

Installation, Fabrication & Storage Guide

FOR SYNTERRA STONE SLABS





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Introduction

A key purpose of this manual is to guide fabricators of Better Stone products in ensuring the finished article is compliant with the lifetime and 25-year Better Stone warranties - throughout this manual the symbol **W** will appear against any specific instructions that are linked to compliance or voiding the Better Stone warranty.

A vast array of interior commercial and domestic uses, such as furnishings, reception counters, bar tops, vanities, and indoor & outdoor benchtops are perfect for Better Stone surfaces. Better Stone indoor surfaces should not be used outside or in any location that is very hot or exposed to UV rays (unless it is the specially designed outdoor+ UV collection).

Better Stone has been developed for a wide range of applications using a variety of design methods. Any method of design, fabrication or installation not detailed in this manual must be discussed with Better Stone prior to fabrication. In this situation, approval must be sought in writing from Better Stone or the limited warranty may be void.

This manual has been developed to allow designers, fabricators and installers who work with Better Stone to achieve excellent performance standards and meet the expectations of the purchaser for both domestic and commercial applications.

Users of this manual should adhere to all recommendations specified. All health and safety guidelines must be understood before commencing any work with Better Stone. Fabricators should also ensure that they are aware of and comply with all local, state and federal health and safety regulations.

Better Stone assumes no responsibility for errors or omissions, or for damages resulting from the use of information contained in this document. In no event shall Better Stone be liable for any loss of profit or any other loss or damage caused, or alleged to have been caused directly or indirectly as a result of any person relying upon any information contained in this document.

The information contained in this manual is provided as a guide for the design, measurement, fabrication, and installation of Better Stone. Except as required by law, no warranty, however expressed or implied, is given in relation to the procedures outlined in this document and content in this manual is subject to change at any time without notice.



General Safety

Better Stone highly values creating a safe work environment, therefore we expect the same degree of dedication to safety from our distributors, fabricators, and installers, as well as adherence to nation, regional and local occupational health and safety laws.

These are some of the steps we take and believe you should follow to create a safe working environment for all:

- Keep a clean and tidy work area
- Keep a fully stocked first aid kit in all work areas
- Read instructions in regards to tools being used and always operate in a professional manner, and not under the influence of drugs or alcohol.
- Wear proper footwear and do not overreach, as this may upset balance; causing accidents and hazards
- Regularly monitor risks to prevent hazards
- Keep the area well ventilated
- Use the correct tools and follow manufacturers guidelines in how to use properly
- Do not use improvised tools, or tools/attachments outside of their intended use
- Maintain tools and keep in good working order, tested and serviced regularly, or as per manufacturers guidelines

Wear the following safety equipment when fabricating Better Stone Surfaces:

- Respiratory protective mask; P3/N95 filter, a fit-tested half face respirator with P3/N95 filters or higher, or a Powered Air Purifying Respirator (PAPR). (AS/NZS 1715 and 1716)
- Non-slip steel capped rubber boots (AS/NZS 2210)
- Gloves
- Safety glasses (AS/NZS 1337) or approved eye protection
- Proper hearing protection when in noisy areas (AS/NZS 1269)
- Helmet and hair covering
- Do not wear neckties, rings, bracelets or other jewelry that may get caught in moving parts

Applications



INTERIOR APPLICATIONS

W Better Stone is suitable for interior applications. Exposure to direct sunlight for extended periods can cause colour fading which is a condition excluded from the Better Stone lifetime warranty (the Outdoor+ Collection with 25-year warranty is UV-protected).

Better Stone can be used for: kitchen and vanity benchtops, splashbacks, islands, fireplace surrounds, and many other interior vertical and horizontal applications.

Note: When used for splashback applications, the installation must conform to the minimum Australian/New Zealand Standards for installation behind gas cook tops, for clearances in relation to appliances generating heat. Please refer to AS/NZS 5601 Gas installations and AS/NZS 4386 Domestic kitchen assemblies – Installation. In flooring applications ensure that the slip requirements relate to your state or territory are understood and met.

EXTERIOR APPLICATIONS

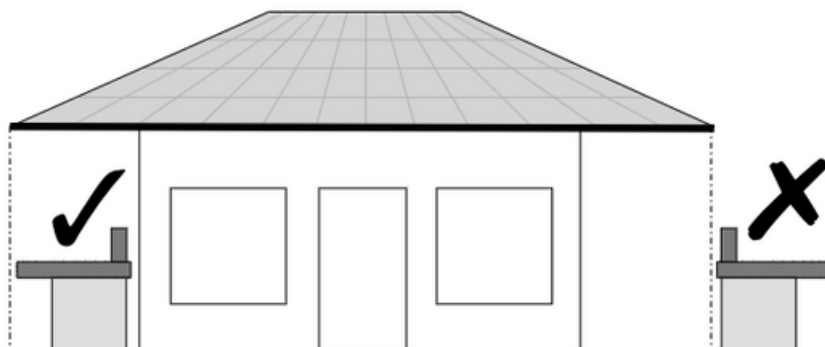
W Better Stone **indoor surfaces** *are not* recommended for use in exterior applications where the product is exposed to direct sunlight outside the roof area, and its use in these applications will void the warranty (see image below). The direct roof area refers to areas covered by the formal, fixed roofline of the property. Vergolas, opening roof systems, acrylic sheeted roofs, shade sails, and textile coverings are not considered part of the formal roof for this purpose.

Better Stone's **Outdoor+ Collection** is UV-protected, non-combustible, and purpose-built for outdoor use—making it ideal for applications exposed to direct sunlight, the elements, and even heat from BBQs.

All other Better Stone collections—including Essentials, Standard, Deluxe, Boutique, and Premium—are not suitable for exterior use where the surface is exposed to direct sunlight outside the formal roof area.

W For outdoor slabs a UV stable glue must be used for manufacturing and installation. Whilst there are other brands available; the importance is that the glue used **must** be UV Stable. For guidance on suitable adhesives for outdoor installations, including UV-stable glues, please refer to page 31 of this guide.

W Note: Better Stone's Outdoor stone can only be cleaned with Methylated Spirits (to ensure the integrity of UV protection), no acetone.



Information about Slabs

Better Stone surfaces are produced in a wide variety of colours, each belonging to a different series with special qualities. Better Stone surfaces are created using synthetic clay-based materials to mimic the hardness of quartz, one of the hardest materials in the world, plus premium polymer resins and colour, which are then compressed into dense, non-porous slabs by strong vibration, vacuum, and pressure. After post-curing, the slabs are polished and gauged to different thicknesses.

Note: The actual composition of each stone slab will vary marginally between colours due to the particular design and dimensions.

The slab data presented here are merely theoretical and are intended for transportation and storage – slab sizes may differ slightly to the below.

There may be a slight variance in slab thickness, typically ranging between 19mm and 21mm (± 1 mm).

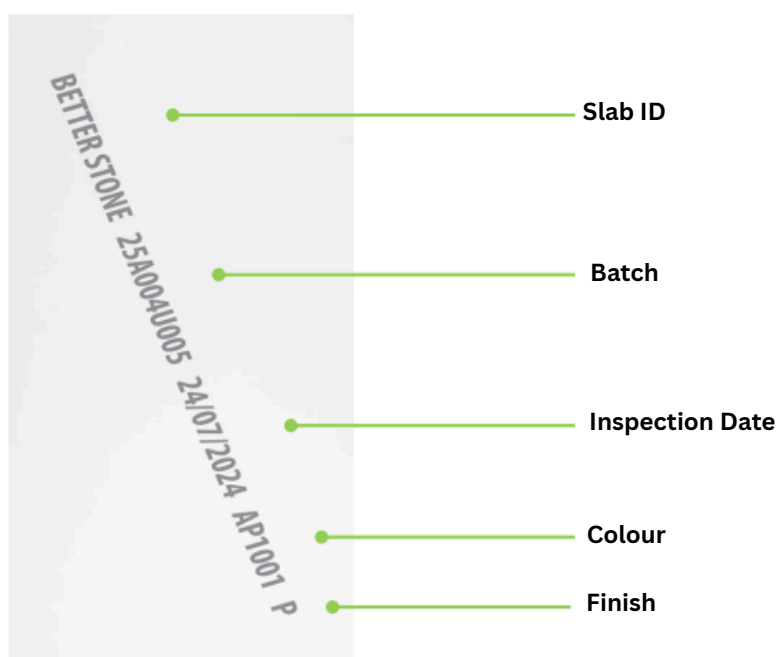
Standard Better Stone Slab | 3220mm x 1620mm | 250-300kg

There is a stamp on the back of each slab for identification purposes (see example in the image below).

Please note: There is no correlation between the batch number and the slab ID. The date shown on the slab indicates the inspection date, not the date of manufacture.

The batch number is used to track multiple slabs from the same batch. This is helpful when you need to group matching slabs for a single project.

