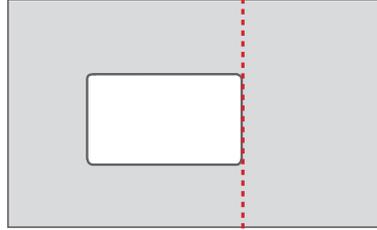
Irregular cuts are also not recommended such as for a “farmhouse sink”; in these cases, add joints to the countertop design:



Other types of designs to be avoided:



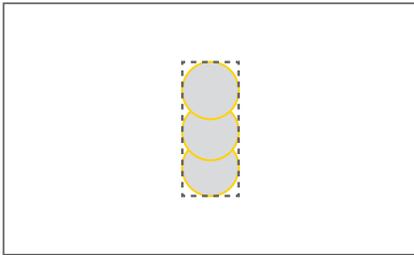
✘ INCORRECT



✘ INCORRECT

Sockets and switches:

Gaps made to insert accessories (sockets, switches, etc.) should be done using circular drills; they may overlap.



✔ CORRECT

6.2 Countertop reinforcement

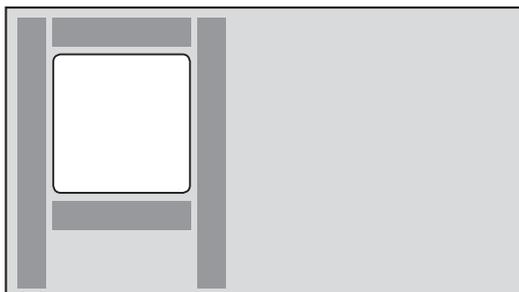
▶ Countertops with 45° edges:

Reinforcements for 45° edges must be made with Neolith strips or dense granite; be careful when using other materials for reinforcement. The difference in the thermal expansion can cause the countertop to curve or the 45° edges may open over time.

NEVER USE QUARTZ REINFORCEMENT.

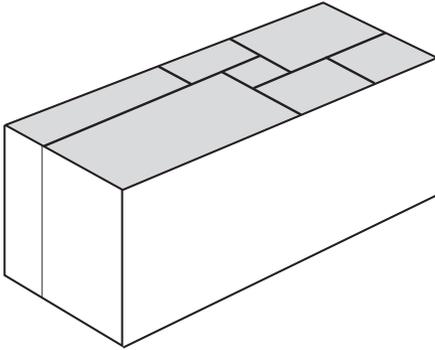
For countertops with 45° edges, reinforcements must be installed for greater countertop firmness, especially with 3+3, 6+3 and 6+6 thicknesses. These reinforcements must be distributed around the perimeter in such way that they find direct support on the sides of the kitchen furniture.

Moreover, it is important to reinforce the perimeter of the cutouts for greater strength and firmness in the area:



▶ **Countertops with a straight edge:**

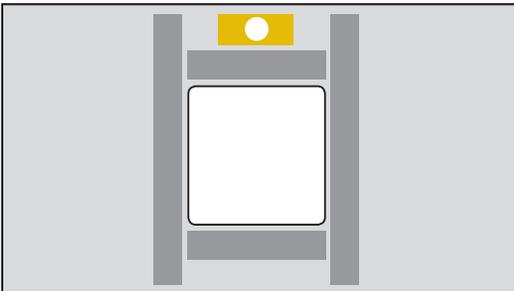
For straight edge countertops, where no inner structure can be hidden, a continuous surface like a wooden plank, Kerdi-Board or similar element should be placed over kitchen furniture.



▶ **3+3, 6+3 and 6+6 Neolith countertops**

Besides the aforementioned written recommendations, inserting a reinforcement piece (wood or similar) in the faucet gaps is recommended to reinforce this area. This reinforcement will distribute the forces generated during installation and daily use.

NEVER USE QUARTZ REINFORCEMENT.



6.3 Sinks

▶ Flush sinks

TheSize only recommends the installation of flush sinks in 12 mm and 20 mm.

Removing more than 6 mm on a 12 mm slab or 10 mm on a 20 mm slab is not recommended.

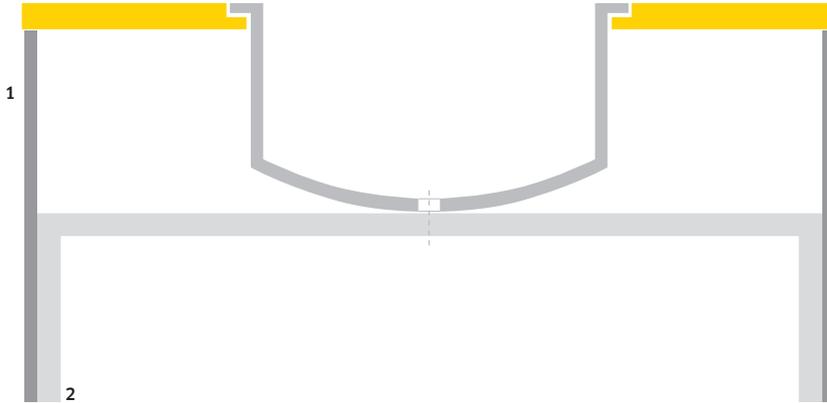


▶ Undermount sinks

To reduce the risk of splintering to a minimum, a round edge with a radius of at least 2 mm is recommended.



For large-size sinks, place a rod support structure under the sink so the weight is on the rods and not the countertop.

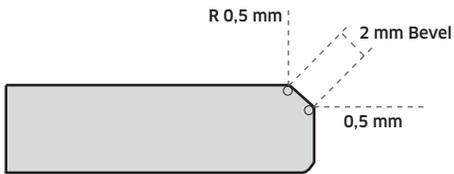


- 1. Furniture
- 2. Support rod

6.4 Edges and Joints

▶ Edges

TheSize recommends using the following edge for Neolith countertops. It is the perfect compromise between esthetics and functionality.



The edge is formed by a 2 mm bevel and by two rounded edges with a radius of 0.5 mm. The radius is barely visible but increases the edge impact resistance.

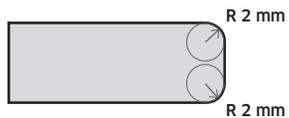
In high impact risk areas (sinks and dishwashers, for example), the edges could be as follows:



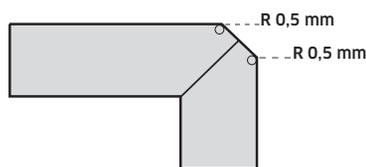
The greater the radius, the better it will bear any impacts. Remember that the greater the bevel, the more base color in the slab.

The edges can be wet or dry polished using standard granite or marble discs.

Recommended edges for Neolith:



Round edge, R 2 mm



45° edge with a bevel, 2 mm



Inverted fluted peak



IMPORTANT

Polished edges must be treated with water repellent to permanently seal the edge.

TheSize recommends using NANOTOP by LITHOFIN or a similar product.



▶ **Joints**

Given the texture of Neolith slabs, a micro-bevel for all joints is recommended. Even if the straight edges are perfect, they may seem “splintered” due to the texture of Neolith slabs.

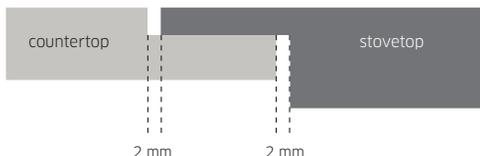
Each joint requires additional support (any technique will work).

The oven finish may not be “touched-up”; once the Neolith surface is polished or ground, there is no way back.

Producing samples so your customer can approve the edges and joints is highly recommended. (joint with a micro-bevel, 45° edge with a 2 mm bevel or a round 2 mm edge).

6.5 Glass-ceramic / induction stovetops

The minimum distance between the countertop and a stovetop must be 2 mm.



Use the right heat-resistant silicone or the joints supplied by the stovetop manufacturer.

Removing more than 6 mm on a 12 mm slab or 10 mm on a 20 mm slab is not recommended.

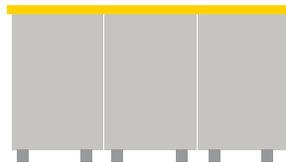
6.6 Countertop Installation

► Furniture:

Furniture must be in perfect conditions and level before installing the countertop. Cabinets must be secured to each other and then secured to the wall.



