



BELLA

SERIES

BELLA SERIES FABRICATION & INSTALLATION GUIDE

12

12mm Range



LUSO
GROUP

BELLA SERIES

FABRICATION & INSTALLATION GUIDE

1. GENERAL INFO

- Slab data
- General Safety Procedures
- Slab Handling, Transportation & Storage
- Visual Slab Inspection

2. PROJECT DESIGN

- Measurements
- Layout
- Internal radius Corner
- Cabinet Design and Support
- Overhangs
- Edge Profile Splashbacks
- Joints
- Cut out recommendations

3. FABRICATION

- Tools & Equipment
- Maintenance
- Inspection Before Cutting
- Cutting & Feed Rates
- Blade Cutting
- Waterjet Cutting
- CNC Cutting
- Adhesives for Edging
- Edge Treatments

4. PACKING AND TRANSPORT

- Quality Control
- Packing
- Loading & Unloading
- Liability Waiver

5. BENCHTOP INSTALLATION

- Preparation of Base Cabinetry
- Test Fit
- Adhesion
- Outdoor Installation

6. CARE AND MAINTENANCE

- Dried on Food Stains
- Build up Stains
- Greasy Stains
- Glue, Rubber marks

1 GENERAL INFO

Slab Data

- Overall Slab Dimension: 3280mm x 1540mm
- Actual Working Slab Dimension: 3200mm x 1500mm
- Slabs are non-rectified, 20mm is to be trimmed off each length to release any tension with the cut starting from outside of the slab working in and is to be cut all the way through to go off the slab
- Thickness: 12 mm
- Weight: 12 mm = 32kg per m²

General Safety Procedures

- **Working in areas with fabrication dust: Always wear a filtered mask and goggles, or a full-face mask that covers eyes and has air filters. Remember to change the filters frequently.**
- Use the appropriate safety gear for each fabrication step: Apron, gloves, shoes, goggles, masks, and hearing protection.

Slab Handling, Transportation & Storage

- Lifting Methods: Crane or forklifts using clamps, straps, or any manual lifting system that ensures safe movement of the slab. The slabs must be balanced taking into account their centre of gravity.
- Transportation: Use an A-frame that is secured to the transport vehicle. Be careful not to over-tighten the straps to the slabs. Ensure slabs are free from grit that may score the surface while in transit. (See Countertop Installation for more information)
- Slabs can be stored inside or outside, in all climates and cannot be damaged by UV exposure, weather, or naturally occurring stains.
- A-frames must have rubber or wood on their bases so the edge of the slabs does not get chipped from metal contact.

Visual Slab Inspection

- Inspection process: Check that the material doesn't have any visible transportation defects before starting the fabrication process.

Note: A slab with a factory defect will not be considered for replacement if it has been cut.

- Colour matching slabs: If material from multiple slabs will be seamed together then check to make sure the shade matches between slabs. Material from the same factory shade will match.

2 PROJECT DESIGN

Measurements

- Exact measurements are critical to a job well done. Make sure to leave a 2-3mm gap between walls and Bella to allow for easy install and to prevent binding from structural movement.
- Make sure base cabinets are flat, level, strong, and free from defects.
- Weight: 12 mm = 32kg per m².

Layout

- Manipulate colour and vein structure per the design of the cut diagram.
- Utilizing the slab: Bella is full use to the slab. Be sure to inspect for transit chipping or scratching.

Internal Radius Corner

The radius of all internal corners must be a minimum of 5 to 6mm mm to preserve a proper structural resistance of the slab. Never cut the corner at 90° as breakage or cracking points may result.

 Figure 2.1

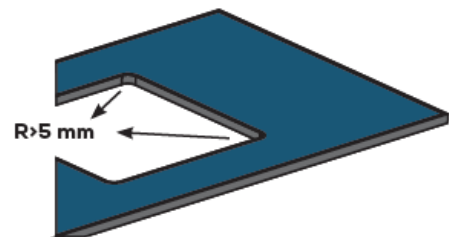


 Figure 2.2

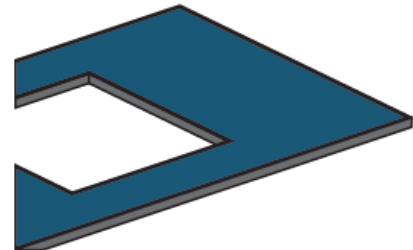
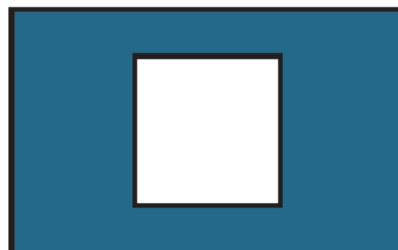
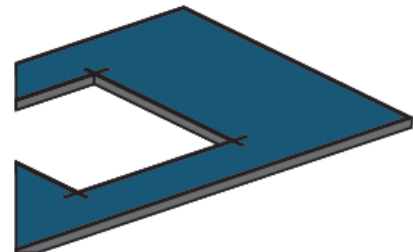
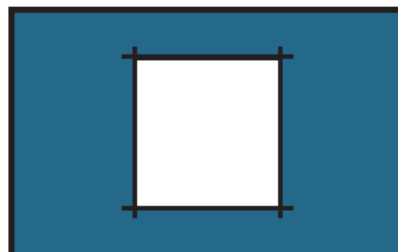


 Figure 2.3



Cabinet Design and Support

- Bella Twelve needs proper and levelled support.
- For 12 mm material, it is recommended to use solid substrate on top of the cabinets or inset into the cabinets. Otherwise strips of material can be used along the full perimeter of the cabinet boxes.
- For benchtops with cut-outs there should be support strips on either side of the cut-out.

Note: The use of quartz for support strips is not recommended due to the expansion rate of that material. Use porcelain, granite, or a material with similar expansion properties instead.

