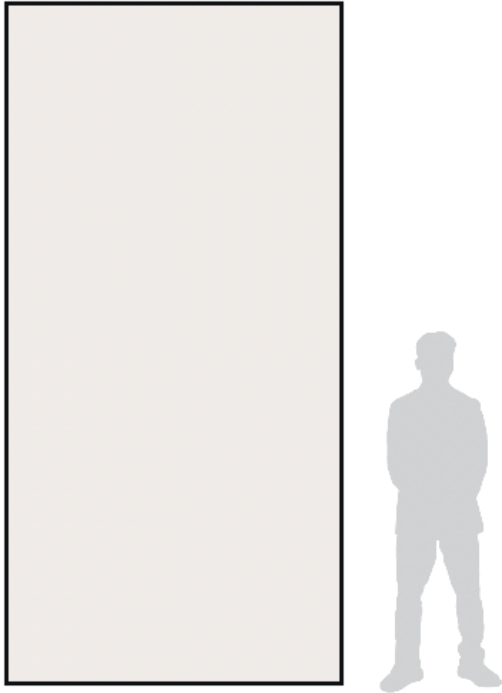


DELLA TERRA®  
PORCELAIN SLABS  
Fabrication Manual

ARIZONA TILE

## Nominal Slab Size

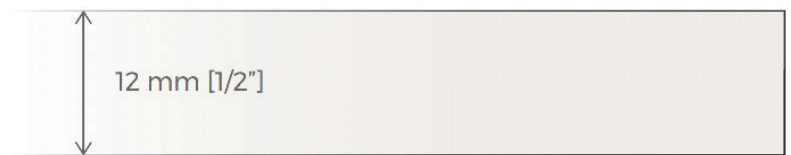


### Nominal Size:


The nominal slab size for Della Terra® Porcelain Slabs is 126" x 63". The actual shipped size is noticeably larger. Small chips or cracks on the edges of raw slabs are common and are not considered defects if the nominal size can still be achieved.

### Thickness:

Della Terra Porcelain Slabs are a consistent 12mm (approximately 1/2") thick.



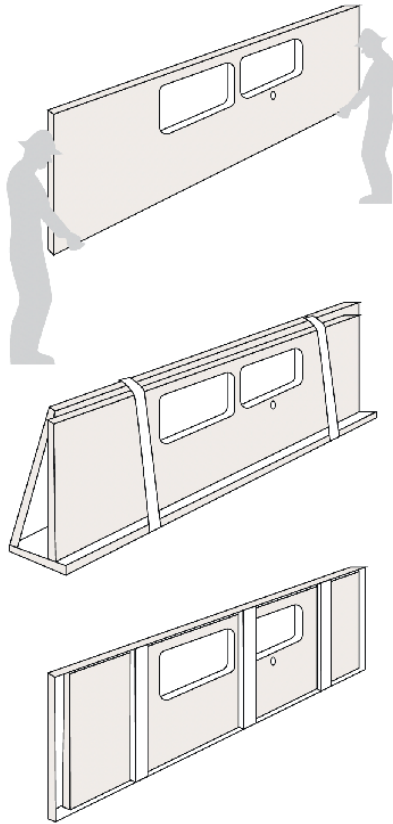
## Slab Identification

<b>DELLA TERRA™ PORCELAIN SLABS</b>		
Articolo Item AX9J		
AZT.F.BOSCO.SK.BO 162X324X12		
Formado Nominale Nominal Size 162X324X1	Spessore Thickness 12.0000	
Spelta Choice 1	Tomo Shade DE6	Calibro Caliber
GL/UGL UGL	Mq/pz Sqm/pc 5.25	Peso Weight 148.00
		
0788845933874		
MADE IN ITALY		

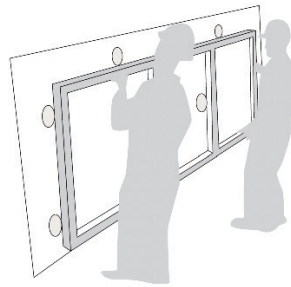
Each Della Terra Porcelain Slab will have a flag style label fixed to one of its short sides containing the following information:

- Product Code
- Item Description
- Thickness
- Quality
- Shade
- Production Date

## Handling & Transport



Transport both raw and fabricated Della Terra® Porcelain Slabs vertically, using wooden crates or A-frames to protect the slabs from damage. Place foam or polystyrene inside crates to protect slab edges. When using an A-frame, it is important that the slabs are fully supported with an appropriate backer, and that the edges are securely clamped to prevent vibration.