The slab ID number identifies individual slabs and helps in recognising offcuts that originated from the same slab.



Storage, Handling & Transportation



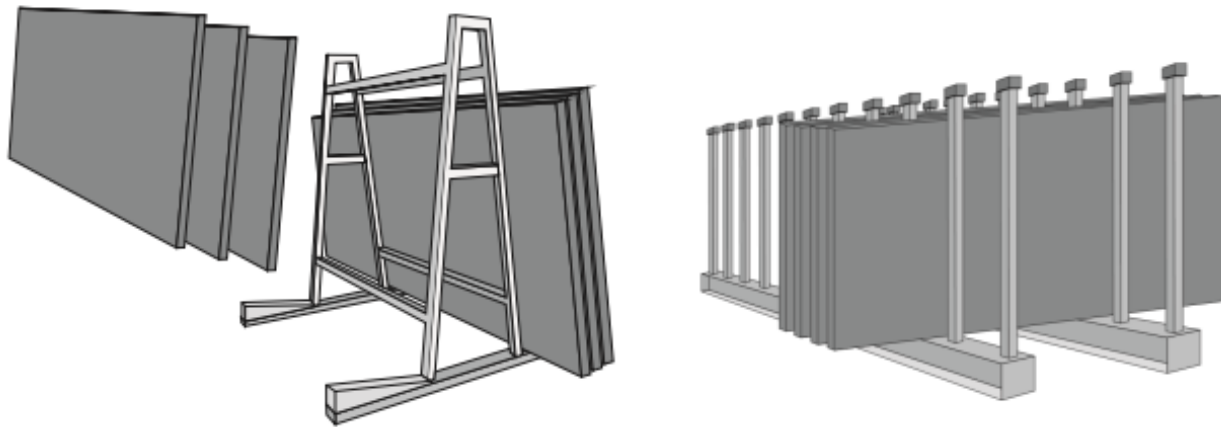
When handling, transporting and storing, ensure you adhere to all the relevant safety regulations regarding equipment and personnel. Every slab must be balanced to the centre of gravity, when being handled, stored and transported.

STORAGE

The diagrams below show the recommended storage on angled posts method for Better Stone slabs.

Better Stone slabs are heavy and can cause serious injury or death if not safely and securely stored.

All slabs must be secured against falling when being stored and transported.



DANGEROUS STORAGE

There are numerous safety issues that could lead to serious injury and damage to slabs, such as:

- No outer support post; uneven ground
- No rubber base buffer
- Cut pieces placed against or between whole slabs - may scratch the slabs
- The polished surface exposed to sunlight may fade
- Unsecured slabs may fall and break
- Incomplete support may cause warping.

Do	Don't
Support slabs with a minimum of two support posts, spaced 1500–1800 mm apart, with the slab positioned centrally.	Do not store cut slabs between full slabs.
Ensure the slab is in full contact with the entire height of the support posts.	Do not store slabs on the open ends of A-frames, as they may fall if tilted.
Store a maximum of 12 slabs (20 mm thick) per stack.	Do not store slabs on the open ends of A-frames, as they may fall if tilted.
Store slabs under cover at all times.	
If slabs are stored in sunlight or high temperatures, provide additional support (e.g. a third post or a 30 mm slab against the posts).	
Store outer slabs with their backs facing outwards to protect the polished surface.	
Store slabs face-to-face and back-to-back with no gaps, allowing easy identification of colour and batch numbers.	
Use rubber buffers on the base of the stand to prevent chipping.	
Slabs may be temporarily stored between the uprights of A-frames (not ideal, but safer than open-ended A-frames).	

HANDLING

All of our Better Stone slabs must be loaded, unloaded and transported by a forklift, bridge crane or other suitable devices for lifting.

- Any handling or lifting equipment must: pass quality and safety checks, be used according to guidelines, be in suitable working order, and for the purpose of the weight of the load.
- When lifting more than one slab at a time, the slabs must be back-to-back with no gaps in between.
- The most appropriate tools for attaching the slabs to the lifting apparatus are clamps or straps.

METHODS OF LIFTING

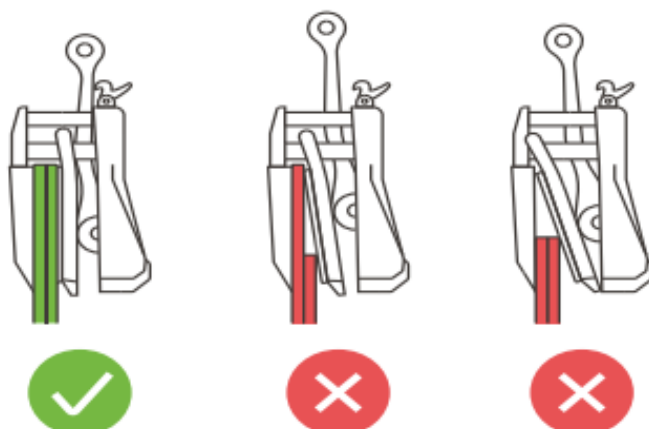
The below precautions must be taken with lifting/transporting Better Stone slabs:

- If using a scissor lifter or clamp lifter to lift slabs, ensure you start by lifting the slabs slowly, and ensure the slabs are firmly secured before transporting them.
- Do not modify the clamps or other lifting mechanisms.
- Do not exceed the load lifting capacity of the lifting equipment.
- When lifting or transporting, use the correct equipment; such as clamp lifter, lifting straps, scissor lifter, crane and spreader beam or vacuum lifter.

CORRECT USE OF CLAMPS

Use the diagram below to correctly place slabs into clamps. Failure to follow the correct procedure can result in hazard or injury to machine or personnel.

Some clamps can lift multiple slabs at once, depending on the size of the clamp. However, do not lift multiple slabs if they are not all the same height.



TRANSPORTATION

Better Stone slabs weigh between 250 - 300kg per slab. All transport vehicles for Better Stone slabs must be appropriately designed to withstand the weight and safely transport the slabs.

- Securely attach a safe and approved frame (A-frame) with no visible defects to the transport vehicle for loading Better Stone slabs
- Check that the A-frames are appropriately secured to the vehicle and the slabs are appropriately, secured to the A-frame so that they cannot move during transportation.
- The slabs should be loaded evenly, face-to-face and back-to-back with no gaps and on both sides of the A-frame.
- Use proper load-rated straps or ratchet tie-downs to secure the load. If these have any defects or wear, they would be discarded immediately.
- The load should be carried completely within the tray of the transportation so that if a slab breaks, none of the slab is able to fall onto the road and endanger road users.
- Do not use rope to secure a load; it deteriorates very quickly and has a greater element of elasticity, which reduces its effectiveness.

TRANSPORTATION OF FABRICATED SURFACES

When transporting fabricated surfaces, the correct racking is essential for getting the slab to site in good condition.

- There must be a protective layer between the rack and the fabricated surface, to prevent scratching or surface damage during transit.
- The fabricated surfaces should be loaded evenly, face-to-face and back-to-back with no gaps and on both sides during transit
- Each piece must be fully supported by the adjacent piece. Place pieces with cutouts in between solid surfaces for protection. A protective layer may be placed between cut pieces of different sizes to prevent abrasion lines.
- Load using the proper equipment and safety gear.
- The driver must stay with the vehicle at all times and ensure the vehicle is in good condition and safe working order.
- Driver must ensure the load is within the legal carrying capacity of the vehicle, even if not fully loaded.
- Driver must ensure correct slabs are loaded and fully secured the vehicle prior to leaving the premises.

Tools & Machinery



Tools & Machinery

TOOLS

- Heavy duty electric/pneumatic angle grinder for cutting or grinding (variable speed preferred)
- Light electric/pneumatic angle grinder for polishing (variable speed preferred)
- Pneumatic polisher
- Diamond cutting disks in various sizes, Diamond core bits in various diameters
- Diamond contour blades, Diamond and/or shaped grinding wheel
- Wet edge profiling machine (edge router)
- Electric hand drill (variable speed preferred)
- Carbide-tipped drill bits
- Grinding stone
- Polishing drums for polishing inside corners
- Sets of diamond and sanding polishing pads
- Diamond polishing brushes
- Various sized clamps
- Pneumatic seam setter

Reach out to your Better Stone representative to help select the correct diamond tools for cutting Better Stone.

MACHINERY

- Required equipment
- General ventilation system
- Stone carts
- Storage racks
- Forklifts
- Water recycling systems
- Local exhaust system
- Fabrication work benches
- Waterjet machine (CNC)
- Automated bridge saw
- Edge profiling machine
- Slab polishing machine

INSTALLATION TOOLS/ACCESSORIES

- Dust collection installation tools
- Cleaning materials
- Vacuum cleaner with (HEPA) filter for dust
- Spatula and scraper
- Collection tools
- Pigments (for tinting seam adhesive)

Fabricator Responsibilities



VISUAL SLAB INSPECTION

Prior to delivery, all Better Stone products are subjected to many visual and mechanical inspections to ensure the highest quality standards are met. However, it **remains the responsibility of the fabricator** to conduct their own visual and other quality control inspections before accepting the material. If collecting Better Stone products from Better Stone or receiving a delivery from Better Stone, it is essential that before the goods are accepted, a visual inspection is carried out.