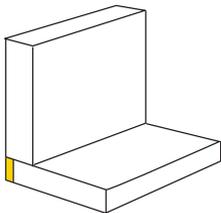
✗ INCORRECT



✓ CORRECT

► Expansion joints:

Given the irregularities in the wall and possible structural movements in the building, leaving a 3 mm perimeter expansion joint on the countertop is recommended. The point where the crown and countertop meet shall be sealed with a line of silicone:

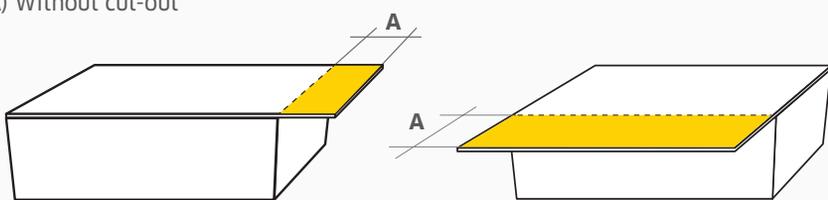
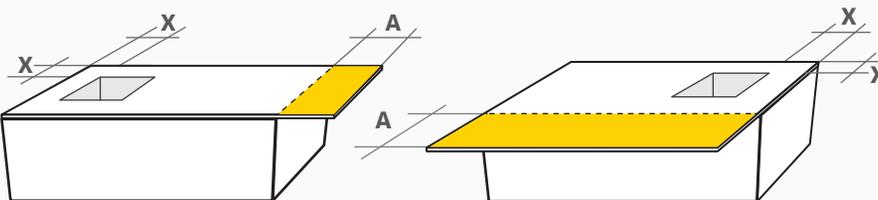
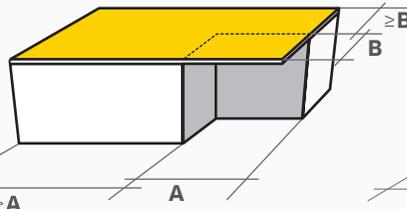
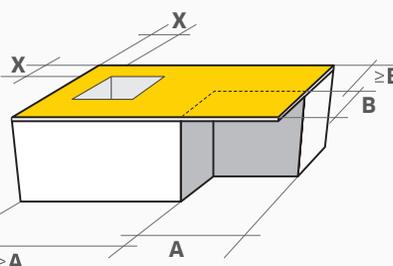


Flexible adhesive should be used such as 100% transparent adhesive to fill these joints and secure the countertops to the furniture and the floor or to secure the Neolith crowns to the wall. This will enable adequate thermal expansion.

Using flexible adhesives such as epoxy or liquid nails to secure the countertop is not recommended.

6.7 Overhang

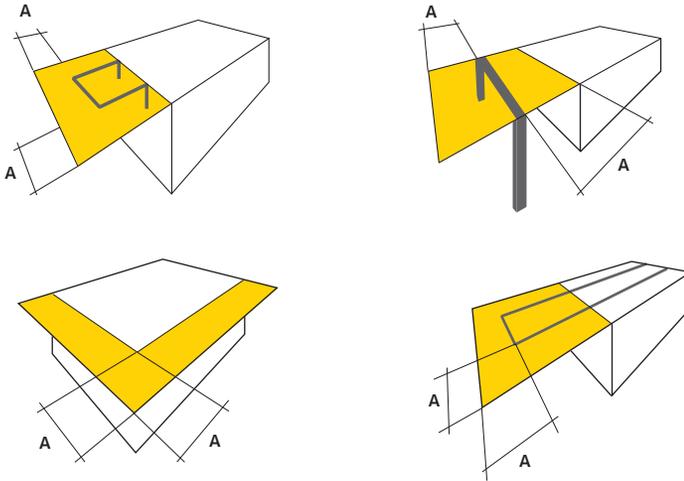
Sizing the parts that will overhang must be taken into consideration during countertop designing, pursuant to the parameters indicated in the following table:

		Thicknesses	
		12 mm	20 mm
1. Full side overhang			
A) Without cut-out			
		$A \leq 350 \text{ mm}$	$A \leq 500 \text{ mm}$
B) With cut-out			
		$X \geq 100 \text{ mm}$	$X \geq 100 \text{ mm}$
2. Partial overhang			
A) Without cut-out			
		$A \leq 500 \text{ mm}$	$A \leq 1000 \text{ mm}$
B) With cut-out			
		$B \leq 200 \text{ mm}$	$B \leq 400 \text{ mm}$
		$X \geq 100 \text{ mm}$	$X \geq 100 \text{ mm}$

Occasional maximum static load = 100kg

It is recommendable to reinforce the X sections with additional reinforcements of expanded polyurethane.

More examples of countertops with overhangs



6.8 Outdoor countertops

Installing the countertop over a brick/stone or similar base or structure using C2 cement glue is recommended.

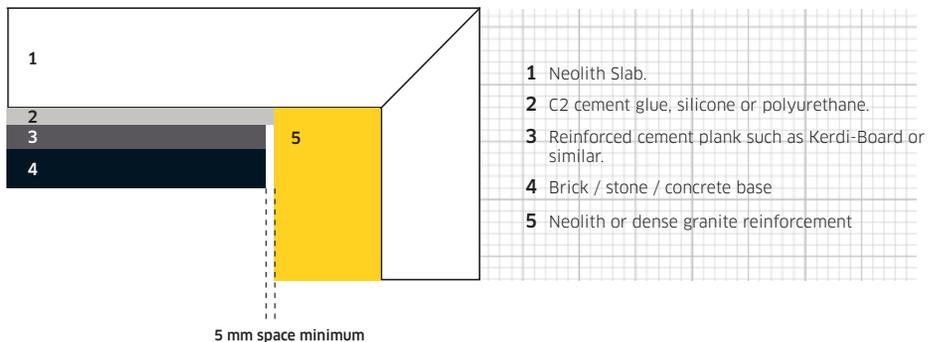
If there is no such structure available, covering the top of the existing structure with reinforced cement panels is recommended.

When installing outside, avoid the use of wood or agglomerate planks due to their tendency to expand and contract as the weather changes.

Using flexible adhesives such as epoxy, liquid nails or construction adhesives to secure a Neolith countertop is not recommended.



To glue the 45° angles, use an adhesive that is suitable for outdoor use and resistant to UV rays such as **Integra Ultra**.



6.9 Observations

▶ L-shaped countertops

Dividing L-shaped countertops into several parts is recommended to avoid 90° corners in one part.