The use of suction cups is an ideal way of moving slabs manually. Large pieces, particularly those that are long and narrow, may require the use of aluminum spreader bars in addition to the suction cups to prevent the slab from bending.



## Shade Consistency

Slight shade variations may occur between production lots. Before cutting, confirm that the shades are consistent and acceptable across all slabs provided for the project, using a suitable light source for accurate inspection. Some Della Terra Porcelain Slab products are designed with intentional shade variations to replicate the look of natural stone.

## Surface Preparation and Pre-Fabrication Inspection

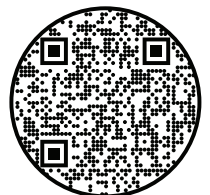
Before fabricating Della Terra Porcelain Slabs, it's important to clean the slab and conduct a thorough visual inspection of the entire surface. Report any potential material defects before fabrication, such as blemishes, chips, or scratches, as damage claims will not be accepted once the product is fabricated and or installed.



### **DANGER! Porcelain Slabs Contain Respirable Crystalline Silica**

Use the QR Code to View Safety Data Sheets (SDS) and Silica Safety Standards & Resources

[www.arizonatile.com/resources/product-information/safety-resources](http://www.arizonatile.com/resources/product-information/safety-resources)



## Cutting Equipment

Della Terra® Porcelain Slabs can be cut with the same equipment typically used for natural stone, marble, and quartz slabs. This includes bridge saws, CNC machines, and waterjets. Ensure that all tools are properly calibrated and in good working condition to avoid creating excessive vibration. To further reduce vibration, it is recommended to place a dense foam board as a “backer” between the slab and cutting table.

## Diamond Blade Selection and Specifications

Only use diamond blades suitable for use with Porcelain Slabs.

*Please Note: Granite, marble, or quartz blades are NOT suitable for use with Porcelain Slabs.*

Perform all cuts wet, with a continuous jet of water directed at the leading edge of both sides of the blade. The recommended blade diameter will vary based on the machine used and the slab thickness. For a 12mm (approximately ½”) thick slab, a blade diameter of between 12”–20” (30–50 cm) is ideal.

### General Settings for Linear Cutting

DIAMETER (mm)	DIAMETER (inch)	RPM	FEED RATE (m/min)	FEED RATE (inch/min)
350	14	1800-2500	1,0-1,5	40-59
400	16	1500-2300	1,0-1,5	40-59
450	18	1200-2000	1,0-1,5	40-59
500	20	1000-1600	1,0-1,5	40-59

### General Settings for 45° Inclined Cutting

DIAMETER (mm)	DIAMETER (inch)	RPM	FEED RATE (m/min)	FEED RATE (inch/min)
350	14	1800-2500	0,6-0,8	24-32
400	16	1500-2300	0,6-0,8	24-32
450	18	1200-2000	0,6-0,8	24-32
500	20	1000-1600	0,6-0,8	24-32