Better Stone covers all slabs with a protective plastic coating, first remove the plastic coating and label before the visual inspection. **W** Small defects can be disguised with the plastic film intact and will not be recognised as a claim if the plastic is not removed for inspection. The protective film should not be left on the surface of the Better Stone for extended periods, particularly if exposed to UV conditions through adjacent window as this may cause discolouration of the stone surface.

Before commencing the fabrication, check for the following:

- Correct items (size, colour, thickness, etc.)
- Consistent colour match (ensure that colours for the same fabrication have the same batch/lot number, and inspect for colour compatibility)
- Defects, such as: chips, scratches, particulate irregularities, excessive pigmentation spots, unacceptable product deflection (length and width), evidence of transport cracks, general quality of the surface finish, and quality of the edge.

It is extremely important to check each slab prior to the commencement of fabrication for correct batch numbering, colour compatibility, or for any visual defects that may be outside the written specification, **W** as replacement or compensation for area loss will not be considered once the slabs have been cut.

When inspecting each slab, please keep in mind that Better Stone products are subject to variations in colour, pattern, and shades, and are unique characteristics that are inherent in man-made surfaces.

W Small blotches, “off-colour” particulates, or irregular particulate distribution may also occur in man-made surfaces. These characteristics are not considered imperfections or defects and, therefore, are not covered under the lifetime warranty criteria.

However, if any of the above surface variations are evident and considered excessive, consultation with a Better Stone representative must occur prior to the commencement of fabrication. **W** No claims will be honored for slabs that are partially or fully fabricated and later found to have visual defects.

BATCH NUMBER

For applications where stone pieces are joined together to complete an installation, material from different batches should not be used.

Each production cycle is labelled with different batch numbers.

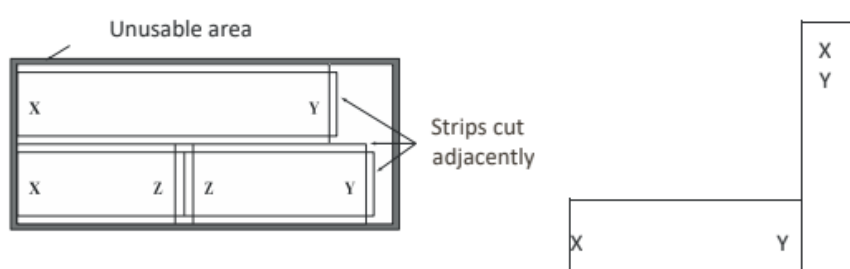
The batch number appears on each end of the slab, the back of the slab and the labels affixed to all slabs.

It is best to use the same batch numbers for each job, this helps to ensure there is a colour match. However, always perform a visual colour match before cutting to confirm consistency in shading.

W Any visual/colour variation between batches will not be recognised under the Better Stone lifetime warranty.

The agglomerate will also vary to some degree in each slab & within each slab, and therefore we do not recommend adjacent installation of opposite sides or ends of the slab.

Example of full slab set-out:



- Y edges should be kept together (labelling of slab edges prior to cutting is recommended)
- X edges should be kept together (labelling of slab edges prior to cutting is recommended)
- Z edges should be kept together (labelling of slab edges prior to cutting is recommended)
- X to Y or X to Z or Y to Z adjacent butting may not always match with consistent colour or agglomerates.
- X to X or Y to Y or Z to Z adjacent butting is preferred and recommended.

SAMPLES VS FULL SLABS

While a sample provides an indication of the slab's look and feel, it is not a complete representation of the overall appearance of a full-size slab. Therefore, customers are strongly encouraged to view a full slab image or, where possible, the actual slab prior to fabrication to ensure it meets their expectations and to avoid any issues at the time of installation.



Design Guidelines

CABINET REQUIREMENTS

The successful installation and performance of any Better Stone benchtop will be influenced by the design and construction of the cabinets and benchtop supports.

Installation of a Better Stone benchtop should only proceed if all aspects of the design, and construction conform to all relevant product guidelines and the minimum requirements as described in this manual.

- The cabinets must be constructed from solid panels (16mm thick minimum), ensuring the weight transfer from the benchtop to the floor is carried out through each end or division.
- Cabinets should be installed directly to concrete or other solid floor, not onto floating floors to ensure stability and load transfer.
- Rail support is imperative, with both the front and back rails having minimum dimensions of 90mm wide x 18mm thick.
- All cabinets must be level to ensure that the Better Stone benchtop is installed flat and level.
- **W** Failure to level the benchtop will void the warranty.

Benchtop Support

In addition to adequate cabinetry, Better Stone benchtops require a level and sturdy surface area to support the weight of the material. The benchtop support will reduce the risk of the stone warping or cracking under load during normal use. A maximum out-of-level tolerance is 1.5mm per 3000mm.

The top support must be able to take the material weight (55kg per m² for 20mm) plus any additional load the benchtop could be subject to. Any appliance weighing more than 5kg should not be supported directly by the Better Stone, but be adequately supported by the cabinet frames.

W Cracks occurring in the Better Stone product will not be recognised where inadequate support of an appliance is found.

When placing a fabricated Better Stone benchtop onto cabinets, there are two main methods that can be used to provide substrate support: Full Perimeter Support and Full Substrate Support.

Full perimeter support (rails) – 20mm

The perimeter support method requires the use of rails around the front and back edge of the cabinet and every 600mm in centres. A board of suitable length should be used for these rails. These can be made from 19mm MR (moisture resistant) Plywood, particularly where there is a likelihood of water penetration. However, if the application does not have the potential for water ingress, then the use of 18mm MR Particleboard or MR MDF of the same rail width is acceptable.

Full substrate support – 20mm

The full substrate support method involves the placement of a substrate under the complete surface area of the Better Stone benchtop. Better Stone recommends the use of 19mm Plywood, 18mm MR MDF or Particleboard.

SPAN AND OVERHANG SUPPORT

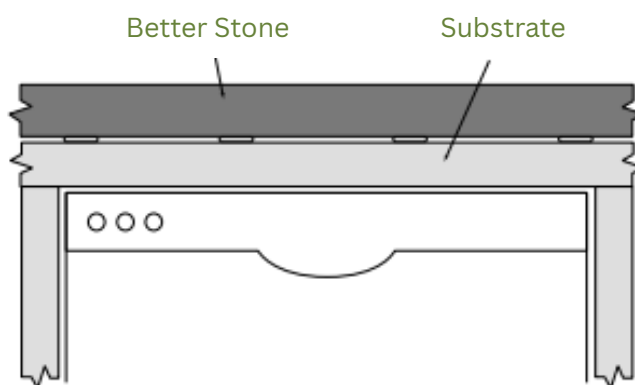
Spans

Depending on the design and dimension specification for the base cabinets, where the cabinet width exceeds 1000mm, the inclusion of a full MR Plywood, MR Particleboard or MR MDF substrate is recommended.

Dishwashers

To protect against both heat transfer from the appliance and possible movement, a full width substrate of MR Plywood, MR Particleboard, or MR MDF substrate or similar must be employed over dishwasher openings (see picture). Thermal shock cracks in the Better Stone benchtop above the dishwasher may occur due to direct contact/heat transfer to the stone.

W Failure to correctly install the dishwasher may result in a non-compliant installation finding on any resulting thermal damage, where the Better Stone warranty will not apply.



Overhang Support

Depending on the project, the design may call for the provision of an overhanging top, such as a breakfast bar. The following chart provides guidelines for designing overhanging benchtop sections.

OVERHANG SIZE 20MM MATERIAL

GUIDELINES

Less than 300mm

No additional support required

300mm and larger

The fitting of vertical support to the floor, such as legs or similar, or steel bracing beneath the benchtop.

Any overhang exceeding 300mm shall require 10mm thick, 70mm wide steel flat bar or equivalent placed underneath the benchtop. These should be placed at 600mm centres.

Less than 450mm

No additional support required

450mm and larger

The fitting of vertical support to the floor, such as legs or similar, or steel bracing beneath the benchtop.

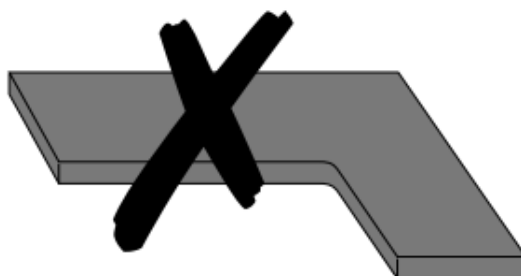
Any overhang exceeding 300mm shall require 10mm thick, 70mm wide steel flat bar or equivalent placed underneath the benchtop. These should be placed at 600mm centres.