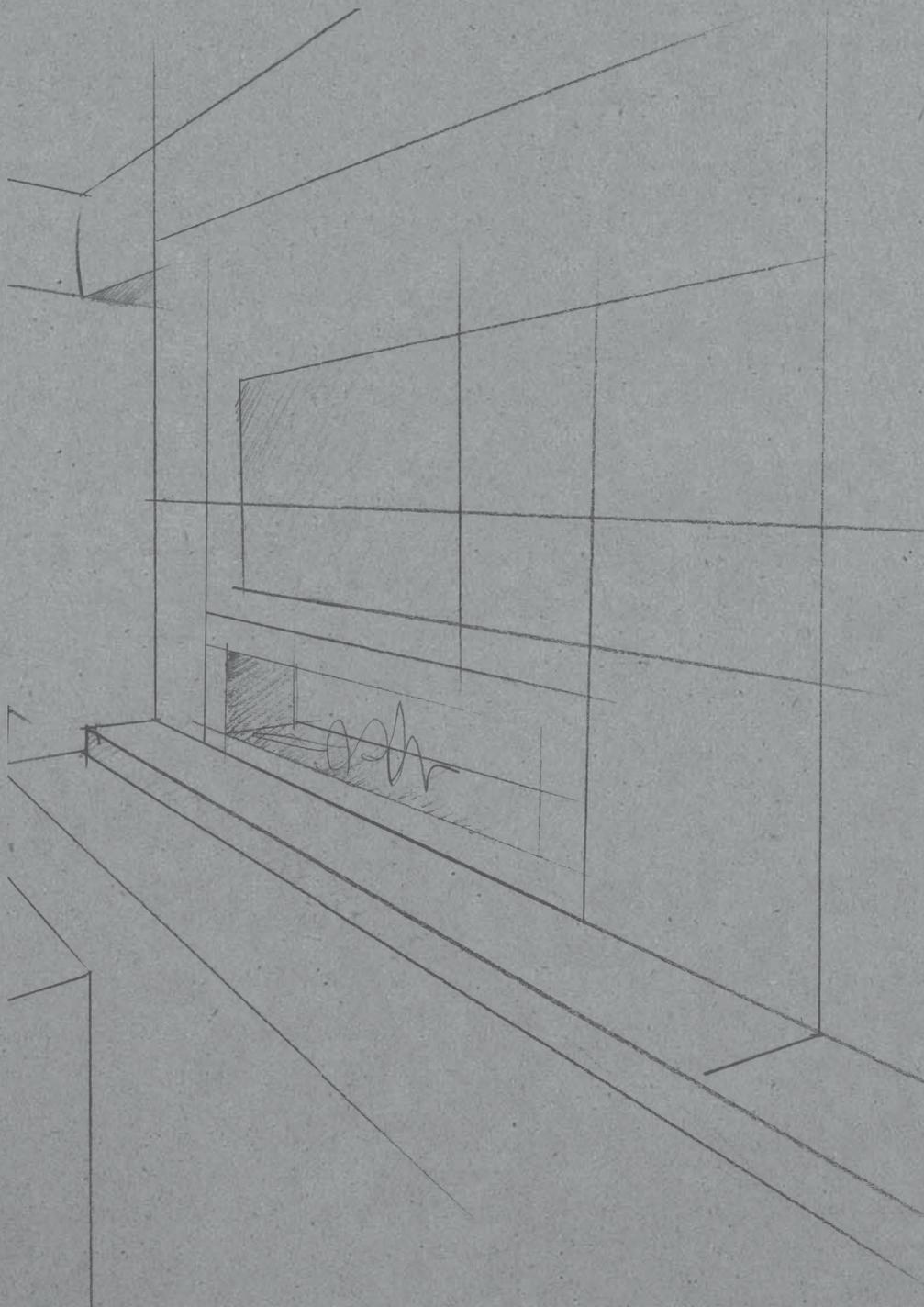


L-shaped countertops made of a single piece without a 45° angle must have a minimum radius of 2”.



Make sure the furniture is in perfect conditions and level before installing this type of countertop.

07. EXTREME HEAT



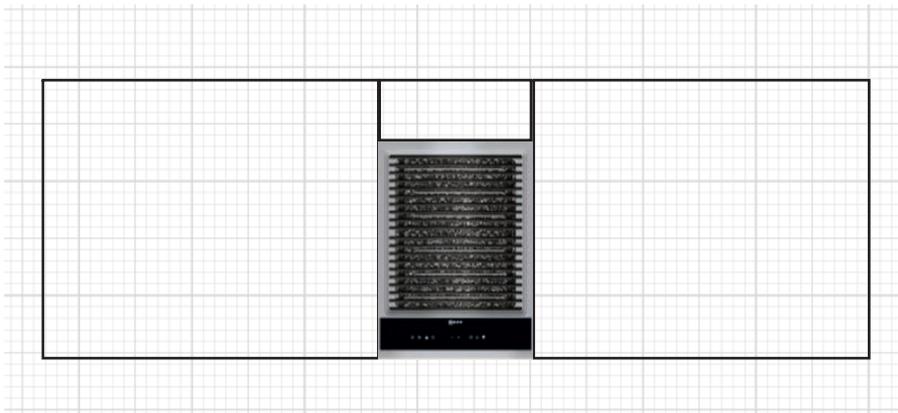
07. EXTREME HEAT

Neolith parameters that are essentially relevant for this use:

- ▶ **Maximum temperature: 300° C**
- ▶ **Linear thermal expansion: between 5.3° and 6.7°. 10-6 x°C-1**

If grills and/or barbecue grills are to be placed in a Neolith countertop, keep the following in mind:

- Always remember that all material expands when subject to temperature changes (i.e. the metal structure of a barbecue grill) to prevent stress due to a lack of space for such expansion.
- Metal materials expand much more than Neolith; therefore, prevent direct contact by leaving enough space (which will depend on the dimensions of the barbecue grill, maximum temperature it may reach, etc.).
- Polishing the edges of the cutout is recommended to eliminate any micro-fissures created when cutting. The more intense this treatment is, the less risk there will be in the future.
- Inner corners must have minimum radiuses of 10 mm. We recommend diameters of more than 10 mm or producing the countertop in several parts, when the design so allows:



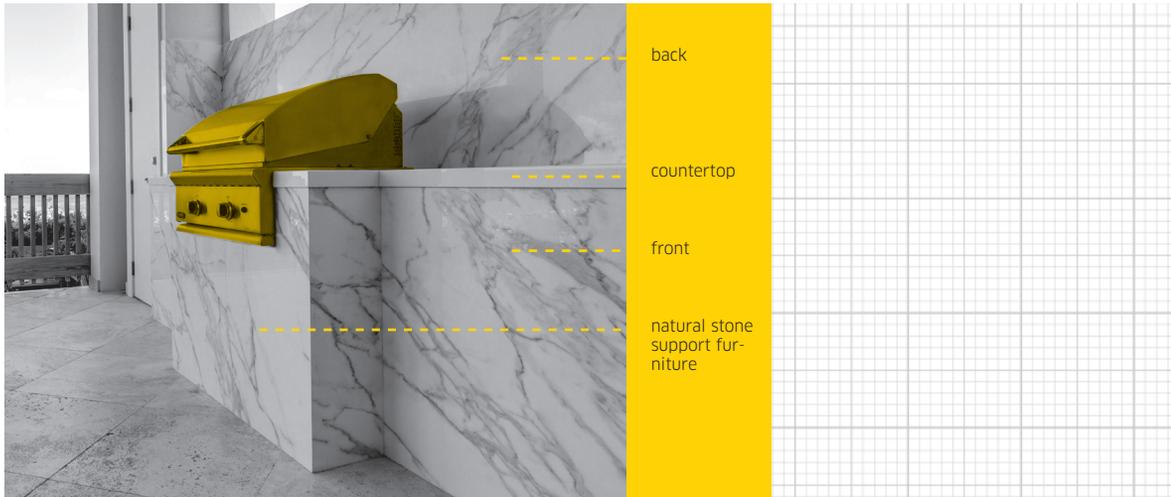
View of the top of the grill/barbecue grill built into a Neolith countertop

- Leaving a minimum space of 5 mm between the grill/barbecue grill and filling with thermal insulation such as fiberglass thermal insulation tape is recommended.



Neolith is not recommended for inner paneling for a fireplace.

Possible uses for Neolith with built-in barbecue grills:

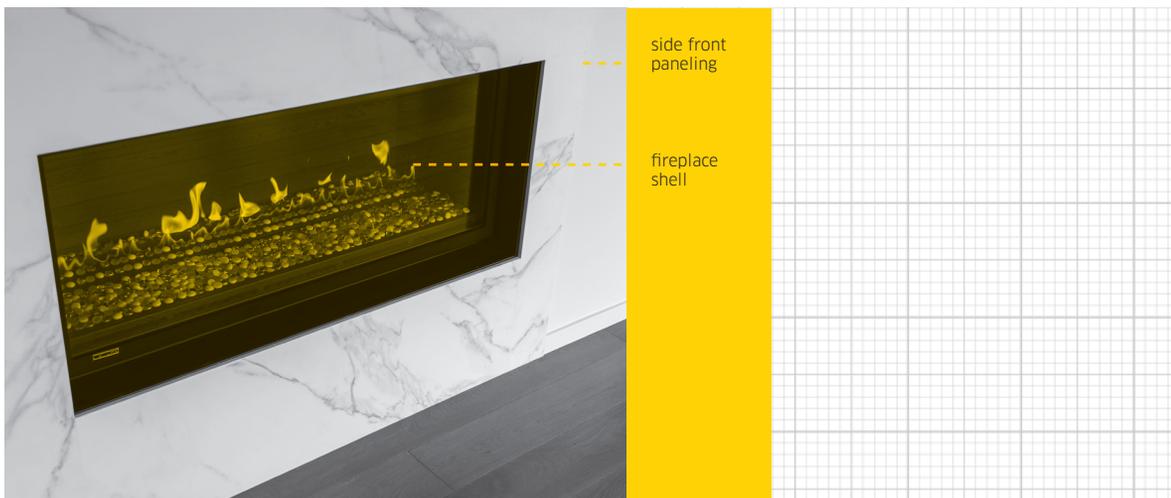


Possible uses for Neolith with fireplaces:

Front outer paneling: separated from the heat by an inner refractory wall (fire resistant).

Side outer paneling: separated from the heat by an inner refractory wall.

Countertop furniture



Neolith is not recommended for inner paneling for a fireplace.