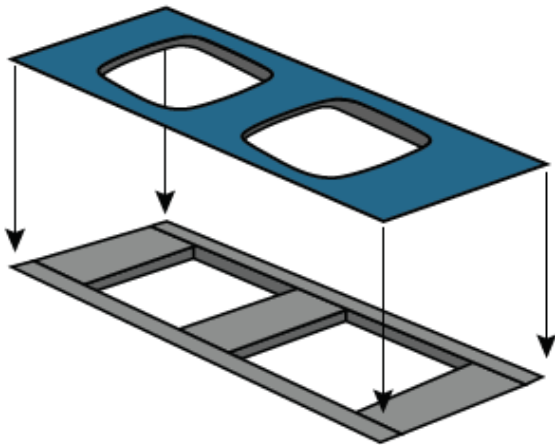


Figure 2.4

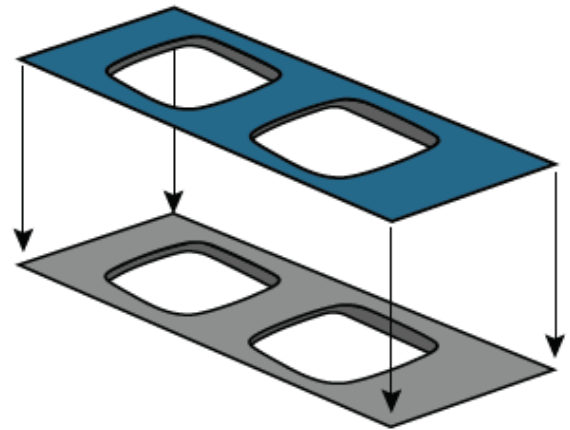


Figure 2.5

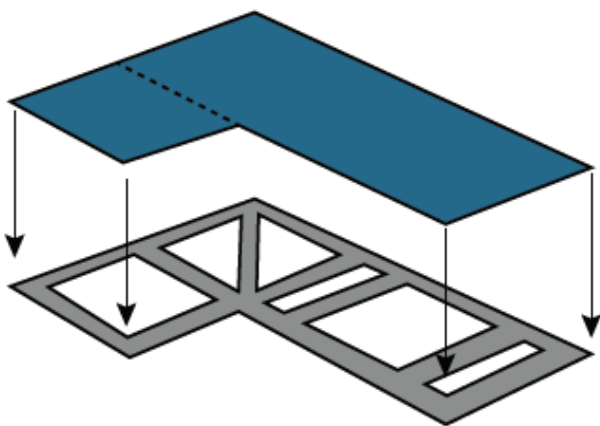


Figure 2.6

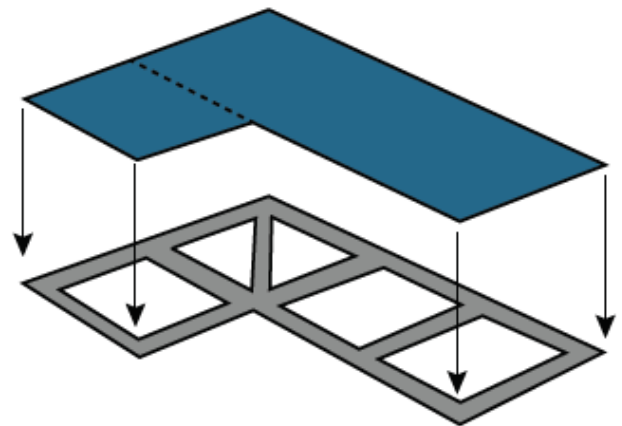
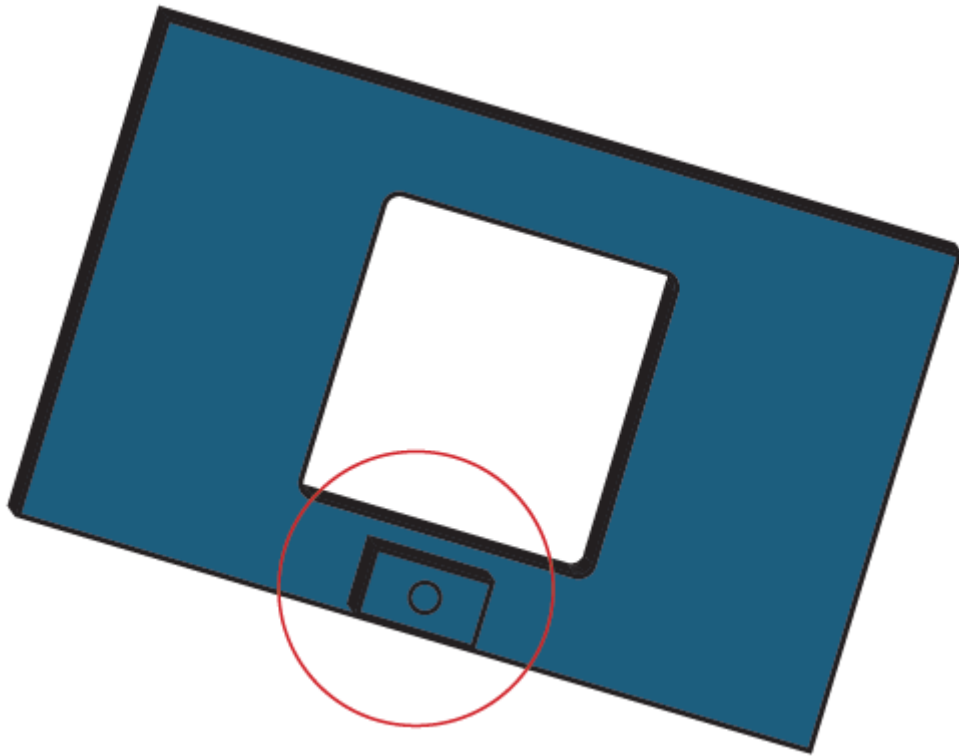


Figure 2.7

- If the taps are to be installed directly in the top, it is advisable to add a support under the top in the point where the hole has to be drilled. Be careful as the support must be positioned as to enable free movement of the top.

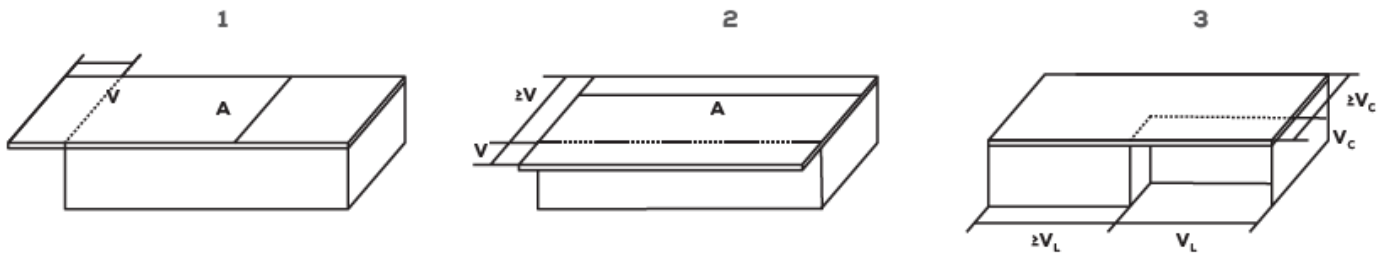


Overhangs

- 12 mm without substrate = 20cm of unsupported overhang
- 12 mm with substrate = 25cm of unsupported overhang
- If there is a sink or cooktop cut out that is 30cm or less from the overhang, then the overhang needs additional support or table legs.

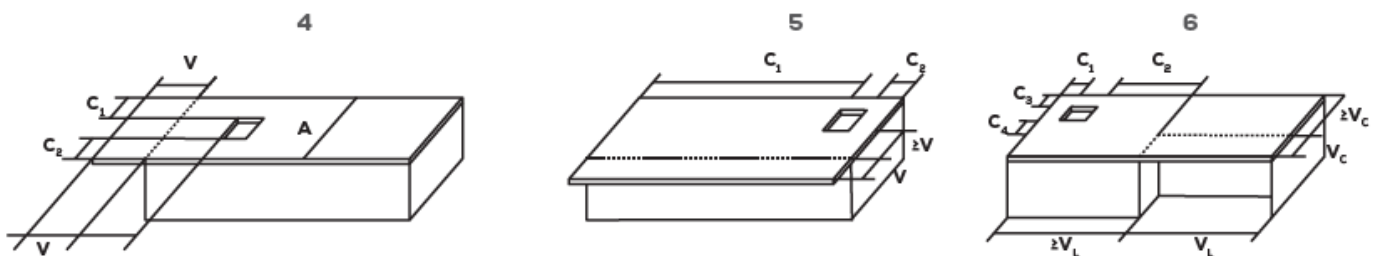
The following diagrams applies to benchtops with only one cut out:

V OVERHANGS FOR WORKTOPS WITHOUT CUT-OUTS	12mm
Full side overhang (1) (2)	$V \leq 25\text{cm}$
Partial overhang (3)	$V_L \leq 50\text{cm}$
	$V_c \leq 20\text{cm}$



V OVERHANGS FOR WORKTOPS WITHOUT CUT-OUTS	12mm
Full side overhang (4) (5)	$V \leq 25\text{cm}$
Partial overhang (6)	$V_L \leq 50\text{cm}$
	$V_c \leq 20\text{cm}$

The following diagrams applies to benchtops with only one cut out:



Edge Profiles

- Options for edge profiles on Bella Twelve bench tops include square edge and mitred edge
- The edges can be honed, polished, or brushed to create a texture.
- The corners of the edge should be finished with either a pencil round or arris to prevent chipping from impacts. The greater the pencil round-or arris the more durable the edge will be. It is recommended to have a minimum of 3mm pencil round or arris in general use areas and also areas like a sink cut out.