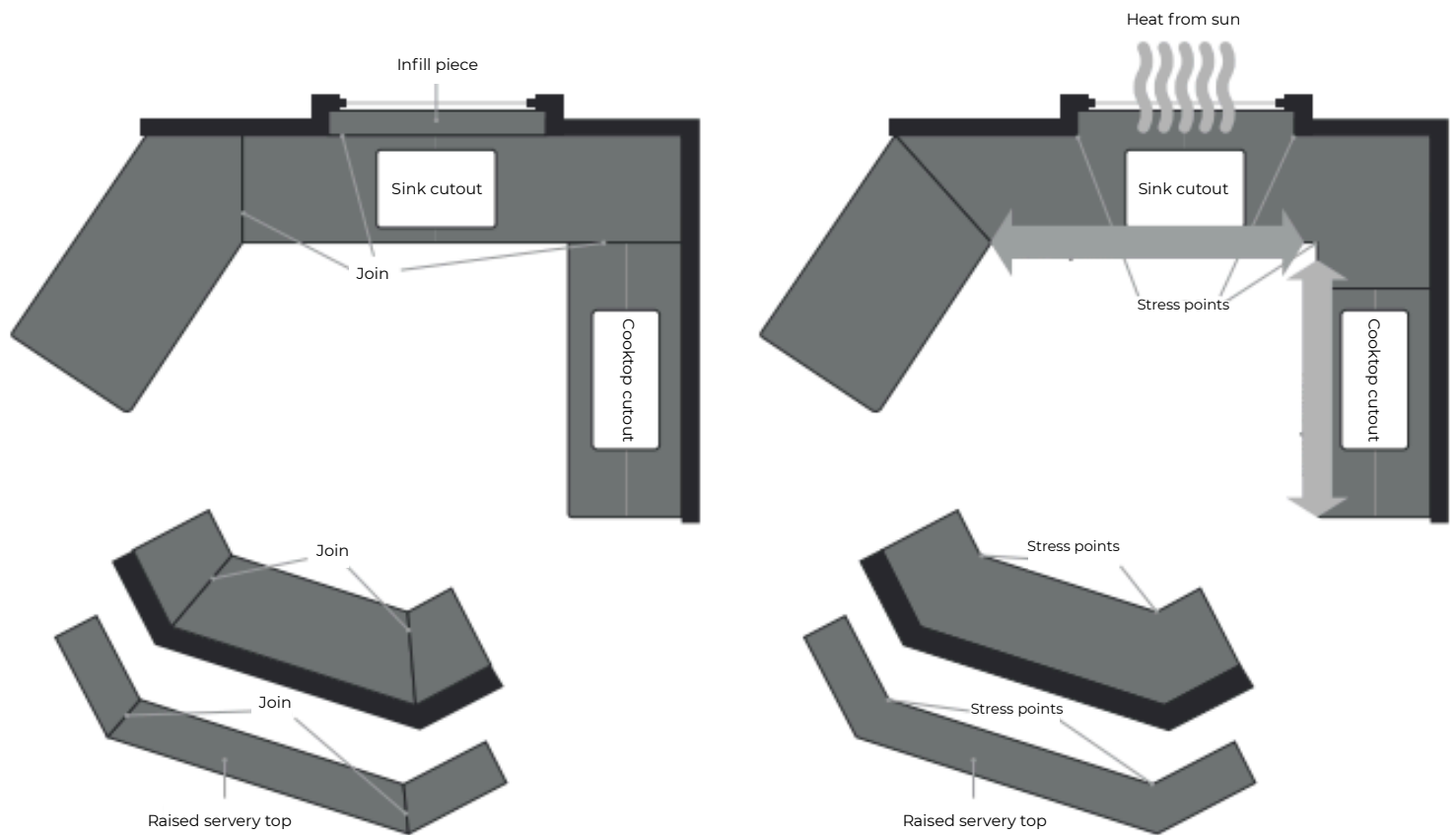
W Cracks occurring where overhangs are greater than the tolerances specified, and not adequately supported will not be recognised under the Better Stone warranty.

INTERNAL CORNERS

Benchtops

When designing the benchtop layout plan, it is not permitted to incorporate any one piece "L" or angle-shaped sections, as any undue movement or stressing at the corner bi-section may lead to stress cracking. Installation of any L shape benchtop, which includes any benchtop with a 90 external degree or square cut out from any edge will void the Better Stone warranty. **W** Cracks that may occur in the vicinity of the L shape cut out will not be recognised as a claim.

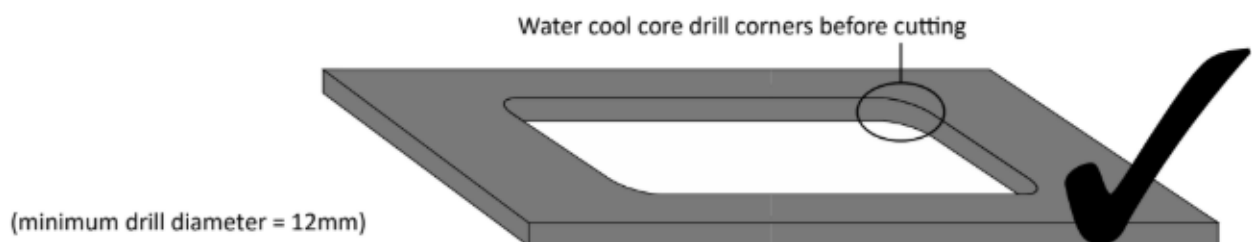




Cut-Outs

The internal corners in cut-outs, must be radiused, and fabricated with the largest radius possible (diameter), as this is a safeguard against the possibility of stress cracking. Any cracks occurring from an appliance cut out will be checked for a smooth edge, free of jags and with a suitable radius.

W Failure to adhere to these requirements may result in a non-compliant finding and no warranty will apply.



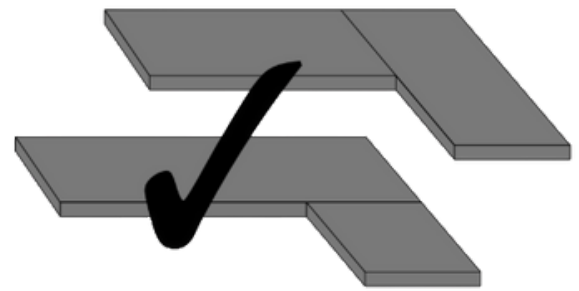
JOINT LOCATION

“U”, “L” and angle-shaped fabrications. The placement of joints in any benchtop should be planned carefully to ensure optimum performance of the material, and protection against fracturing.

For angle-shaped corner fabrications, such as “L” or “U” shapes, the use of a single piece of stone is not permitted, as the risk of cracks appearing in the surface increases.

W No Better Stone warranty is offered for any application where an “L” shape or “U” shape piece of stone is installed in one piece.

The preferred method for all internal corner intersections involves individual butt-joined benchtop lengths.



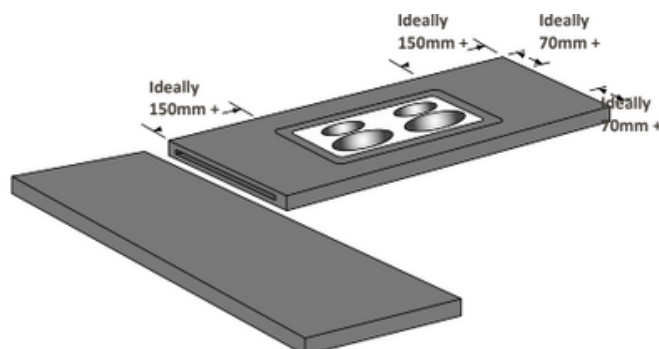
Recommended methods for fabrication of “L” shaped or angle tops

JOINT LOCATIONS FOR SINK & APPLIANCE CUT-OUTS

Consideration of the appliance and sink locations is required when evaluating the project plans. This should be carried out prior to the commencement of template manufacture.

Consider the following recommendations:

- In an application where the appliance will generate heat (under bench, oven, hot plate, dishwasher), the deck joint is ideally located not less than 150mm from the cut-out. Joints are not permitted to be located through any cut-out or immediately above a heat generating device (hotplate under bench oven, oven, dishwasher **W**). To do so will void the warranty for any heat related cracks occurring in the vicinity of the joint.
- In an application where an appliance does not generate heat, such as a top mounted sink, joints may be placed in the cut-out area.
- Irrespective of the appliance to be used, cut-outs should be designed to have a front and back rail.
- The dimension of the front and back rail should be no less than 70mm. Therefore, where an appliance requirement makes this dimension less than 70mm, consideration should be given to designing deeper benchtops in these locations or the addition of stronger rail support (e.g. steel or aluminum).
- Failure to leave a min of 70mm stone rail (front and back) of any appliance voids the warranty as the area is not sufficiently supported.
- **W** Any appliance weighing in excess of 5kg shall also require additional support rails around the opening.