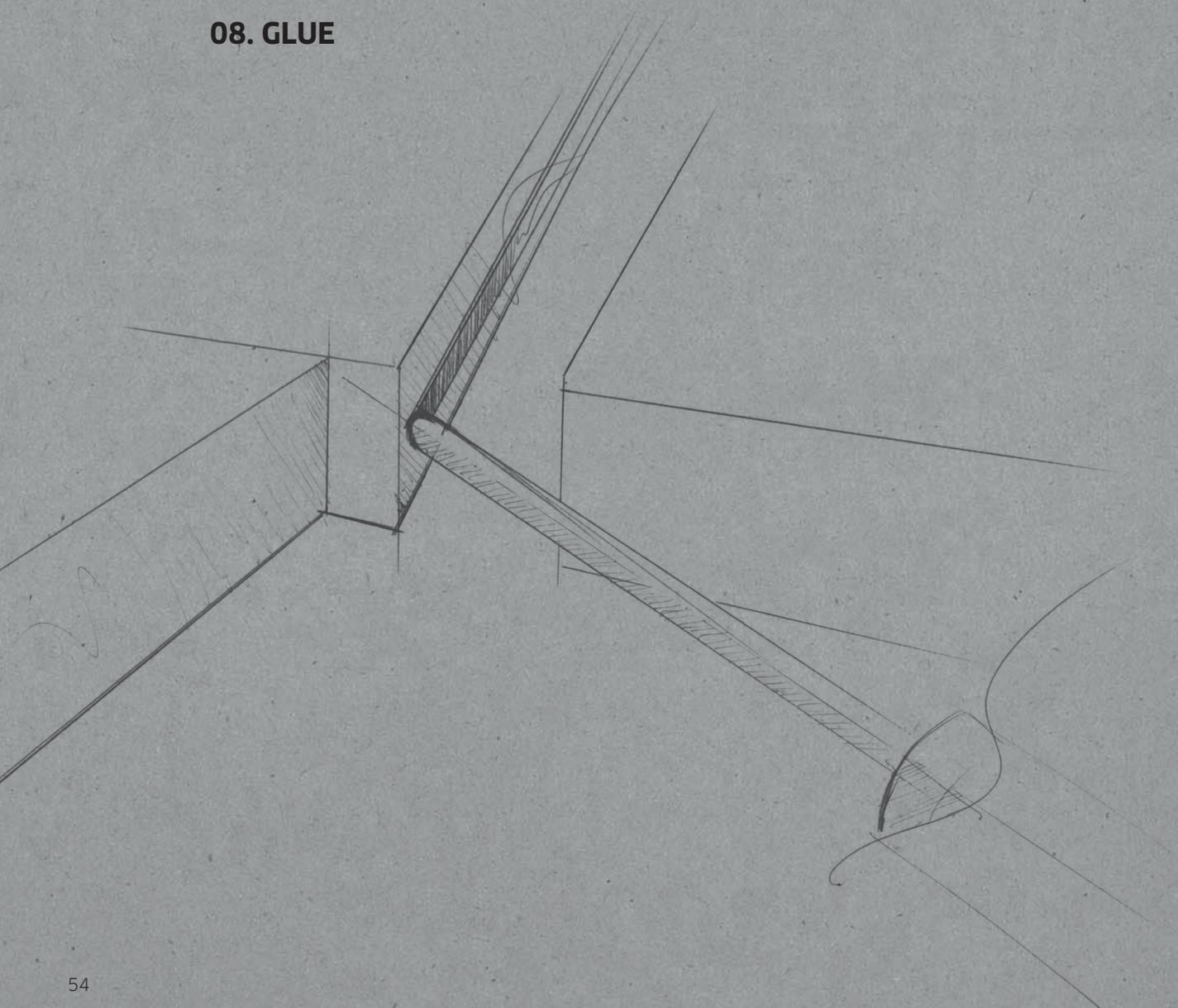
Ethanol fireplace design

Front outer paneling: separated from the heat by an inner refractory wall.

Side outer paneling: separated from the heat by an inner refractory wall.



08. GLUE



08. GLUE

Look at the side of the Neolith slab when preparing the glue color as the color of the surface is not exactly the same as the color of the slab base; this is important as polishing the edges will expose the slab base color.

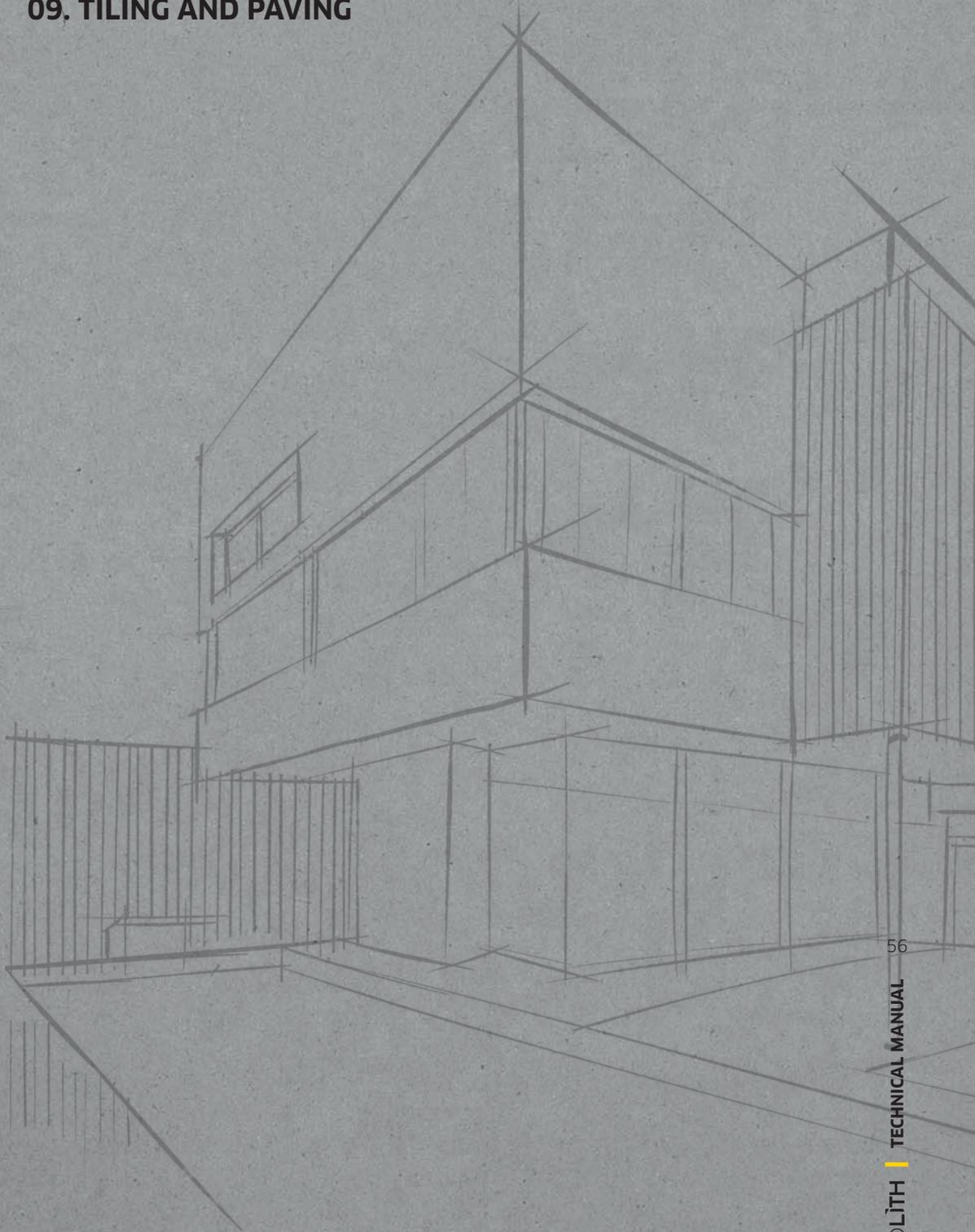
Recommended glue: Integra or similar.