## Detensioning Cuts

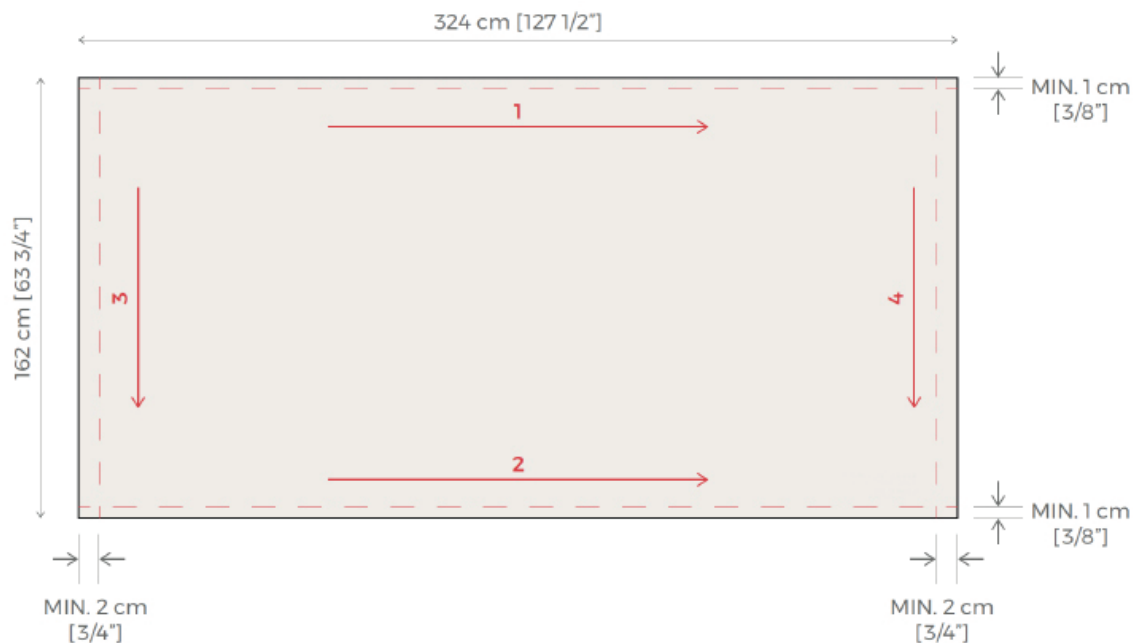
The first step in the fabrication process is to make a series of detensioning cuts. Detensioning cuts are required to release residual tension in the slab from the manufacturing process. Furthermore, these cuts allow the slab to be squared for subsequent operations.

Remove a minimum of 3/8" to 3/4" (1–2 cm) of material off of each side in the following order:

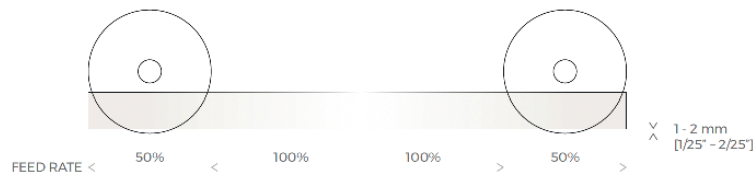
- Cut both long sides first with each cut being made in the same direction.
- Cut both short sides, again with each cut being made in the same direction.

Cut the slab on a flat surface, preferably with a foam backer to reduce vibration.

Begin the cut with the saw's feed rate at 50%, increase to 100% through the middle of the slab, then exit the slab at 50% speed.



The blade height should be set so that the blade only just penetrates the bottom of the slab as shown in the diagram.



## CNC Contouring Machine Cutting

Place suction cups uniformly under the slab to reduce vibration and bending, especially around areas with cuts or voids such as a sink cutout. Ensure suction cups adhere securely.