EXPOSED EDGE PROFILES

The type of end use proposed for Better Stone, whether domestic or commercial, must be taken into consideration at the design stage. It should be noted that the more rounded the edge profile used, the less risk of edge chipping.

For all commercial installations it is strongly recommended that the largest edge profile possible is used.

Detailed below are the minimum requirements for all end applications:

Bevel/Arise: The minimum bevel recommended is 12mm profiled at an angle of 45°



Minimum Bevel/Arise is 12mm at an angle of 45°

Pencil Round: Whilst a radius of 3mm is the minimum allowed, a slightly larger radius will assist greatly in the overall edge performance



Minimum 3mm Pencil round. The higher the radius, the higher the strength.

Square Edge Profile: Exposed sharp edges are not permitted at any time



Exposed square edges are not covered by the lifetime warranty

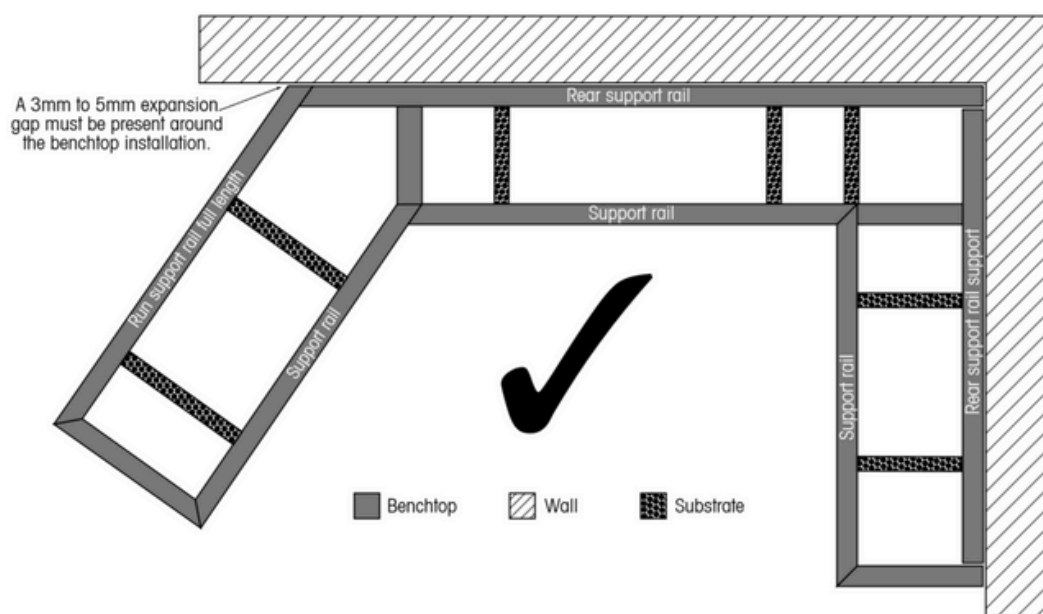
W Warranty claims relating to edge damage where an incorrect edge profile is used will not be accepted.

EXPANSION GAP AND DIMENSIONAL TOLERANCES

Variations in ambient temperature will cause wall and cabinet materials to expand and contract.

An expansion gap between the wall and the benchtop is required (see below). As a rule, a 3mm to 5mm gap will be sufficient for normal installations.

W Expansion gaps of less than 3mm will void the warranty.



Splashbacks – Design Considerations

When designing an area where Better Stone will be used as a splashback, there is a requirement to conform to the minimum Australian/New Zealand Standards for splashback installation behind gas cook tops. Refer to AS 5601 Gas Installations and AS NZS 4386.2 Domestic Kitchen Assemblies Installation.

The following points should also be considered during the design phase:

- Correct distance from a heat-generating appliance to the splashback surface, minimum 200mm from the edge of a gas burner to the splashback surface.
- Correct wall cladding to be installed behind the splashback fixing locations.
- Joint line between the benchtop and the splashback should be designed with the use of silicone adhesive in mind.
- All cut outs for GPO's (electrical outlets) must have radiused internal corners and must not occur less than 150mm from any finished edge of the stone. **W** Cracks occurring from square cut internal corners will not be recognised under warranty.

SPLASHBACKS – INSTALLATION

When installing Better Stone as a splashback material you must always follow the appropriate Australian/New Zealand Standards in regard to clearances, especially when installed behind cooktop appliances.

- AS/NZS 5601.1:2022 Gas Installations
- AS/NZS 4386.2 Domestic Kitchen Assemblies - Installation
- Appendix C - Fire Resistant Material & Acceptable Methods of Protection of Combustible Surfaces
- AS/NZS 1530.3:1999 Simultaneous Determination of Ignitability, Flame Propagation, Heat Release, and Smoke
- Specific installation requirements as provided by the cooktop appliance manufacturer
- Any wall or other construction methods should be conducted in accordance with the relevant industry guidelines and building codes.

SPLASHBACK INSTALLATION REQUIREMENTS

- Electric Cooktops and Induction Cooktops – Installation of Better Stone as a splashback must be installed with a minimum distance of 50mm from the back edge of the cooktop, to the front of the Better Stone splashback, and also in accordance to any specific installation instructions from the appliance manufacturer
- Gas Cooktops – Better Stone splashbacks must be installed at a minimum of 65mm from the back edge of the cooktop (as per AS 5601) and according to any specific installation instructions from the appliance manufacturer
- All wet areas (kitchens, laundries, bathrooms etc) – install as per your required design and according to AS/NZS 4386.2 Domestic Kitchen Assemblies – Installation. Ensure all joins are adequately sealed with silicone for waterproofing requirements.

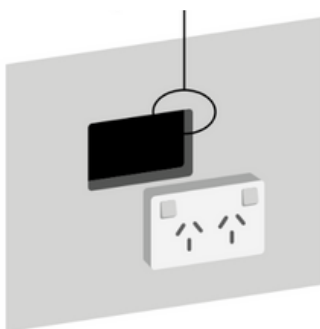
POWERPOINT INSTALLATION

Power points and other item cut-outs must be core drilled to produce radius internal corners minimum of 12mm diameter. Cross cutting should be avoided at all times. **W** Cracks occurring from square cut internal corners will not be recognised under warranty. Cut outs for GPO/Powerpoint outlets must be at least 150mm from the nearest edge of the stone. The use of neutral core silicone is recommended for bonding the splashback to the wall cladding for sealing the joins.

To create cutouts for items like power points, you can use one of these methods:

1. Core drill to produce rounded internal corners by drilling two 50 mm core holes.
2. Core drill to produce four minimum 10 mm internal corners, then cut to complete the cutout.

Water cool core drill corners before cutting (minimum diameter = 12mm)



The background of the page features three books standing vertically. The book on the left has a light beige cover with a mottled, stone-like texture. The middle book has a cream-colored cover with a similar mottled texture. The book on the right has a dark green cover with a marbled pattern. The title text is overlaid on the left side of the image.

Preparation, Templating & Measurement

GENERAL GUIDELINES

Before any templating, fabricating or installation is considered, it is important that the tradesperson is suitably experienced and well aware of the product design requirements. In addition, all relevant information for the installation site should be confirmed. It is also important to consider all relevant safety requirements before commencing any work.

The initial site inspection should confirm that all cabinets have been adequately installed and fixed.

- Cabinets must be level in a true plane in every direction.
- To eliminate costly errors, the location of electrical, plumbing, and any other obvious obstructions that will have an influence on the installation of the Better Stone benchtop/splashback should be noted on the fabrication plans and templates.