INTEGRA COLOR CATALOG:

Sheet name	Integra Match
Arctic White	Perfect - 720-314
Arena	Marfil - 720-310
Aspen Grey	Quarry - 720-423
Avorio	Marfil - 720-310
Barro	Meteor Grey - 720-311
Basalt Beige	Barley - 720-307
Basalt Black	Nacreto - 720-312
Basalt Grey	Meteor Grey - 720-311
Belgian Blue	Nacreto - 720-312
Beton	Light Grey - 720-310
Calacatta	Perfect - 720-314
Cement	Cement - 720-313
Concrete Taupe	Diana Pearl - 720-424
Estatuario	Perfect - 720-314
Iron Copper	Nacreto 720-312
Iron Corten	Nacreto 720-312
Iron Grey	Nacreto 720-312
Iron Moss	Nacreto - 720-312
Limestone Lava	Cement - 720-313
Marfil	Marfil - 720-310
Nero	Nacreto - 720-312
Nero Assoluto	Nacreto - 720-312
Nero Marquina	River Rock - 720-425
Nero Zimbabwe	Iron Grey - 720-426
Nieve	Perfect - 720-314
Onyx	Perfect - 720-314
Phedra	Light Grey - 720-309
Pietra Di Luna	Silk Grey - 720-316
Pietra Di Osso	Barley - 720-307

Sheet name	Integra Match
Pietra Di Piombo	Medium - 720-315
Pulpis	Clay Brown - 720-308
Strata Argentum	White Linen - 720-427
Textil Black	Cement - 720-313
Timber Ash	Cement - 720-313
Timber Ice	Perfect - 720-314
Timber Night	Meteor Grey - 720-311
Timber Oak	Cement - 720-313
Travertino Classico	Marfil - 720-310
Travertino Navona	Marfil - 720-310
Zaha Stone	Dove - 720-422

09. TILING AND PAVING



09. TILING AND PAVING

9.1 Indoor installation.

Leave a 2-3 mm space between tiles.
Create movement joints every 25 m² or as dictated by applicable national law.
The adhesive must be applied with a notched trowel using the double-glue technique; in other words, the adhesive must be applied to the back of the tile and the sublayer.

Neolith must be installed with **class C2** adhesive pursuant to standard EN 12004 and class **"highly flexible S2"**.

9.2 Outdoor installation.

Create flexible movement joints of around 1 cm wide in the corners. Create movement joints every 9-12 m² or as dictated by applicable national law.
The building structural joints must be absolutely respected.

The tiles must be installed with a large joint between them. The width of the joint must be determined pursuant to the local climate conditions, the size of the tiles and flexibility of the sublayer.

In warm climates and during poor weather (strong winds, for example), using **class E** adhesives (with open time) is recommended pursuant to standard EN 12004.

In cold climates and during the winter, it is best to use class F adhesives (quick fixing) as per EN 12004.

9.3 Tiling over other Tiles.

Check that the old tiling is well-fixed. Otherwise, remove any loose tiles and fill the gaps with mortar that is compatible with the support.

Wash the old tiling with water and soap to eliminate any grease or dust, rinse well and let dry.

Apply bonding resin before tiling above the old tiles, following the recommendations for installation indoors or outdoors.

9.4 Manual Cutting

Manual ceramic cutter:

Neolith can be cut without any problems using traditional machines. Thicknesses of 3 and 6 mm can be cut using manual cutters. Cutting with a grinder is recommended for 12 mm. If the part has reinforcement mesh, the mesh must be cut with a cutter after splitting.

Grinder:

Tiles may be cut with no problems using a diamond disc available from TheSize.

Irregular cut:

Use crown bits, available from TheSize, for round holes. Gaps made to insert accessories (sockets, switches, etc.) should be done using circular drills; they may overlap.

A radius of at least 3 mm must be left on any inner corner of a gap. Never leave a 90 degree angle.

9.5 Tile Rejointing

Recommended Products:

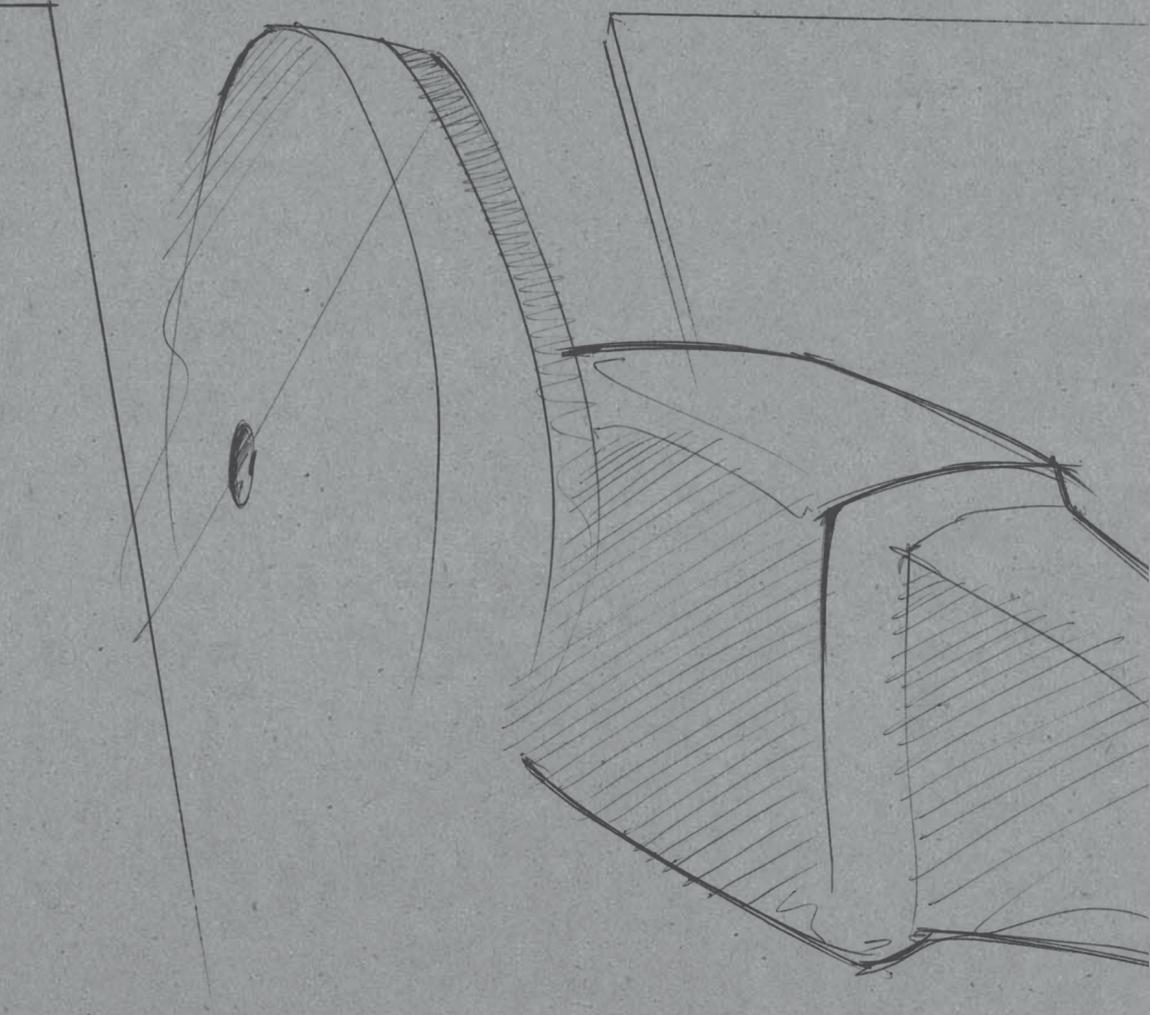
High-performance, anti-fluorescence, quick fix and dry, water-repellant, anti-mold, class CG2 as per EN 13888.

High-performance, polymer modified, water-resistant technology for filling joints of up to 6 mm wide, class CG2 as per EN 13888.

Deep clean the surface after re-jointing with the right soap, wash the surface and absorb any excess water using the right equipment and do any other necessary operations to complete the work as per the specifications.

For more information, read our **"Tiling and Paving Guide"**, available in the download area on our website: www.neolith.com.

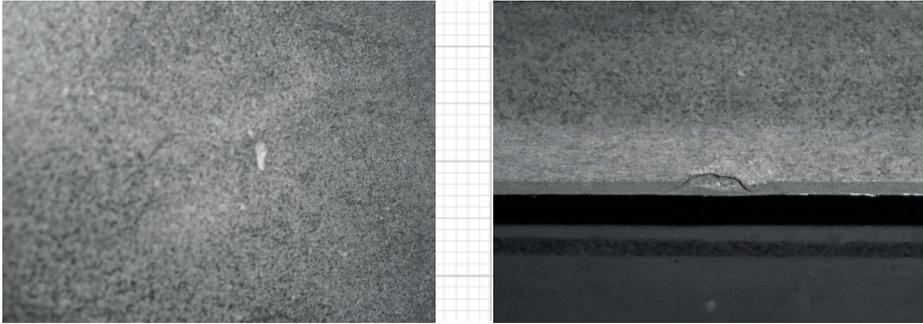
10. REPAIRS



10. REPAIRS

10.1 Chip repair

Ceramic surfaces can be damaged for many reasons. Most of the time it is due to a defect caused by a plate that falls down or a heavy object.