Figure 2.8



Figure 2.9

Splashbacks

- Due to imperfections in the wall and structural movement of the building we recommend a 2-3mm gap between the bench top and the wall. This gap should first be filled with silicone and then the splashback can be installed to cover this gap. The splashback is first adhered to the wall with silicone and then sealed to the bench top with silicone.

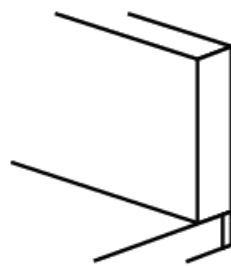


Figure 2.10

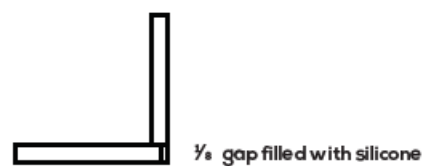


Figure 2.11

Joints

- It is recommended putting a joint in the corners of all large L-shaped pieces.
- A micro-bevel or chamfer should be put on all benchtop edges that will be seamed together. This will prevent chipping during install when the pieces are brought together.
 - This can be done by hand with a fine grit sandpaper (approx. 800-1000 grit)
 - 2-3 swipes along the edge by hand will produce the micro-bevel.

Cut out recommendations

When cutting, keep a minimum distance of at least 50 mm between the slab edge and the cut. The same distance must be kept between every hole e.g., between the hole for the taps and the hole for the sink, the minimum distance between the benchtop edge and a cut out is 50mm.

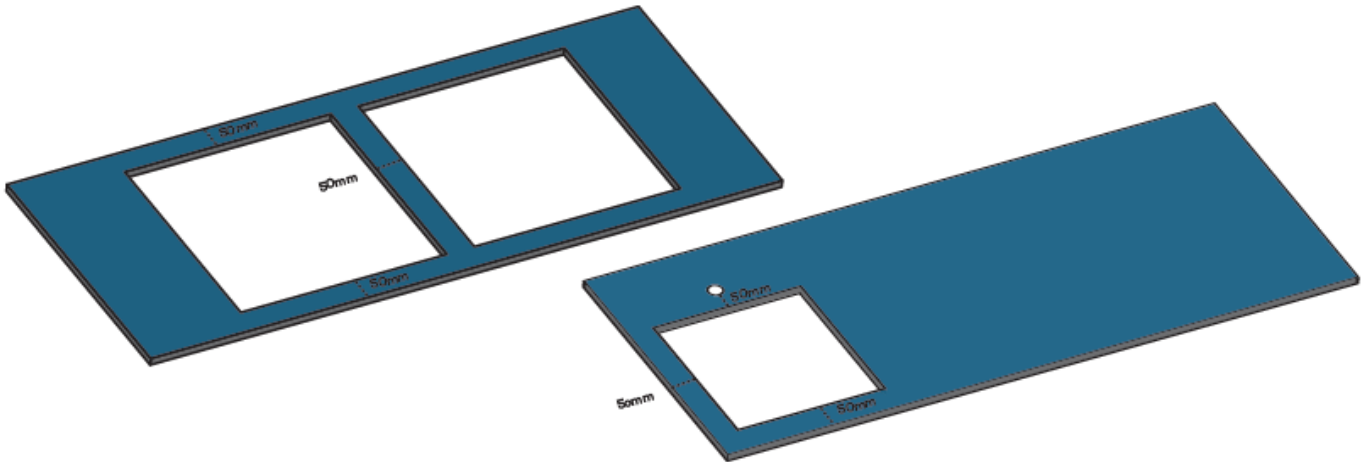
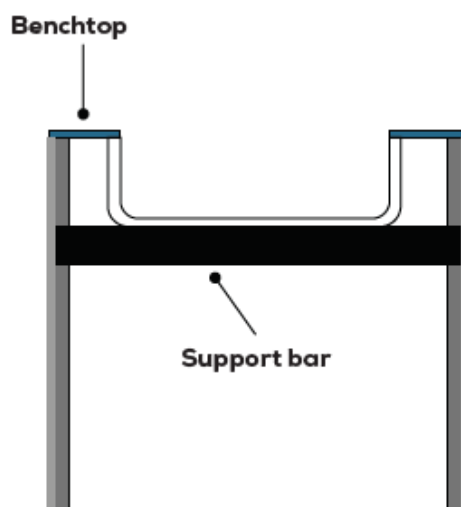


Figure 2.12

There are 3 mounting methods for different types of sinks and hotplates:

- **Top Mount:** protects benchtop edge and easiest install.
 - **Flush Mount:** 4mm max depth in 12 mm bench tops. A 3mm expansion gap must be given to allow cooktops to expand when hot. The expansion gap should be filled with silicone.
 - **Under Mount:** does not protect benchtop edge, recommend rounding the top corner of the edge to increase durability against impact damage.
- For **Under Mount:** the sinks are adhered to the underside of the bench top using a mounting system with adhesives. It is always better to use a mounting system that ties the weight of the sink into the side support rails of the cabinetry.
 - For large farm-style sinks it is mandatory to have support rails underneath the sink that ties into the sides of the cabinetry so that the weight of the sink is not hanging from the Benchtop.



3 FABRICATION

Tools & Equipment

- Bella Twelve porcelain panels can be fabricated using any equipment designed for stone fabrication. The only difference is that the abrasive material needs to be formulated for working with porcelain (example: saw blades, core bits, CNC milling bits).
- The following is a list of some types of equipment that can be used for benchtop fabrication:
 - Bridge Saw
 - Mitre Machine
 - Water Jet
 - CNC
 - Edge Profile Machine
- Hand tools include:
 - Angle Grinder
 - Router
 - Pneumatic Polisher

Maintenance

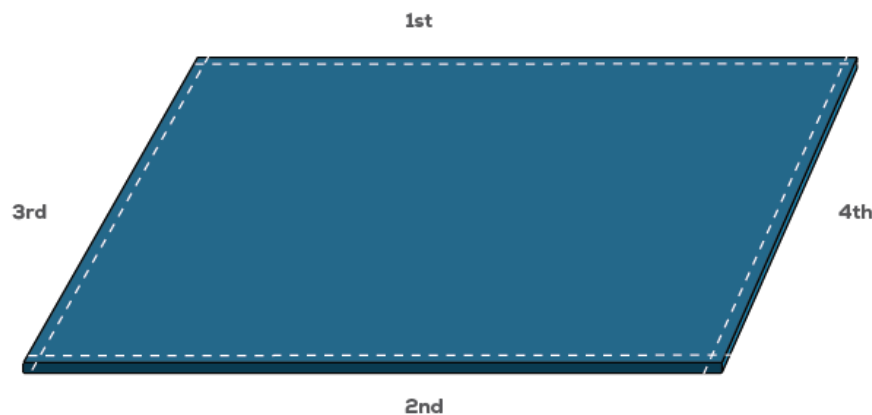
- Equipment must be maintained properly to have successful performance:
- Saws must be tracking properly to prevent binding or cracking during cutting. Following manufacturer scheduled maintenance and re-calibration is strongly advised.
- Slab tables for bridge saws and Water Jets must be flat and in good condition. If the table is worn in areas and does not properly support the slab, then back cutting, chipping or cracking will occur. Tip: A layer of rubber or foam on the surface of the slab table will reduce vibration from older equipment between the slab and the table resulting in cleaner cuts that are less prone to chipping.