When inspecting the site consider the following:

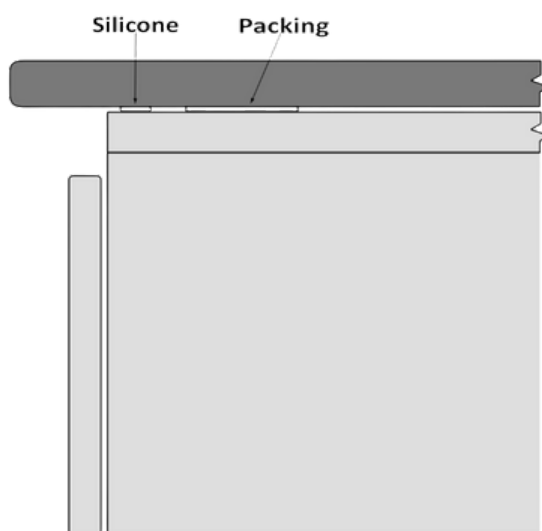
- Accessibility to the construction site, paying particular attention to any obstacles that may create handling problems during the installation.
- Cabinet construction and clearances.
- All surrounding areas where installation is to occur, particularly where the cabinets have been installed on existing timber floors. Floors must be stable, rigid and capable of accepting the weight of the Better Stone benchtop. The weight of the stone will be 55kg per m² for 20mm. Typical loads may exceed 100kg per m².
- All cabinets must be adequately fixed to the walls (where free-standing island units are installed, they must be adequately fixed to the floor and any other part of the rooms' construction which is to support the finished installation). Ensure that there is absolutely no movement within the total cabinet installation.
- **W** The installation over floating floors is inherently unstable and is not permitted under the Better Stone warranty.
- Electrical and plumbing positioning is located as specified on the working drawings and allows for the installation of the Better Stone benchtop and/or splashback. Please check that planned tap holes and cut outs meet the minimum distances described in this guide.
- Cabinets and benchtop substrate/support meet the minimum Better Stone specifications.
- Availability of sink(s), cook tops and any other appliances that are to be installed into the benchtop.

LEVELLING

During the site preparation, either at the time of templating or installation, one of the most important tasks is to ensure all the cabinets are levelled. Do this by using a long straight edge. Accurate levelling will help prevent stress cracking of the Better Stone benchtop.

- Cabinets must be installed on a true (same) plane.
- Cabinets must be levelled to a maximum variation of 1.5mm over a 3000mm run.

Note: Variations up to 1.5mm can be corrected by packing the benchtop to the cabinets, preferably with a dense material (see below). Should a level variation exceed 1.5mm over a 3000mm run, or if any other cabinet installation problem is detected at this stage, ensure this is rectified well before the bench-top installation.



KEY CONSIDERATIONS

Once design templates have been produced, it is important to check that all the major requirements have been met, including:

- Accessibility to the work site.
- Cabinet construction, fixing, and levelling meets the minimum requirements.
- Electrical and plumbing positioning is acceptable.
- Substrate and overhang supports are adequate.
- Appliance cut-out specifications have been confirmed and cut-outs align correctly.
- Where splashbacks or vertical panels are to be installed, ensure correct wall cladding has been fitted, and comply to the relevant standards.
- Ensure that the benchtop support meets all design requirements. Installation should not proceed if support for the benchtop is inadequate.

W Warranty claims will not be recognised where insufficient support mechanisms contribute to the failure of the Better Stone material.

Adhesives

SUBSTRATE – BENCHTOPS

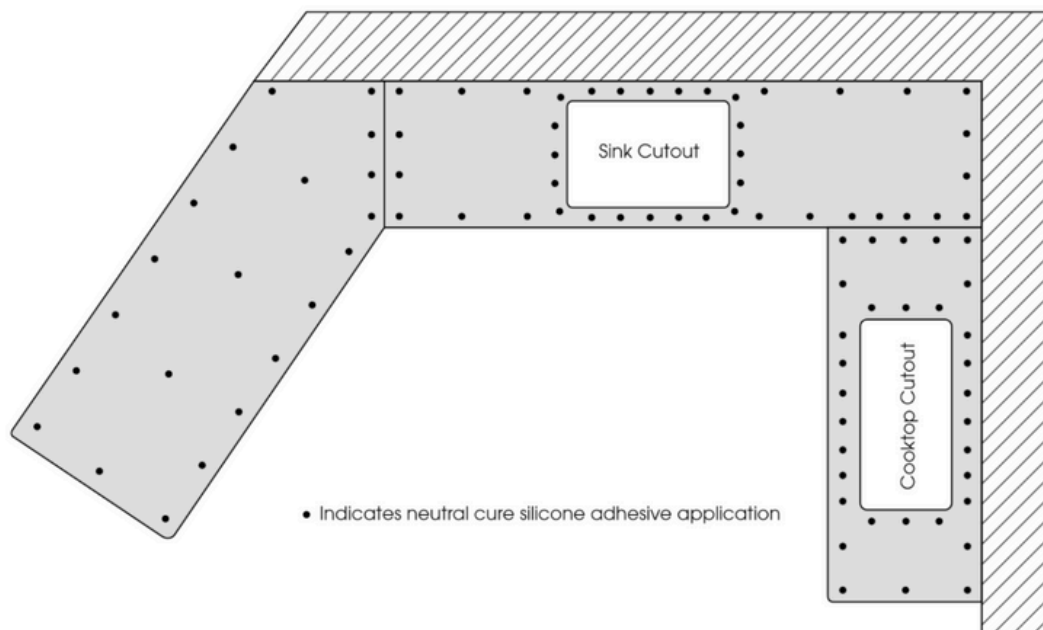
Due to the requirement for the slab to move with materials affected by atmospheric change or exposure to heat from appliances or utensils, the use of a flexible glue line is required for bonding between the substrate and the Better Stone benchtop components.

W For outdoor slabs, a UV stable glue must be used for manufacturing and installation. Whilst there are other brands available; the importance is that the glue used **must** be UV Stable.

Better Stone recommends the following adhesive:

- **Diarex Integra Adhesives Surface Bonder Ultra**
- **Diarex Evo Plus EV-5 Hybrid Stone Adhesive**
- **Diarex Gold GV-5**

Therefore, the only adhesive recommended for this application and the application of splashbacks is neutral cure silicone, ensuring there is an adhesive thickness of approximately 1.0mm to allow easy movement between the substrate and the benchtop slab once cured.



Fabrication



BASIC GUIDELINES

Failure to comply with the standards set out in this manual will void warranty claims. However, if you are required to fabricate a design or application not covered in this manual, consult with your Better Stone representative to obtain advice on the proposed fabrication techniques that could satisfy the design/fabrication requirements, and retain the lifetime warranty.

Always consider safety guidelines when fabricating Better Stone.

CUTTING

As with all products, it is advisable to consult with your machinery and tool suppliers to obtain the best cutting tools for your specific stone working machinery, and conduct testing with these suppliers before commencing any new and untried fabrication applications.

Cutting must be carried out using water-cooled equipment.

W Evidence of dry cutting will void the Better Stone warranty. For cut-outs that are unavoidable at the site of installation, it is essential that these are water cooled. Dry cutting leads generates excess heat within the cutout area and may lead to cracking. Evidence of dry cutting failures will not be supported by the Better Stone warranty.

CUT-OUTS

All cut-outs for sinks and appliances should be completed in the factory environment where a water-cooled process can be employed.

The internal corners in cut-outs must be radiused and fabricated with the largest radius possible (minimum 6mm radius), as this is a safeguard against the possibility of stress cracking.

Note: When core drilling for internal cut-out corners, the use of water as a cooling agent is required

CUT-OUTS: FACTORY MADE

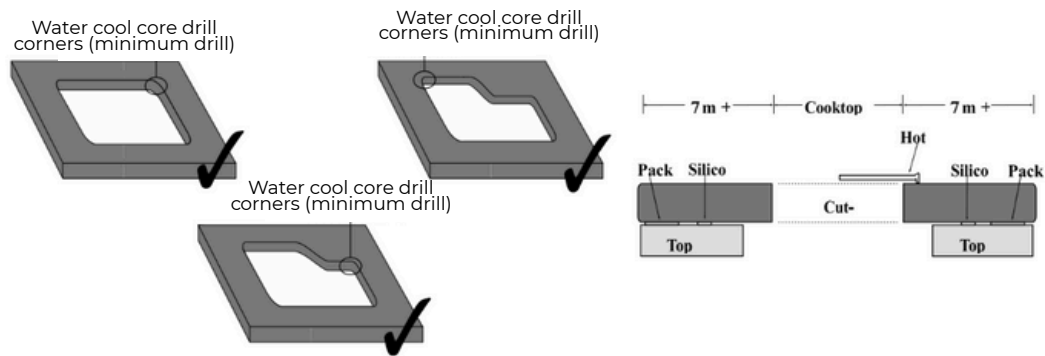
Determine the cut-out dimensions, ensuring there is at least 3mm clearance around the entire appliance perimeter.

Depending on the appliance flange allowance, allow for the internal corner radius to be as large as possible. A 6mm radius (12mm diameter core drill) should always be the smallest radius.

The finished machined cut-out edges should be as smooth as possible.

Any appliance installed into the Better Stone material weighing greater than 5kg will require additional support rails around the underside of the opening.

W Evidence of cross cutting, square non radiused corners or jags left behind that contribute to cracks occurring from within the cutout will not be recognised under warranty.