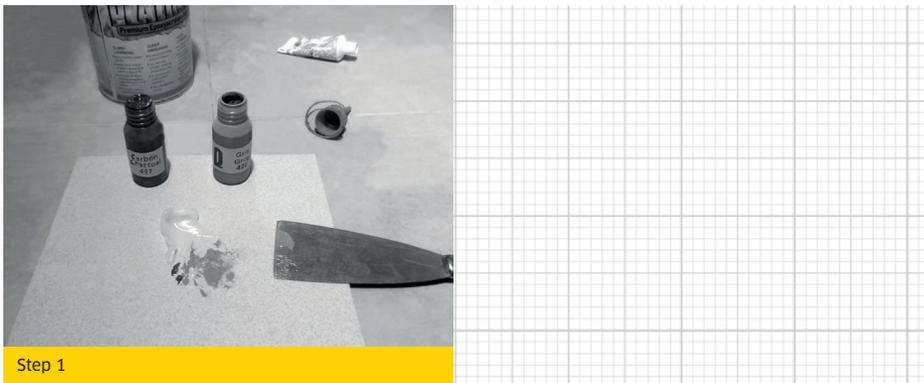
Keep in mind that no repair is perfect; it's very difficult to duplicate the tone and texture of a surface with resins.

Step 1:

Mix the bi-component epoxy resin, adding the color to color the epoxy so it matches the Neolith countertop.

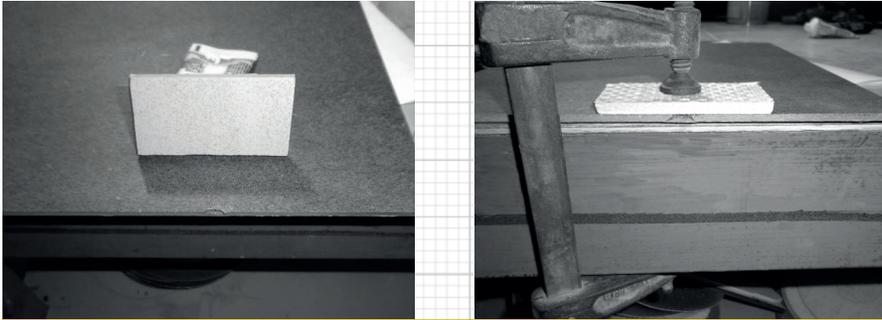
Tip:

Repair all defects at the same time as the bi-component epoxy will cure quickly. And only mix enough to fill the defects with a little left over: epoxy resin cannot be stored once mixed.



Step 2:

Use a Neolith fragment to imitate the surface finish and fill the defect with the mixed resin.



Step 2

Step 3:

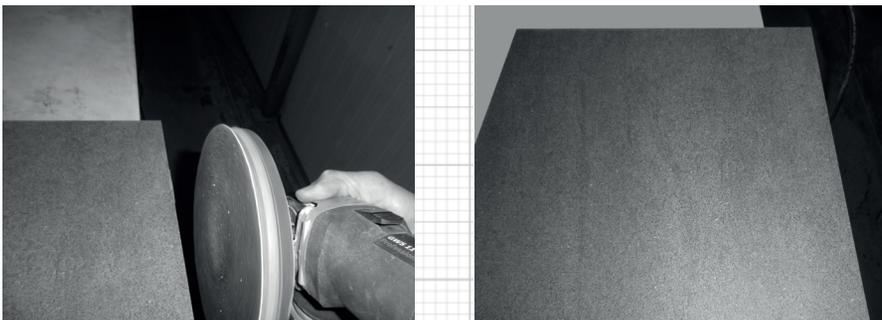
Use an acetone-soaked cloth to add additional texture to the resin to imitate the adjacent surface even better.

Make sure the level of resin does not exceed the surface.

Clean the excess resin from the surface before it hardens with an acetone-soaked cloth.

Step 4:

Once the resin hardens, remove the excess resin in the edge mechanically. For surface repairs, it's best to work manually to prevent damage to the surface.



Step 4

10.2 Repairing surface scratches in Neolith Polished.

Necessary materials:

- Cerium oxide powder (90% purity, optical quality)
- Rubber gloves
- Smooth cloth
- Water
- Electric drill / Grinder
- Polishing pad (lamb wool, felt or leather pads)
- Spray bottle
- Goggles

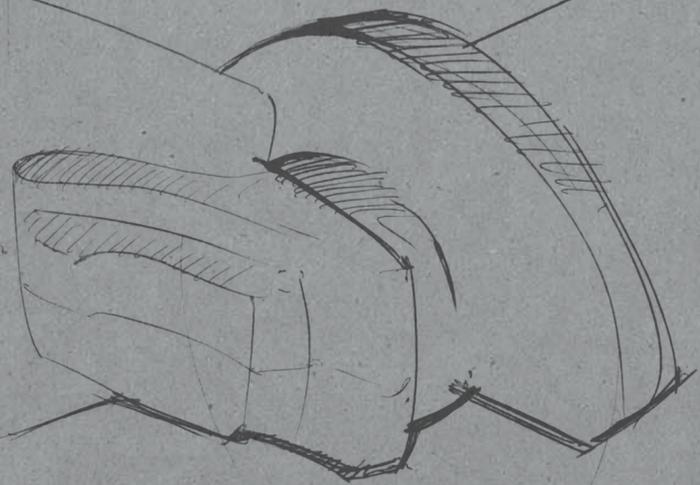
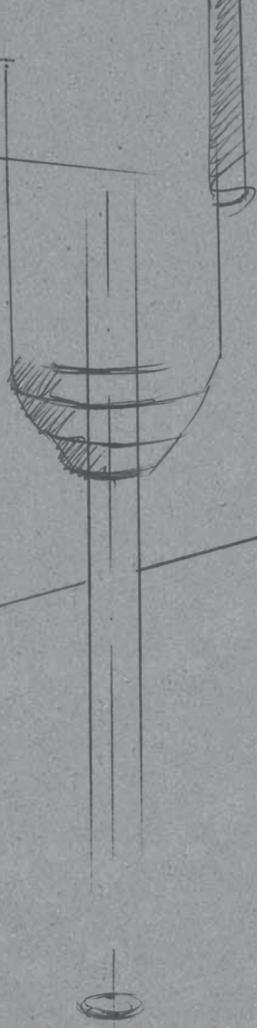
Determine the depth of the scratches before polishing the scratches on the surface. If you can feel the scratches with your fingernail, they're too deep to be polished with cerium oxide. You must first sand the entire surface.

Only then can you polish the surface with cerium oxide.

Instructions:

1. Mix a little cerium oxide with the water to form a fine paste (creamy consistency) - mixing in a small bowl is recommended so the paste can be applied easily to the polishing pad.
2. Deep clean the surface to eliminate all dirt and grease residue.
3. Apply the polishing paste to the pad.
4. Place the pad on the drill and work the area.
5. Move the pad up and down, left and right in the area.
6. Keep the surface damp to prevent overheating - if there's enough paste, just spray a little water on to keep the area damp.
7. Clean any residue and inspect the repair - keep working until you get a satisfactory result.
8. Clean the pad for later use.