Inspection Before Cutting

- Inspect the surface of the panels to be cut under good lighting conditions. Do not fabricate the panels with any type of surface defect (such as chips or scratches from handling) that cannot be avoided by cutting around them.

Cutting & Feed Rates

- Prior to loading slab, inspect the bench making sure it is flat, level and free of debris.
- Before cutting the slab, it is important to remove 20mm off each side of the slab as per the following illustration starting the cut outside of the slab and working through to go all the way to the end and off the slab.



- The rate at which you can cut and process Bella Twelve depends on several factors including the abrasive media type and the machine settings and conditions.
- Before cutting pieces with inside corners, first core drill in each corner and then cut towards the core hole.

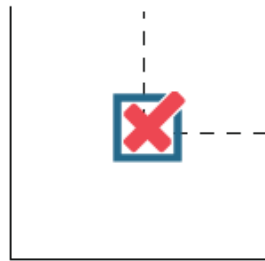


Figure 3.1

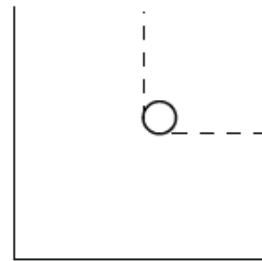
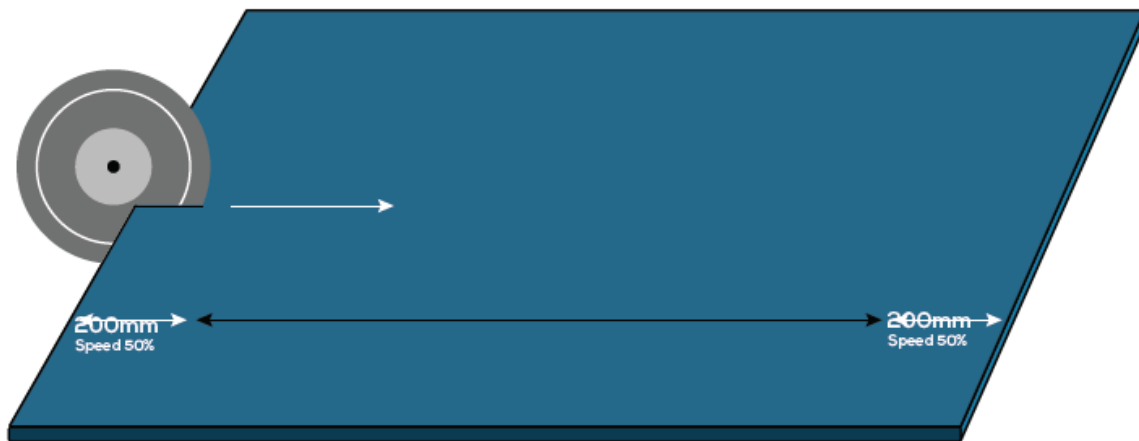


Figure 3.2

Blade Cutting

When entering the slab, it is recommended to adjust the feed rate to be at 50% of the rate. At or around 200mm, the feed can be increased gradually to 100% and reduced again to 50% feed approx. 200mm from end of the cut as highlighted in illustration below.



- Set machines to deliver as much cooling water as possible to dissipate the heat that is generated while cutting. Excessive heat build-up will shorten the lifespan of the blade and also result in poor performance.
- When cutting or drilling with hand tools ensure that the bench top piece is stable and properly supported.

THICKNESS	SPEED		DISC	RPM
	(mt/m)	(mt/min)45o		
12	1.0-1.5	0.7	400	1,900 MAX
12	1.0-1.5	0.7	300	2,500 MAX
12	1.0-1.5	0.7	350	2,500 MAX

Waterjet Cutting

When entering the slab, it is recommended to adjust the feed rate to be at 50% of the rate. At or around 200mm, the feed can be increased gradually to 100% and reduced again to 50% feed approx. 200mm from end of the cut as highlighted in illustration below.

PRESSURE (Bar)	SPEED (mt/m)	ABRAISIVE FEED (gr/min)
3,000 – 3,500 (entrance hole) 900 bar	0.7-1	350

CNC Cutting

TOOL	SPEED		RPM
	(mt/m)	(mm/min)	
Core drill	0.5		4,500 – 5,500
Finger drill		20-30	4,500 – 5,500

Adhesives for Edging

- Any adhesive made for use on non-porous material (like quartz or solid surface) will work.
- Mitred Edge: 12 mm thickness has less bonding surface area than 2 or 3 cm materials so it is recommended using stronger than average glue for this edge type. Hybrid Epoxy or Acrylic glues are recommended but Polyester Knife Grade is not recommended because it shrinks while drying which creates a weaker bond.
- Material surfaces to be glued should be first roughed up or cut with cross-hatches so the glue has better architecture to grip onto. Clean surfaces with acetone before applying the glue.

Note: Using clear adhesive causes shadowing which creates a darker looking joint line. Use opaque adhesive for light coloured porcelain.



Figure 3.3

Edge Treatments

- Edge shaping done by hand, use a silicone-carbide grinding wheel or diamond cup wheel mounted on an angle grinder. Automated machinery can be used for this as well.
- Edges can be polished or brushed to match the sheen of the surface
- Dry polishing can be done using sandpaper from 60 to 3000 grit; depending on intended polish level. Note that dry polishing alone will not achieve full sheen depth.
- Wet polishing (recommended) is done using diamond polishing pad grits from 50 to 3000 depending on intended polish level.

Note: wet polishing minimizes the chance of burning the adhesive in the joint and creating discoloured areas.

Note: Using clear adhesive causes shadowing which creates a darker looking joint line. Use opaque adhesive for light coloured porcelain.

4 PACKING AND TRANSPORT

Quality Control

- Once the fabrication is completed it is very important that the project pieces are inspected under proper lighting conditions.
- Check all factors against the design such as measurements, polished edges, and cut-outs.
- Check for any damage done to the surface of the pieces by tools or handling.
- Do not allow pieces to move forward to packaging and transport if there are any issues.

Packing

- If the fabricated product passes QC inspection, then it can be prepared for transport. This can be done by putting pads onto corners to prevent handling damage, and by putting protective film over the surface to prevent scratches.
- Support bars should be attached across any cut-outs to stiffen up those pieces. This will allow for easy transport from the shop to the install without breaking the pieces.