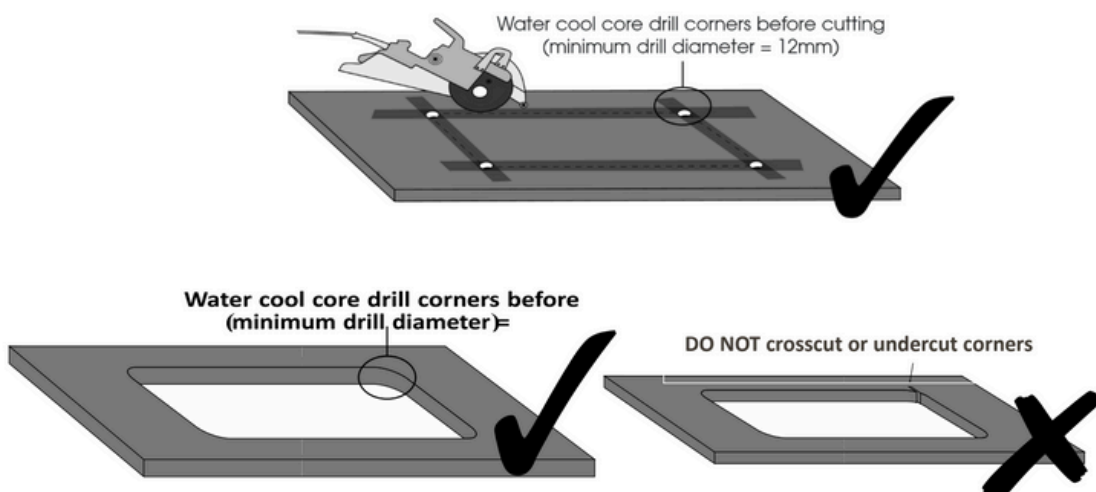


CUT-OUTS: ON-SITE

It is suggested that the following points are taken into consideration before performing on-site cut-outs:

- Cutting on site should be kept to a bare minimum, and if possible avoided.
- Use all the necessary safety equipment and take all the necessary precautions.
- Only experienced installers should perform on-site cut-outs.
- It is essential to use water-cooled tools to avoid overheating of the slab and to avoid dust.
- Place fully on support, such as old slab/off-cut and drill/cut completely through top piece.
- Determine the location for the cut-out and affix masking tape to give a clear line at the cut location; the tape will also assist in reducing the chance of edge “chip out”
- Select the largest diameter core drill and drill the four internal corner locations. (Minimum 6 mm radius)
- Cut along the marked lines with the water-cooled appropriate stone tool, ensuring the cut is made towards the internal core hole.
- Smooth out any rough cutting along the cut-out edges.

W Ensure that the saw cuts do not run past the internal corner radius. Stress cracks linked to cross cuts, jags or roughly sawn uneven edges will not be accepted under the Better Stone warranty

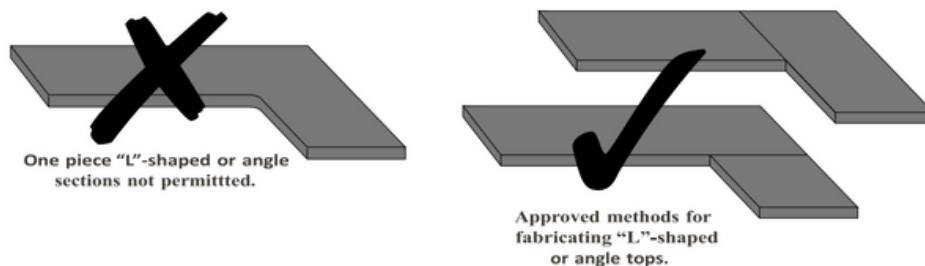


INTERNAL CORNERS

Benchtops

When designing the benchtop layout plan, it is not permitted to incorporate any one-piece “L” or angle-shaped sections as undue movement or stressing at the corner bi-section may lead to stress cracking. The corner radius must be 6mm or more. No check outs around window posts, upright cabinets, high tops or similar resulting in a 90 degree or L shape cut out are permitted in one piece.

W Cracks occurring from the corner of any such installation will not be recognised under warranty.



EDGE PROFILES

Laminations

When the design of the edge is larger than 30mm in thickness, there are strict guidelines to follow in both the join design and location. These are detailed below:

- Ensure the strip to be laminated is obtained from the same slab batch, preferably obtained from a off-cut from the same slab.
- Always use 45° mitres for all corners.
- To reduce the chance of joint detection, where possible, all lamination should be of the same length as the benchtop section.
- If the lamination has insufficient length to the benchtop, whilst not preferable, any butt join must have a 45° mitre.

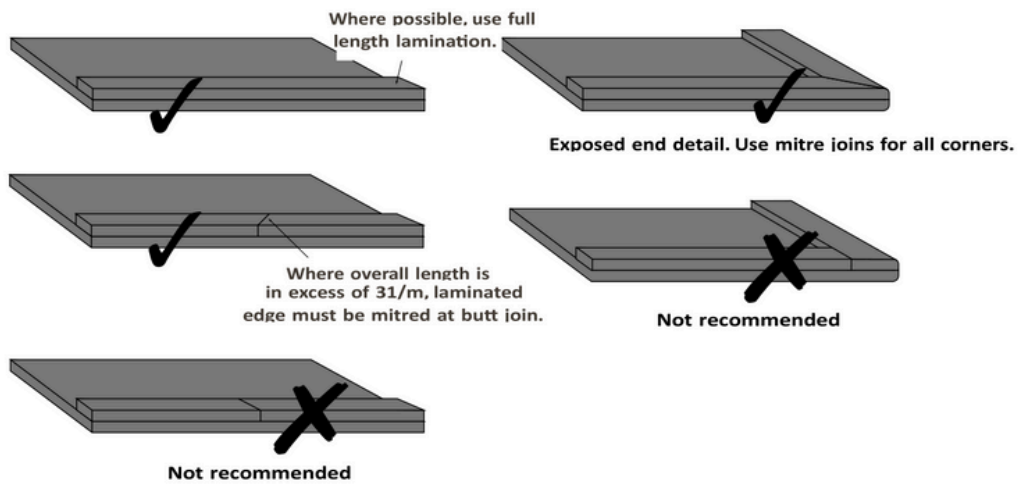
Joins *not* recommended are:

- Corner butt joins – corner mitre joins are recommended.
- Butt joins along the length of the build-down – mitre joins along the length

When the edge profile design allows, we strongly recommend a mitred edge build-up in place of any laminations exceeding 40mm (or 60mm if using 30mm thick material) in depth.

Where the lamination edge is to be bonded on its edge to the benchtop, then the edge and face component should be mitred at 45° profile. The edges to be bonded must be machined smooth to reduce the chance of detecting the glue line after fabrication.

W Variations in the colour, thickness or appearance of the glue line in a laminated edge, or failures in bonding are related to fabrication and are not recognised as a product fault in the Better Stone warranty.



WATERFALL ENDS

Better Stone is not self-supporting on the vertical axis. No waterfall end in stone not affixed to the cabinets should be used as a support mechanism for a benchtop.

This is the method for the fabrication of waterfall ends:



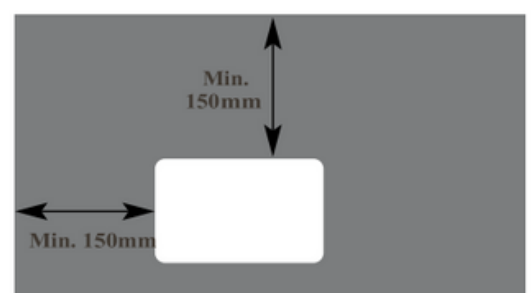
Both methods require accurate measurements to ensure tensioning of the join is prevented. The waterfall end must be glued to the side of the cabinet and the load transferred fully to the floor.

Waterfall ends cannot be installed on floating floors due to the potential of movement, which may result in opening of the joins or cracking of the benchtop. Waterfall ends must only be glued to the floor using neutral cure silicone to allow for flexibility.

W Evidence of hard-set epoxy style adhesives will void any claims for cracking occurring due to rigid installation.

Any GPO (electrical outlet) cut-outs in a waterfall end must have a radius in all 4 internal corners, and be set at least 150mm from the top (horizontal) edge and 150mm min from all vertical edges.

W Cracks which occur where these minimum standards are not employed will not be recognised as a claim.



Edge Polishing

The use of water-cooled polishing tools is essential, as any excessive heat generated will weaken the physical structure of the material, as well as giving a dull, flat and/or chalky appearance to the finished polished edge profile and avoid generation of dust particles.

In general, the quality of the machined profiles will ultimately determine the grit sequences to be used, but conduct a trial first with a full set of grits, to ensure finish is acceptable. Finished profile must be within acceptable tolerances, size and finish.

Note: It is essential to gradually process through the grits listed above. If short cuts are employed by jumping over grit size sequence, the final polished finish will show scratches and appear dull. Consult with machine and polishing disk manufacturers for further advice. For edge polishing of non-gloss Better Stone surfaces please refer to technical bulletins and updates issued by Better Stone for this purpose.