11. TOOLS



11. TOOLS

DISCS	
Dented disc for porcelain	
	Ø 300 Ref. 411-053 Ø 350 Ref. 411-055 Ø 400 Ref. 411-056

SILICON CARBIDE DISC			
A flexible silicon carbide disc with Velcro for dry work. 60, 120, 220, 400 Grain			
	<table border="0"> <tr> <td> Ø 125 60: 720-041 120: 720-042 220: 720-043 400: 720-044 </td> <td> Ø 180 60: 720-018 120: 720-019 220: 720-020 320: 720-021 400: 720-023 600: 720-022 800: 720-183 </td> </tr> </table>	Ø 125 60: 720-041 120: 720-042 220: 720-043 400: 720-044	Ø 180 60: 720-018 120: 720-019 220: 720-020 320: 720-021 400: 720-023 600: 720-022 800: 720-183
Ø 125 60: 720-041 120: 720-042 220: 720-043 400: 720-044	Ø 180 60: 720-018 120: 720-019 220: 720-020 320: 720-021 400: 720-023 600: 720-022 800: 720-183		

SMOOTHING PLATE WITH ELECTRO-DEPOSITED DIAMOND	
To refine and smooth edges	
	Fine grain G40, Ref.720-008 Thick grain G100, Ref. 720-009

FELT DISC	
	Ø 125 Ref. 720-181 Ø 180 Ref. 720-064

SMOOTHING CUP

Preliminary edge beveling and polishing



medium, 60 grain: Ref. 720-061

SILICON CARBIDE DISCS

Discs for wet work



Ø 100
30: 720-291
100: 720-292
200: 720-293
400: 720-294
800: 720-295
1500: 720-296
3000: 720-297

20-35 MM CROWN BITS

Electro-deposited diamond bits



Ø 35: 411-018

ROUTER BIT



Ref. 720-107

6-12 MM BITS

Electro-deposited diamond bit. Use a drill without the hammer action. Use water to cool.



Ø 6 Ref. 853-099
Ø 8 Ref. 853-098
Ø 10 Ref. 853-097

CROWN BIT (CNC)



Ref. 720-165

10 CM DIAMOND DISC

Dented disc for porcelain. Recommended speed 11.00 R.P.M.



Ref. 411-051

ROUTER BIT



Ref. 720-210

NEOLITH COLORED FILLER	
Check availability and references.	
	

ULTRA-COMPACT DISC	
Segmented disc for porcelain	
	<p>Ø 300 Ref. 411-066 Ø 350 Ref. 411-067 Ø 400 Ref. 411-068</p>

MANUAL TILE CUTTER



Sales Contact:
Brevetti Montolit SpA

Company headquarters:
Largo Cav. Montoli - 21050 Cantello (VA) Italy
Via Varese, 4/A - 21050 Cantello (VA) Italy

Legal head office:
Via Turconi, 25 - 21050 Cantello (VA) Italy
Tel. +1 604 353 99 64
Tel. +39 0332 419 206
Tel. +39 0332 419 230
e-mail: export@montolit.com
web: www.montolit.com



Reference: 300-70 (SUPERSTICK)

Machinery: Manual tile cutter.

Features, Diameters, Observations:

- A complete system for cutting porcelain stoneware tiles and slabs from 0 to 340 (0" to 134") cm
- Non-slip system;
- Quick connection;
- Integrated lubrication;
- Quick cutting wheel change;
- International patent;
- 100% MADE IN ITALY



ELECTRICAL TILE CUTTER



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Reference: MOTO-300-FL (MOTO-FLASH-LINE)

Machinery: Electrical Tile Cutter

Features, Diameters, Observations:

- Motorized dry cutting system for slabs and porcelain tiles, granite marble from 0 to 340 cm (134").
- This is the motor-powered evolution of the Flash Line manual cutting system. With this system you can cut porcelain tile and slabs up to 20mm (approximately ¾ inch) thick. The machine itself has all the advantages of manual flash line (easy to transport, light, precision, patented locking system without the use of suction cups), with the addition of a motorized head with a professional diamond blade for ceramic and porcelain tile. In short, it is a system for dry cutting porcelain slabs up to 20 mm (approximately 3/4 inch) thick.



HANDLING SYSTEM FOR LARGE FORMAT TILES



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Reference: 300-70 (SUPERSTICK)

Machinery: Handling System for Large Format Tiles.

Features, Diameters, Observations:

- It is designed to handle and position next-generation large format (320x160 cm) (128"x64") porcelain stoneware slabs.
- The overall dimensions of the complete frame are also specifically designed so the tile slabs can be removed from the special packaging they come in.
- The telescopic handles provide for a more ergonomic grip.
- The 'Superstick' carrying frame allows the tile slabs to move in both horizontal and vertical directions and is equipped with telescopic legs for support on the ground so the tile remains in the frame without being damaged.
- The special suction cups are equipped with a vacuum safety gauge to indicate the force of adhesion to the tile slab.
- Made of galvanized steel to resist wear and corrosion.
- Max. load 80 Kg (160 pounds)



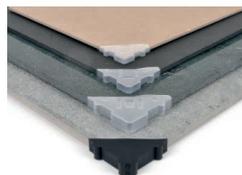
PLASTIC CORNER PROTECTOR FOR SINTERED STONE SLABS



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Reference: 300-95-04 (3/4mm)
300-95-06 (5/6mm)
300-95-10 (8/10mm)
300-95-12 (11/12mm)

Machinery: Plastic corner protector for Sintered Stone slabs

Features, Diameters, Observations:

- A set of large plastic tiles for Sintered Stone slabs and ceramic tiles.
- A patented system that absorbs shocks which could damage or chip the material.
- Made of plastic material that can be re-used again and again.



BOGIE FOR LARGE TILES



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Reference: 300-85 (GOAL)

Machinery: Bogie for Large Tiles.

Features, Diameters, Observations:

- The ideal solution for moving large slabs of porcelain stoneware in warehouses or at installation sites.
- Easily folds to use less space during transport and storage.
- The 4 soft rubber castors on each corner offer superb movement and direction control as well as extreme stability.
- Two of the wheels have brakes which can be locked to keep the carriage in the desired position.
- Slabs up to a maximum weight of 150 kg (300 pounds) can be carried completely safely and materials such as wood and foam can be secured to avoid chipping and slipping in areas of contact with the cart.
- Two hooks in the upper part of the cart support the Superstick frame to more easily coat tiles with adhesive glue and create movement continuity between the plate lifting phase and installation.



DIAMOND BLADE



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Reference: CGX115 (4.5") (FRECCIA ORO)

Machinery: Diamond blade
Features, Diameters, Observations:

- Use: dry and wet
- Height band diamond: 11 mm
- Material: porcelain stoneware, hard stone
- Application: laying tiles
- Performance
- Speed: Very high
- Finish: Very high
- Life span: Very high
- Use: angle/flexible grinder
- Renewable blades with abrasive stone art. 395B.



DIAMOND CORE-BITS FOR DRY DRILLING



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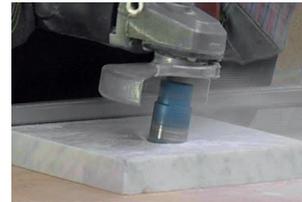
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Reference: FS (MONDRILLO)

Machinery: Diamond Core-Bits for dry drilling
Features, Diameters, Observations:

- Use: dry and wet
- Diameter: 6-8-10-12-14-16-18-20-25-27-30-35-40-45-50-55-60-65-68-70-75-100-120 mm (1/4", 5/16", 3/8", 1/2", 9/16", 5/8", 11/16", 3/4", 1", 1-1/16", 1-3/16", 1-3/8", 1-1/2", 1-3/4", 2", 2-3/16", 2-3/8", 2-1/2", 2-11/16", 2-3/4", 3", 4", 4-3/4")
- Material: For all types of ceramics, gres porcelain, terracotta tiles, granite and marble.
- Application: For furniture and bathroom fittings and electric and plumbing systems.
- Perfect for drilling: porcelain stoneware, hard ceramic, granite, marble
- Speed: Very High
- Finish: Good
- Lifespan: Good
- Use: Flexible angle grinder.



DIAMOND CORE-BITS FOR DRY DRILLING



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Reference: FAJ (MONDRILLO JR)

Machinery: Diamond Core-Bits for dry drilling
Features, Diameters, Observations:

- Use: dry and wet
- Diameter: 5-6-8-10-12 mm (3/16", 1/4", 5/16", 3/8", 1/2")
- Material: All types of ceramics, gres porcelain, terracotta tiles, granite, marble, glass.
- Application: For furniture and bathroom fittings, electric and plumbing systems.
- Speed: High
- Finish: Good
- Lifespan: Good
- Use: Universal drill and cordless drill (recommended minimum rpm 800).



COOLING FLUID



Sales Contact:
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Reference: M-Performer

Machinery: Cooling fluid
Features, Diameters, Observations:

- Cooling fluid for optimal performance of diamond core bits (diameters up to 12 mm (1/2"). When drilling, switch the machine off and sink the drill bits into fluid for a couple of seconds.