Loading & Unloading

- Prepare the A-Frame or racks on the transport truck for loading of the pieces. The parts of the framework that will come in contact with the porcelain must be covered with rubber, or wood, so that no damage occurs. Make sure these contact areas are clean and free from grit so that the porcelain is not scratched or marred during transit.
- Place the pieces on both sides of the frame to balance the load, ensuring that the pieces fit snugly together.
- Secure the load with wood and clamps or with straps. Make sure the pieces are held tightly enough that no shifting will occur during transit, but not too tight that might damage the pieces.
- After transit check to make sure no shifting has occurred and none of the pieces have been damaged.
- When unloading, it is important that the pieces are carried upright (not flat) into the install site. Make sure there are enough employees present to safely carry the pieces without risk of dropping or knocking them into other objects. Temporarily resting the porcelain on tailgates or truck beds may cause chipping while the weight is shifted to that point. If this is necessary use wood, padding or carpet to protect edges. Pay extra attention to pieces with cut-outs as they are the easiest to fracture or break.

Liability Waiver

- This manual has been created to offer informative guidelines for the design and installation of Bella Twelve products. The information provided is merely informative and the customer must check it over thoroughly.

5

BENCHTOP INSTALLATION**Preparation of Base Cabinetry**

1. Remove old benchtops and clean up the top surface of the base cabinetry and adjacent walls.
2. Bella Twelve benchtops require proper support, so this is the time to verify or complete this process (see previous section).
3. Check to see if the base cabinets are flat and level.
4. If the bench top support system is built into the bench top itself, then the base cabinets must be flat and level before starting the install. If not the cabinets must be adjusted so that their top surfaces are flat and level – do not move forward with install until this has been completed.
5. If the bench top support system is a separate substrate, then it is time to install the substrate onto (or into) the cabinetry. Once the substrate has been installed the surface must be flat and level. If the cabinets are off slightly then packers can be used underneath the substrate to correct this problem. Packers should be less than 18" apart.
6. We always recommend to install an insulating panel over the dishwasher or under the benchtop.

Note: Packers are not allowed on top of the substrate or cabinet rails. The bench tops must be in full contact with the substrate or cabinet rails for proper support. The silicone used to glue down the tops can fill small gaps but not large gaps (less than 1/8").

Test Fit

1. Carefully place the bench tops onto the base cabinetry.
2. Check that the pieces are the correct size, fit together properly, and joined areas match up according to the original design. If there are any issues do not move forward with the installation.
 - It is recommended to place thin material between the edges of the bench top pieces before bringing them together - this will prevent accidental chipping. The material can then be removed before adhesive is filled in the gap and then the pieces can be pushed together for final placement.

Adhesion

1. Glue down the bench top pieces to cabinetry using Silicone. The silicone should be spread evenly across the support rails or substrate.
2. Clean the bench top edges and worktop thoroughly before attempting to join pieces together.
3. Use colour-matched adhesive to fill gaps between joined pieces of the bench top. Taping off pieces where adhesive will be applied can make for easier clean up. The use of suction cup levelling systems when gluing joints together can make for a better final result.
4. Do not allow anyone to get dust or dirt into seam glue while it is drying. Remove tape and clean up any excess adhesive residue on benchtops.

Outdoor Installation

- When installing bench tops outdoors extra attention must be given to substrate material and adhesives.
- Plywood substrate is not recommended for outdoor use. It is recommended using high density board instead
- The adhesive used to glue down the bench top to the substrate needs to be rated for the environment of the install. Silicone is not recommended for freezing temperatures – instead use a flexible polyurethane construction adhesive that is rated for freezing temperatures.
- It is also acceptable to mortar down bench top pieces outdoors, a waterproof cement board substrate should be used.

6 CARE AND MAINTENANCE

Bella Twelve surfaces require very little maintenance. Routine cleaning with a sponge and soapy water is usually all that is needed. For streaks use a porcelain cleaner. For tougher stains see the following:

Dried on Food Stains: Use a Non-Abrasive gel cleaner with bleach on a No-Scratch blue scrubber sponge.

Built up Stain: Use a smooth flat edge scraper against the surface to pop off any materials stuck. Use appropriate cleaner for residue.

Greasy Stains: Use a recommended porcelain cleaner.

Glue, Rubber marks: Acetone, Lacquer thinner.

Do not leave cleaners sitting on the surface for extended periods of time, and always follow with mild soap and water to ensure the surface is clean and neutral when done. Use of harsh cleaners and aggressive scouring could alter surface.

It is recommended to cut food on cutting boards instead of directly on the bench top.

Flat edge Cutlery is likely to leave a metal mark on the surface and immediately dull the knife.

Use of a cutting board will avoid these issues.

CONTACT

LUSSO GROUP

LOCATION

1 Finance Place, Corner Weir Road
Malaga, WA 6090
(parking at rear)

CONTACT

08 6461 1040 / info@lussogroup.com.au

OPENING HOURS

Monday to Thursday: 8:00 am – 5:00 pm
Friday: 8:00am to 3:00pm
Saturday: 8:00am to 12:00pm
Closed Public Holidays and Long Weekends

 **BELLA**
SERIES

BELLA SERIES
FABRICATION & INSTALLATION GUIDE



BELLA SERIES

FABRICATION & INSTALLATION GUIDE

CONTENTS

Introduction
Size & weight
Fact Sheets – suitability for applications
Handling

FABRICATION INSTRUCTIONS

Tools & equipment
Basic Fabrication Method for cutting
Basic Fabrication Method for cutting Porcelain Panels cut outs, holes by hand powered tools

INSTALLATION TIPS

Safety Guidelines
Care and Maintenance
Contact

INTRODUCTION

Bella Series Porcelain Panels are manufactured by one of Europe's leading porcelain & ceramic suppliers based in Italy. The environment has always been an important focus in the production of the porcelain architectural surface products.

They are and always have been sustainable, green and environmentally friendly. Made from 100% all natural minerals, they are sustainable for the harmful elements that have been left out: they contain no sealants, waxes, epoxies, man-made binders or artificial colouring agents that could add to harmful VOC off-gassing after installation.



SIZE & WEIGHT

Bella Series Porcelain Panels size specification:

Panel size: 3000 x 1500 x 6mm = Total area 4.5m²

Panel size: 3000 x 1000 x 6mm = Total area 3m²

Weight: 14.67kg/m²

Other formats available as a special order
(ex Italy – up to 16 weeks)

Standard cut to size formats –

3000x1500 formats: 1500 x 1500, 1500 x 750, 750
x 750, 750 x 375mm

3000x1000 formats: 1500 x 1000, 1000 x 1000

Bella comes in either a matte, silk or polished
finish pending on the choice of finish – please
refer to web site.

FACT SHEETS

Application

Bella Series Porcelain Panel applications include: all
external wall cladding, internal floors & wall linings,
shower recesses, splash backs and applications over
existing floors or walls.

Suitable for all domestic, commercial, retail, multi-residential and refurbishment projects.

- Bella Series Porcelain Panel are made from 100% natural material with 40% recycled content. No chemical binders or resins are used.
- Bella Series Porcelain Panel are UV resistant and can be used externally.
- High Strength and scratch resistance.
- Thermal shock resistance.
- Stain and mould resistant.



HANDLING

For manual handling and subsequent laying of the Bella Series Porcelain Panel, in order to guarantee the operators' safety and the integrity of the Panels, it is strongly recommended to use a frame with suction cups, available upon request, particularly suitable for large dimension Bella formats (e.g. 300 x 150 cm – 150 x 150 cm) whereas on smaller Bella formats (e.g. 150 x 75 cm) two double suction cups are sufficient.