## Drilling Holes

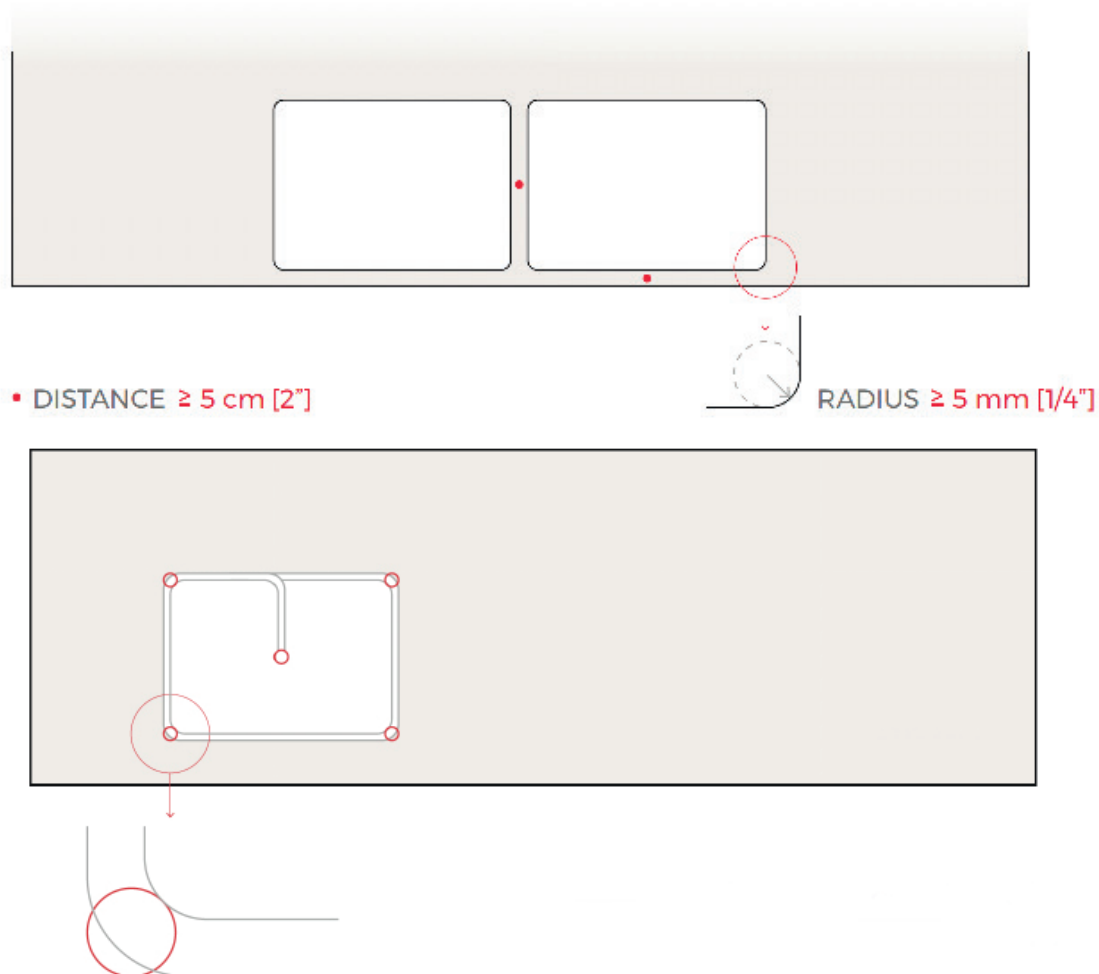
Use wet diamond core bits for circular holes (1/4" to 4.0" in diameter, 6-100 mm) such as those needed for plumbing penetrations or in the corners of rectangular sink cutouts. Maintain abundant water flow through the entire drilling process to avoid overheating or stressing the slab. Recommended drill speeds range from 2000–3000 RPMs depending on the bit diameter, with a feed rate of 3/4"–1 1/8" per minute (20–30 mm per minute). During the first and last 1/8" (2 mm) of drilling, use a lower feed rate (1/4" per minute or 5 mm per minute) to lessen the chance of chip out.

## Rectangular Cutouts

Rectangular cutouts for sinks, cooktops etc., are to be made by first drilling circular holes, with a minimum 1/4" radius, at each inside corner using a diamond core bit and continuous application of water. Use a diamond finger bit to connect these holes, following a smooth, circular path to prevent undue pressure at the corners.

All inside corners must have a minimum 1/4" radius. All internal cutouts (sinks, faucets etc.) can be made no closer than 2" from the edge of the slab. You must also maintain at least 2" between cutouts as shown in the diagram below.

**Do NOT** cut sharp inside corners as doing so will likely result in the slab breaking at the corner due to the accumulation of tension.



## Mitered Edges

Mark the edge and cut the slabs at a 45° angle with a diamond blade or CNC machine, ensuring precise alignment. Smooth the cut edge and clean with acetone to remove dust.

Use a two-part epoxy color matched adhesive suitable for porcelain.

Spread adhesive along the mitered edge of one slab, ensuring full coverage without excess.

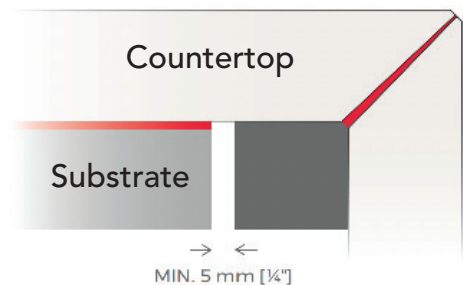
Carefully align the edges to form a 90° angle, then clamp them securely to hold the slabs in place, avoid overtightening.

Clean any adhesive squeeze-out with a putty knife and acetone.

Allow the adhesive to cure as per the adhesive manufacturer's instructions.

To create invisible joints, it is best to cut each edge at an angle of just over 45° leaving more space for the glue at the back of the joint.