DIAMOND HAND PADS



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Reference: DT262

Machinery: Diamond hand pads
Features, Diameters, Observations:

- Main purpose: Ideal for smoothing and finishing ceramic, glass and porcelain tile corners and edges and marble and granite coverings. Excellent for smoothing and rounding sharp edges were tiles are cut to increase their mechanical strength.
- Instructions for use: Rub the pad on the surface to be treated, using the entire diamond surface so as to maximize service life.
- Characteristics: Made using a special diamond deposition technology, the pads come in two different diamond grain sizes to suit the material to be worked: - medium (art. DT060), in blue, for hard tile, porcelain tile, Klinker and granite - fine (art. DT200), in red, for single-fired tiles, double-fired tiles, terracotta, marble and glass.



GRES CUT



Type	Diameter	Segment thickness	Segment height	Bore	Steel Core
Grescut	360	3	10	60/50	NRM/SIL

Porcelain Tile Thickness	RPM FOR Ø360	Feed speed ML/min
3 mm/3+	2150 - 2500	1,5 - 1,8
6 mm/6+	2150 - 2500	1,2 - 1,5
12 mm/12+	2150 - 2500	1,0 - 1,2
20 mm	2150 - 2500	0,8 - 1,0

Our suggestions:

- While entering and exiting the cut, reduce the speed feed by 40 - 50%
- While cutting at 45°, reduce the speed feed by 40%





12. CLEANING PRODUCTS

ACRYCLEAN

AKEMI®

An absolutely pure solvent to clean different surfaces without leaving any residue.

Field of application:

- to clean and degrease before gluing and coating
- removes grease, oil and silicone residue, wax, tea incrustations, tree resin remains, sealants and glue
- removes stickers, laminas and adhesive tape
- to smooth and remove sealant



Container

500ml sprayer
1l bottle

Units

12
12

Ref. number

Neolith - 720-511 | AKEMI - 87603
AKEMI - 87600

ANTI-MOSS AND ALGAE POWER

AKEMI®

Fast-action and highly-effective, low-alkaline and solvent-free cleaning product.

Field of application:

Immediately removes deep incrustations and natural decoloring caused by flowers, leaves, bird excrements and other stubborn soiling.



Container

500ml sprayer
1l bottle
5l jug

Units

12
6
2

Ref. number

Neolith - 720-508 | AKEMI - 10825
AKEMI - 10832
AKEMI - 10833

EPOXY REMOVAL

AKEMI®

A highly effective solvent-based cleaning product that is free of acids, bleach and chlorinated hydrocarbons. No penetrating odor.

Field of application:

To remove mortar remains from epoxy resin-based joints, resin residue, sealant, adhesive remains and similar soiling from indoor and outdoor Sintered Stone.

Due to the liquid and gel-like consistency, it works quite well on vertical surfaces.



Container

Units

Ref. number

1l bottle

6

Neolith - 720-506 | AKEMI - 11983

GRAFFITI CLEANING

AKEMI®

A very effective, gel-like blend of solvents.

Field of application:

Removes graffiti paint and drawings made with markers from unprotected, solvent-resistant surfaces.



Container

Units

Ref. number

1l bottle

6

AKEMI - 10880

SOLVENT

AKEMI®

A product made of highly-effective solvents, surfactants and emulsifiers that is free of chlorinated hydrocarbons and is biodegradable.

Field of application:

To effortlessly remove tar and polish. It even dissolves layers of wax that are very difficult to remove as well as polish from Sintered Stone.



Container

1l bottle

Units

6

Ref. number

AKEMI - 10816

BASIC CLEANING

AKEMI®

A highly-concentrated low-alkaline cleaning product that is free of phosphates and bleach and which is biodegradable, inoffensive to human health in the food sector (confirmed by an external German testing institute).

Field of application:

For deep cleaning, to remove soiling from construction work, the wax and protective layers of the stone, cement stains, oil and grease, soot and tar, acrylic paint remains as well as plaster from Sintered Stone.



Container

250ml bottle (ready for use)
1l bottle
5l jug

Units

20
6
2

Ref. number

Neolith - 720-512 | AKEMI - 10808
AKEMI - 10812
AKEMI - 10813

Products for countertops, sinks and shower trays

TECHNO CERAMIC INTENSIVE CLEANER		
<p>AKEMI®</p> <p>A ready-to-use cleaning product to remove heavy soiling and/or incrustations on Sintered Stone surfaces. This product can also be used to clean kitchen sinks. Can be supplied in a practical sprayer.</p> <p>Field of application: Intensive cleaning of food remains, light oil and grease stains and fine layers of treatment products, rubber and protective products.</p> <ol style="list-style-type: none"> 1. Evenly apply to the surface to be treated. 2. Spread with a damp cloth or sponge and leave for only a little bit of time. Do not let it dry! 3. Then, clean the dirt with a damp cloth and rinse with water. Rub with a clean, hair-free cloth until there are no stripes or streaks. 		
Container	Units	Ref. number
500ml sprayer	12	Neolith - 720-510 AKEMI - 12026

TECHNO CERAMIC DAILY CLEANER

AKEMI®

A ready-to-use spray cleaning product, which is free of surfactant-based acids and bleach, auxiliary substances, aromas and alcohol and free of substances containing phosphates, which is biodegradable, inoffensive to human health in the food sector (confirmed by an external German testing institute).

Field of application:

For daily cleaning of light soiling (i.e. fine layers of oil and grease, dried beverages) on high-tech large-size ceramic surfaces, especially from countertops, display counters and sinks.

Also removes light lime stains. For this reason, it's also excellent for cleaning ceramic shower trays and faucets. The quick-dry formula ensures a streak-free surface.

1. Shake before using, then open the valve.
2. Evenly apply to the surface to be treated.
3. Clean the surface with a clean, dry cloth.



Container	Units	Ref. number
500ml sprayer	12	AKEMI - 12027

TECHNO CERAMIC SET (transparent plastic box)

AKEMI®

Content:

- 500ml Intensive Cleaner
- 500ml Daily Cleaner
- 1 microfiber cloth

Field of application:

For daily, intensive cleaning of high-tech large-size ceramic surfaces.



Container	Units	Ref. number
Set in a plastic box	6	AKEMI - 12025

Products for floors and facades

CRYSTAL CLEAN - Maintenance

AKEMI®

A cleaning product that is free of surfactant-based acids and bleach, auxiliary substances, aromas and alcohol and free of substances containing phosphates, and which is biodegradable and inoffensive to human health in the food sector (confirmed by an external German testing institute).

Field of application:

For daily cleaning of minor soiling such as light layers of oil and grease or street dirt on Sintered Stone. It doesn't leave any streaks and dries quickly.

1. Dilute the product 1:50 (3-4 capfuls in 8 liters of water).
2. Clean the surface with a clean, wet cloth or mop.

You'll never have to clean again!



Container	Units	Ref. number
500 ml	12	Neolith - 720-509 AKEMI - 10954
1l bottle (concentrated)	6	AKEMI - 10955
5l jug (concentrated)	2	AKEMI - 10956

INTENSIVE CLEANER - Basic Cleaning

AKEMI®

A high-alkaline concentrated cleaning product with anionic surfactants, auxiliary agents and solvents.

Field of application:

To deep clean Sintered Stone surfaces in kitchens, occupied rooms, grocery stores, workshops and other industrial companies.

This alkaline product easily and quickly removes stubborn soiling such as oil and grease, soot, rubber stains, different waxes and emulsions with real shine.

1. First wet the surface with clean water.
2. Apply the diluted product (mix 1:2 to 1:20), brush and leave for approx. 10 min.
3. Work the surface with a brush / mop or a buffer.
4. Collect the dirty water and then rinse abundantly with clean water.



Container	Units	Ref. number
1l bottle	6	Neolith - 720-505 AKEMI - 11920
5l jug	2	AKEMI - 11921

ACID CLEANER - End-of-Construction Cleaning

AKEMI®

A concentrated organic acid-based cleaning product with non-ionic surfactants and auxiliary substances. No corrosive vapors, solvent-free, very little odor.

Field of application:

To remove cement, mortar and lime remains as well as layers of treatment products and modified polymer-based joint material from Sintered Stone acid-resistant surfaces.

1. First wet the surface with clean water.
2. Apply the diluted product (mix 1:2 to 1:20), brush and leave for approx. 10 min.
3. Work the surface with a brush / mop or a buffer.
4. Collect the dirty water and then rinse abundantly with clean water.



Container	Units	Ref. number
1l bottle	6	Neolith - 720-504 AKEMI - 11985
5l jug	2	AKEMI - 11986



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