HANDLING Processing stages

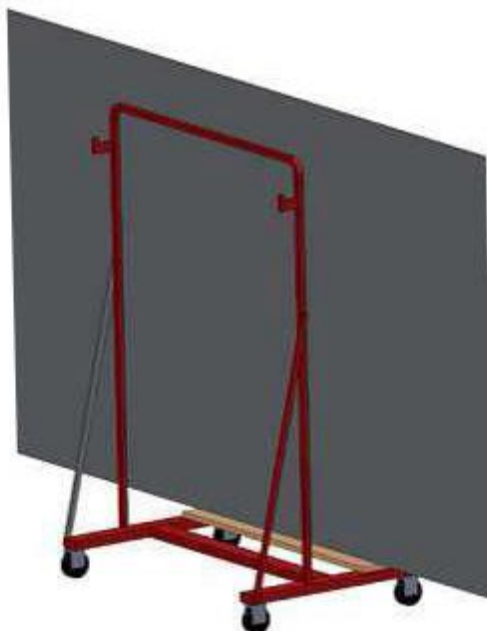
- Position the frame with suction cups on the panel and make sure that the cups adhere to it perfectly.
- For horizontal handling (on the surface), put the panel into a vertical position and use the wheels applied to the handling frame.

Note: Suction cups only work effectively on face of panel and not the rear.

INSTRUMENTS REQUIRED

The instruments for lifting and handling the panels can be chosen according to the size of the panel and the activities to be performed on the site, in particular:

- Frame with suction cups for handling large format panels;
- Double suction cups for handling Panels with format up to 150 x 75 cm.





FABRICATION INSTRUCTIONS

TOOLS & EQUIPMENT

In achieving quality workmanship, it is essential that the correct equipment & cutting methods are used.

BASIC EQUIPMENT

Normal processing equipment that is used for marble & granite is suitable for porcelain panels. Blades & milling tools must be suitable for wet cutting porcelain.

For manual handling & subsequent installation of Bella Series Porcelain Panel in order to guarantee the operators safety and integrity of the panels it is recommended to use a frame with suction cups – (see photos handling).

BASIC FABRICATION METHOD & TIPS FOR CUTTING PORCELAIN PANELS ON WET SAW

- Must use a solid flat base – slightly larger than 3000 x 1500
- Continuous water flow
- Only run slow cuts
- Use a superior quality continuous porcelain blade
- Use handling equipment as required
- On mitre cuts – avoid sharp edge mitres
- Some fabricators weigh down panel, to avoid any flex or vibration in product when cutting.



BASIC FABRICATION METHOD FOR CUTTING PORCELAIN PANELS, CUTS OUTS, HOLES BY HAND POWERED TOOLS

Bella Series Porcelain Panels can be easily processed by using some simple hand tools.

It is recommended to process the panels on a flat work surface, at least 5 cm longer than the panel from each side or double suction cup.

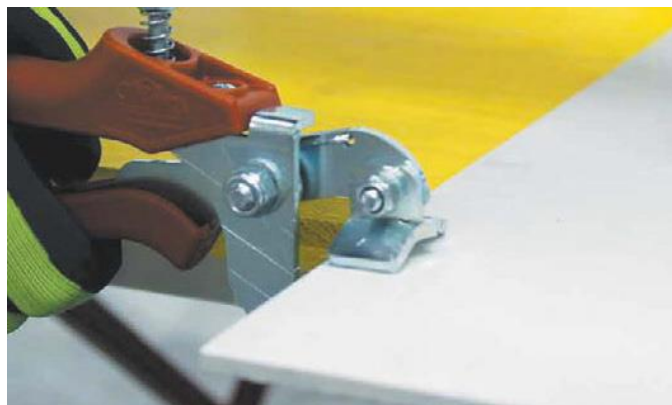
It is recommended to perform the cutting operations with at least two operators. One operator is sufficient for making the



CUTTING Instruments required

Depending on the type of cut and process to be applied to the panel, the recommended types of tools are listed below:

- Handling frame with suction cups or double suction cups;
- Cutting guide with cutting carriage for linear cuts of 150/300 cm;
- Cutting pliers;
- Wet core bits;
- Angle grinder with diamond blade;
- Diamond buffer.



SCORING:

To guarantee correct scoring, the pressure and movement of the cutting carriage must be constant along the whole length of the cut

- Score one end of the panel by 15 cm pushing the cutting carriage towards the edge of the panel.
- Complete the scoring up to the opposite of the panel.

**MARKING Processing stages**

Linear cuts up to a maximum length of 3m.

Depending on the type of cut and process to be applied to the panel, the recommended types of tools are listed below:

- Mark the portion to be removed at the ends of the panel.
- Position the cutting guide with cutting carriage so that the references on the guide coincide with the lines marked on the panel. Lock the cutting guide with the cutting carriage in place using the suction cups.



CUTTING OFF:

- Using the cutting guide move the panel until the scoring line protrudes by 5/10 cm from the work surface.
- Release the cutting guide from the suction cups and move it towards the middle of the panel.
- Start the cutting off process by positioning the cutting pliers in line with the line scored on the panel. Exert progressive pressure until you notice that the cutting off process has begun.
- Go to the opposite side and position the cutting pliers in line with the line scored on the panel. Exert progressive pressure until you notice that the cutting off process has begun.
- To complete the cutting off process, one or more operators must grip the portion to be removed and exert progressive pressure downwards.
- The finishing of the edges on the cut side must be carried out using the special diamond buffer.



L-SHAPED CUTS

For L-shaped cuts (holes for electrical boxes, internal corners) it is recommended to round off the internal angle by making a hole first with suitable wet core bits.



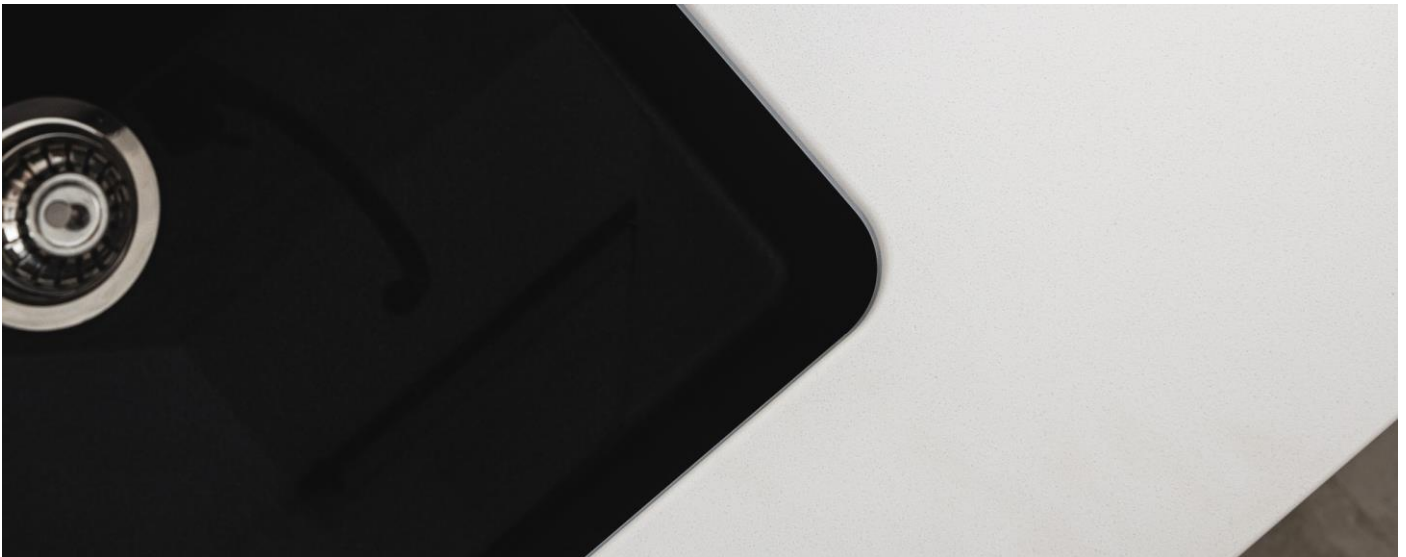
SQUARE CUTS/CUT-OUT

Mark the portion to be removed on the panel. To limit the possibility of breaking, it is recommended to make a 7mm hole in line with the point where the two lines marked on the panel meet. With an angle grinder equipped with a diamond blade, follow the marked lines.