For a smooth finish, polish or hone the seam once fully cured, being careful to not remove more surface glaze than necessary.

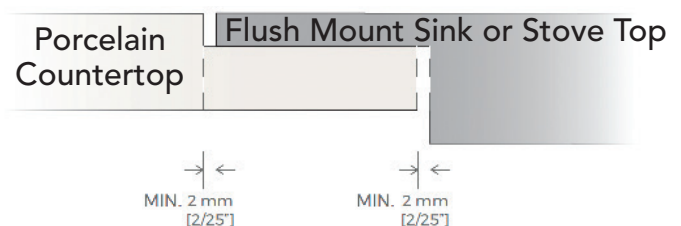
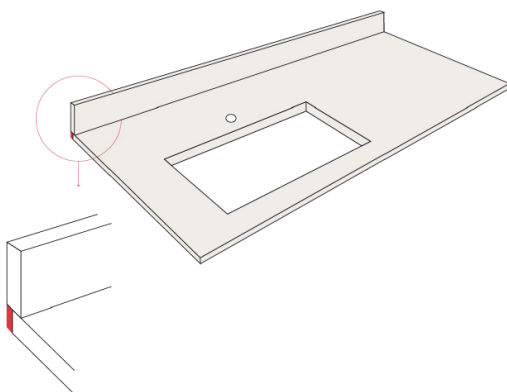


For all installations, be sure to leave a 1/4" gap between the miter support block and the countertop substrate. This will allow for differences in thermal expansion between the two surfaces.

## Expansion Joints

It is important to leave a minimum 2mm (2/25") gap between the porcelain countertop and an adjoining wall to accommodate movement. Fill the void with silicone and cover with backsplash material.

In addition, for a flush stove top or sink, it is recommended to leave 2 mm gap between the stovetop or sink and the counterbore. In all cases it is recommended to fill these joints with silicone or seals provided by the stove top or sink manufacturer.



## Flush Seams

Start by first cleaning and very slightly beveling or rounding off the two adjoining edges to prevent chipping at the seam. Dry fit the slabs to make sure the substrate is level across the seam leaving a slight gap (1/25" or 1mm) between the two pieces to allow for an adhesive filled joint. Spread a thin layer of color-matched epoxy or seam adhesive along one slab's edge. Bring the slabs together and use suction cups or seam setters to align and hold them in place, double-checking to make sure both slabs are level across the seam. Wipe away any adhesive squeeze-out with a putty knife, then clean with acetone. Allow adhesive to cure per the adhesive manufacturer's recommendations.



Porcelain slab seams should **NOT** be polished or "flattened" with a grinder. Doing so will create a noticeable difference in the surface finish at the seam when compared to the rest of the slab(s).

## Sink Cutout and Installation

Della Terra® Porcelain Slabs support top-mount, bottom-mount, and flush-mount sinks. Use support brackets for sinks to prevent detachment or breakage. For undermount or flush-mount sink cutouts in porcelain slabs, ensure that the corners have a minimum radius of ¼" to reduce stress points and prevent cracking. The cutout edges should be flat and polished to provide a smooth, finished appearance and enhanced durability. This polished edge will also help prevent chipping and make the cutout more resistant to wear over time.

All internal cutouts (sinks, faucets etc.) can be made no closer than 2" from the edge of the slab.

## Overhangs

Unsupported overhangs on 12mm thick porcelain slabs should not exceed 8". Countertops with a mitered edge and an approved, properly installed, sub top backer can accommodate unsupported overhangs of up to 10".

Additional brackets or corbels will be necessary to properly support overhangs greater than 10". In all cases, the slab should not extend more than 8" beyond the corbel or support bracket when installed without a sub top backer, and no more than 10" when installed with a mitered edge and supportive sub top.

## Final Installation

Ensure the base cabinets where the Della Terra Porcelain Slabs will be installed are flat, level, and structurally stable prior to installation. Irregular support or work residue may cause slab fragility. Use a high-quality, flexible silicone adhesive or polyurethane-based construction adhesive. These adhesives allow for slight movement due to temperature changes and provide a strong bond between the porcelain and cabinet surfaces. Apply the adhesive evenly across the supported areas to prevent unsupported points. Let the adhesive cure per the adhesive manufacturer's recommendations prior to using or setting objects on the counter.