RECTANGULAR HOLES

- Mark the sides of the portion to be removed on the panel.
- Make 7mm holes in the 4 corners.
- Using an angle grinder equipped with a diamond blade join the 4 holes.



ROUND HOLES Processing stages

- Position the Bella Series Porcelain Panel on a solid, nonslip surface (e.g. wood or concrete). Spray water onto the area where the hole is to be made.
- Start to make a hole at an angle of 75°-85° and penetrate into the panel with a depth of about 1-2mm.
- Keep the drill at a 90° angle and make circular movements with an angle of about 5°-10°. Do not exert too much pressure. Do not push straight downwards. Make sure there is enough water to wet the cutter.
- Clean up the scraps once the hole has been made.

INSTRUMENTS REQUIRED

Depending on the type of hole and process to be applied to the panel, it is recommended to use the following instruments:

- Handling frame with suction cups or double suction cups.
- Drill. (Regular and not hammer).
- Wet diamond core bits (cup wheel cutters).
- Angle grinder with diamond blade.



FLOOR LAYING

DESCRIPTION AND TECHNICAL FEATURES

Laying Bella Series Porcelain Panel require similar laying conditions to those required for traditional format Panels. Bella Series Porcelain Panel require the adhesive to be applied both on the setting bed and on the back of the panel.

Bella Series Porcelain Panel for flooring require the following conditions:

- Dry and seasoned.
- Planar and free of cracks.
- Cleaning of dust, debris and removal of concrete lumps.
- Compact and resistant.
- The substrate must be uniform and have already completed the shrinkage of maturation.

INSTRUMENTS REQUIRED

- Check with Lusso or your adhesive supplier.
- 3x3mm square toothed trowel and 12mm round toothed trowel.
- Frame with suction cups for handling or double suction cups.
- Non-bounce plastic mallet 170x370mm.
- Levelling system: base clip + wedge + pliers.



BONDING TO THE FLOOR

- Ensure that the surface to be covered is solid, flat and free from dust and oil/grease.
- Use the adhesives described mixed according to the specifications indicated in the technical data sheet of the chosen adhesive.
- Spread the adhesive onto the surface to be covered with a 12mm round toothed trowel across an area of 5/10 cm more than the dimensions of the panel.
- With the panel in a vertical position on the handling frame, spread the adhesive onto the back of the panel with a 3x3mm square toothed trowel.
- Using the frame with suction cups, bring the panel into a horizontal position and lay it.
- To guarantee uniform bonding of the panel, the special 170x370mm non-bounce plastic mallet must be used, tapping from the middle towards the edges so as to remove any air pockets between the back of the panel, the adhesive and the surface to be tiled.
- Using the levelling system.

LEVELLING SYSTEM

The levelling system aims to guarantee perfectly levelled floors simply and quickly, eliminating any unevenness between. The levelling system is strongly recommended for laying Bella Series Porcelain Panel.

INSTRUMENTS REQUIRED

- Base clip.
- Wedge.
- Adjustable pliers for installing floors/wall Panels.

APPLICATION OF THE LEVELLING SYSTEM POSITIONING THE BASE CLIP

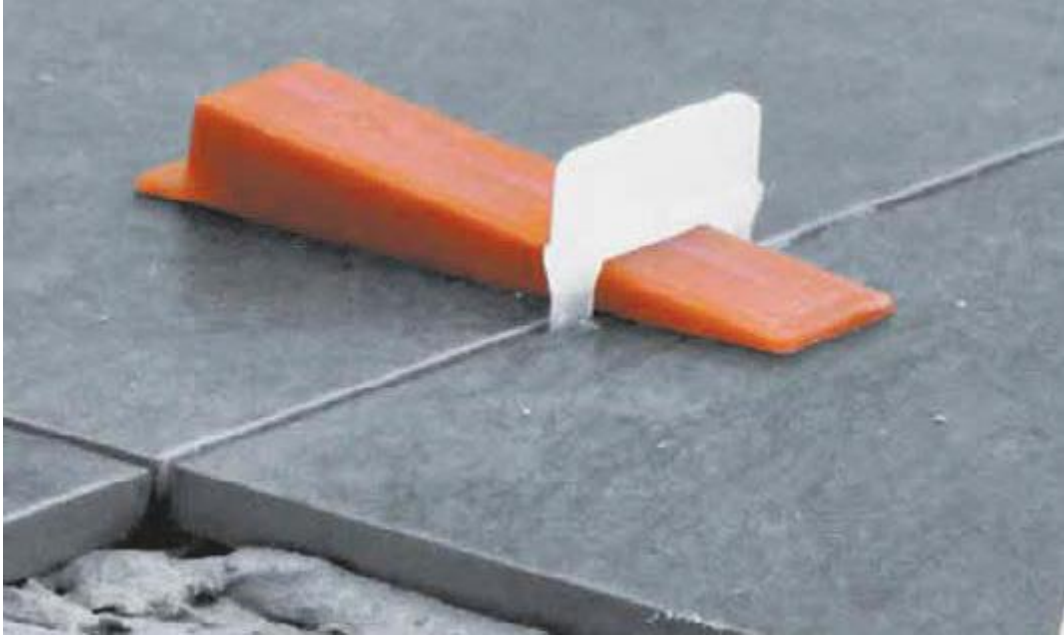
- After spreading the adhesive, insert the base clip below the Bella Series Porcelain Panel on the 4 sides.
- Depending on the format of the panel, position one or more supports for each side of the panel.
- Position the panel.

INSERTING THE WEDGE

- Insert the wedge in the slot of the support, taking care not to exceed the breaking point.
- To make inserting the wedge easier, it is recommended to use the adjustable pliers.

REMOVING THE SUPPORT

- Once the adhesive has dried, the protruding part of the support can be separated from the base clip.



WALL COVERING

BONDING TO THE WALL

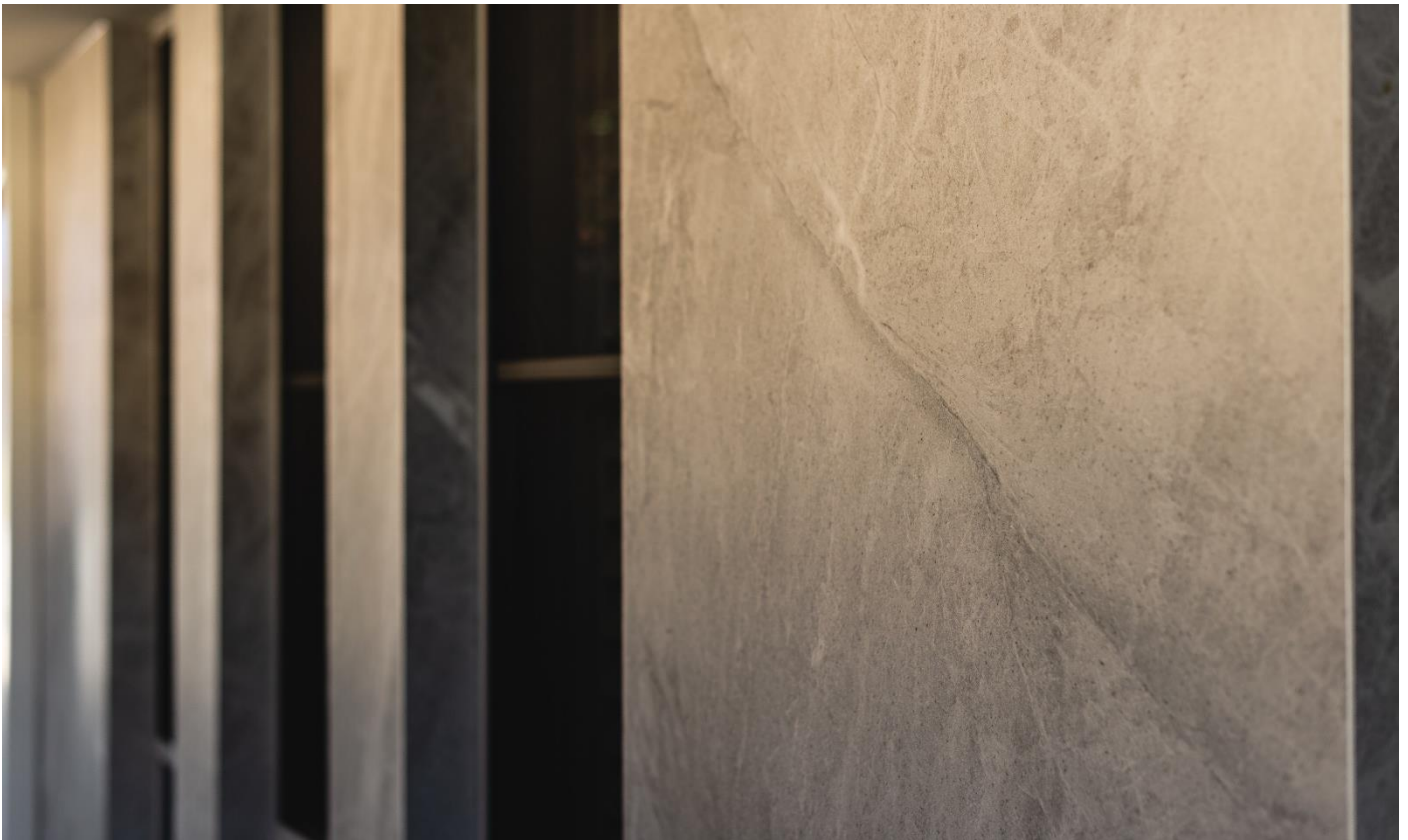
- Ensure that the surface to be covered is solid, flat and free from dust.
- Check with Lusso or your adhesive supplier.
- Spread the adhesive onto the surface to be covered with a 12mm round toothed trowel across an area of 5/10 cm more than the dimensions of the panel.
- Make the final application of the adhesive, taking care that the rows always run in a vertical direction to facilitate expulsion of air from the centre of the panel.
- With the panel in a vertical position on the handling frame, spread the adhesive onto the back of the panel with a 3x3mm square toothed trowel.
- Using the handling frame in a vertical position lay the panel.
- To guarantee complete bonding of the panel and eliminating any air, tap from the middle towards the edges using the non-bounce plastic mallet.
- Before gluing the next panel, you can fix the retractable mechanical hook on the wall using special nails (length 27mm) with a gas nailer. In order to ensure the quality of the attachment of the mechanical hook, we recommend the use of a suitable gas nailer able to ensure a constant supply of energy (When applicable).

The laying system with hidden mechanical safety hook on 6mm Bella Series Porcelain Panel allow the wall covering to be installed in complete safety with a great impact.

INSTRUMENTS REQUIRED

- Handling frame with suction cups.
- Check with Lusso or your adhesive supplier.
- 12mm round toothed trowel.
- 3x3mm square toothed trowel.
- Gas-powered nailing machine and relative nails (If required).





INSTALLATION TIPS

SAFETY GUIDELINES WHEN CUTTING

PROTECTIVE WEAR

Wearing an approved face mask is recommended when cutting Bella Series. Always cut and fabricate with wet diamond tools and take appropriate measures to provide efficient ventilation in the work area. Always wear approved eye, boot & hand protection when fabricating stone.

CONTACT

LUSSO GROUP

LOCATION

1 Finance Place, Corner Weir Road
Malaga, WA 6090
(parking at rear)

CONTACT

08 6461 1040 / info@lussogroup.com.au

OPENING HOURS

Monday to Thursday: 8:00 am – 5:00 pm
Friday: 8:00am to 3:00pm
Saturday: 8:00am to 12:00pm
Closed Public Holidays and Long Weekends

BELLA SERIES PORCELAIN PANELS

THE CARE AND MAINTENANCE WILL HELP YOU KEEP YOUR BELLA SERIES SURFACE IN PRISTINE CONDITION FOR YEARS TO COME.

Bella Series porcelain panels are easy to clean and maintain. Regular cleaning highlights the aesthetic features of the material and gives the product an exceptional shine. Thanks to the characteristics of the production process (high firing temperature, raw materials of great quality, sinterizing process), the surface of Bella Series material is also waterproof (the water absorption is minimal).

The term “cleanability” means the ability of a material to permit the removal of dirt and dust settled on the surface in order to guarantee the required hygienic conditions. As this feature is tightly linked with the surface compactness and impermeability and with the material’s resistance to chemical agents, Bella Series products offer outstanding cleanability.

1 ROUTINE CARE & MAINTENANCE

For routine cleaning, use small quantities of non-bleach, non-abrasive cleaners together with warm water and a damp cloth or sponge. Liquid spills including fruits, vegetables, food colourings and curries should be wiped up and cleaned with a mild detergent and water immediately after detection.

2 PREVENTING HEAT DAMAGE

Protective trivets and heat pads must always be used underneath cookware such as skillets, saucepans, pots or dishes when removing hot items directly from any heat source (oven cooktop or microwave) and placing onto the Bella Series surface. Prolonged or sudden extreme temperature changes can permanently damage the material which is not covered under warranty.

3 PREVENTING SCRATCHES

The use of cutting boards and taking care not to drop or move heavy objects on the surface will help to ensure the long-lasting beauty of Bella Series. The Bella Series resilient surface has been designed to withstand normal daily use and whilst it is resistant to scratches, cuts and chipping, cutting directly on the Bella Series should be avoided.

4 CHEMICALS

There are some strong chemicals and solvents that can cause damage to the Bella Series. Paint remover, paint and stain strippers, nail polish removers, bleach, furniture cleaners, oil soaps, permanent markers or inks, oven cleaners, drain cleaners and chemicals with high alkaline pH levels are examples of products that could damage the surface. If a strong chemical or solvent comes into contact with your Bella Series surface, rinse immediately with plenty of water then follow with normal cleaning procedures.

5 REMOVING DIFFICULT SPILLS

If normal cleaning procedures do not work on stubborn or dried spills, use a non-abrasive cleaning pad such as a household sponge, along with a common mild cream cleanser or a glass and surface cleaner. Gently scrape off the substance, then follow the routine cleaning procedures listed above.

6 GENERAL COMMENTS

Bella Series requires no sealing or special cleaning products.