Sinks, Cook Tops & Appliances

SINKS

Before the commencement of the fabrication, it is important to have the sink that will be installed in the final installation available, to obtain the cut-out dimensions, and to confirm that the sink can be located in the designated cabinet.

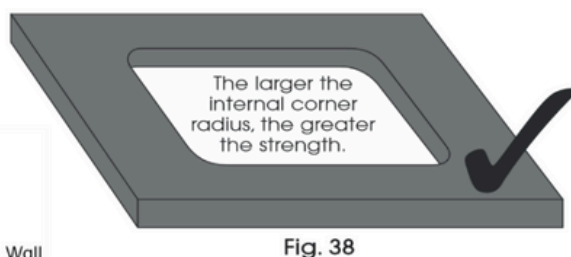
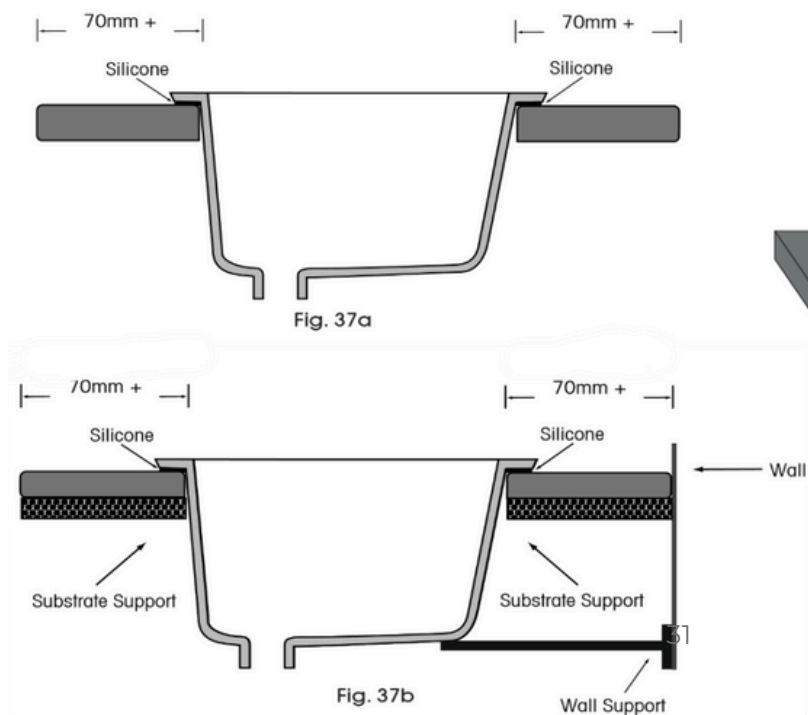
W Regardless of the square corners of some sink designs, the cut out must employ the radius corners as detailed below. Failure to do so will void any claims for cracking from the sink precinct.

Drop in or under-mount sink openings of 600mm wide or greater must employ additional under-bench rail support on all 4 sides. Support rails must be minimum of 19mm MR Plywood

DROP-IN SINKS

- Cut-out rail width dimensions should not be narrower than 70mm at both the front and rear of the benchtop.
- The quality of the machined cut-out must be smooth and have a minimum internal corner radius of 6mm.
- Care must be taken with the sink clip design, as mechanical fixing into the underside of the slab is not permitted.
- Any holes for independent taps, water filters or similar devices must be a minimum of 50mm from the closest side of the hole to the closest edge of the sink opening.

W Cracks occurring where these minimums are not met will not be recognised.

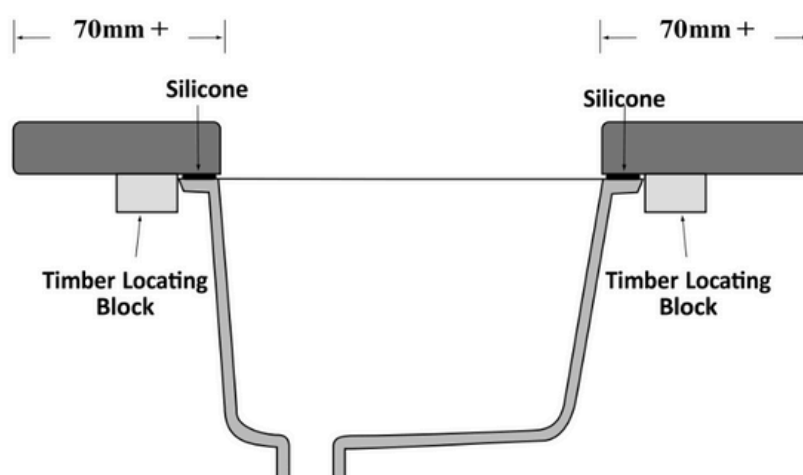


UNDER-MOUNT SINKS

Whilst the installation instructions are very similar, there are additional requirements for the installation of an under-mount sink:

- With under-mount sinks, there is usually a requirement to machine the tap hole or holes through the slab, therefore sufficient room must be designed into the sink back rail to ensure adequate strength. A minimum set back of 50mm between the sink cut-out and the closest edge of the tap hole is required to maintain structural integrity of the benchtop. If more than one hole is to be machined, then it is preferable to fabricate additional strengthening support under the benchtop.
- The exposed edges of the sink cut-out must be machined and polished to the quality of the fabricated edges and slightly arised around the bottom face.
- Prior to locating and bonding, place locating blocks around the sink perimeter with hot melt adhesive, to ensure the sink does not slip out of position when clamped.
- Any holes for independent taps, water filters or similar devices must be a minimum of 50mm from the closest side of the hole to the closest edge of the sink opening.

Note: All drilled holes and exposed edges must have clean smooth edges.



LAUNDRY TUBS & TAPS

Applications in laundry installations vary widely. There is a typical use of 45 litre tubs which when filled weigh 50kg approx. Better Stone surfaces are not a construction material and are not designed to support this weight without the cabinets being reinforced. Supporting cabinet rails must be employed around all laundry tub/sink openings to assist the weight distribution.

Where double bowls/tubs are installed, front to back vertical support rails underneath the bench-top must be used to support the weight. 19mm MR plywood is recommended.

Where the Better Stone is required to span across an opening greater than 600mm (e.g. across under-bench appliances or double tubs), additional upright vertical support rails in the cabinet must be used.

W Failure to support the material adequately will result in no recognition of claims from cracks occurring in the area.

All stone rails between and in front and behind laundry tub cut-outs must be a minimum of 70mm wide.

Independent tap holes must be a minimum of 50mm from the sink edge to the closest edge of the tap hole and a minimum of 70mm from the closest edge of the bench-top.

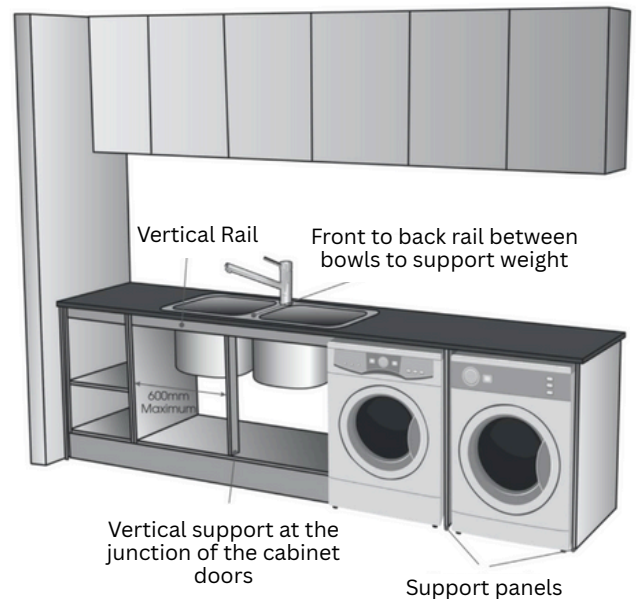
W Cracks occurring from fixtures not employing these minimum widths will not be recognised.

WASHING MACHINE/DRYER INSTALLATION

Better Stone is not suitable to be used as a support to on-bench appliances due to excessive weight and heat generated. Wall Fixed Dryers should be wall mounted well away from the Better Stone bench-top – a minimum distance of 450mm is required.

Under-bench Dryers need to be considered carefully as substantial heat generation occurs when in use. Some appliances exhaust heat from the front of the unit, whilst others are from the back or ducted.

The use of under bench washing machine and/or dryers requires a substrate to be employed above the appliance to protect from direct heat and thermal load underneath the Better Stone bench top in the same manner as for a dishwasher.



W Thermal shock may occur if protection is not provided, and resulting cracks from this condition are not recognised under the Better Stone warranty.

EXTERNAL USE BARBEQUES

Better Stone can be used in external applications where a gas or electric inbuilt BBQ is used, with strict adherence to the following requirements:

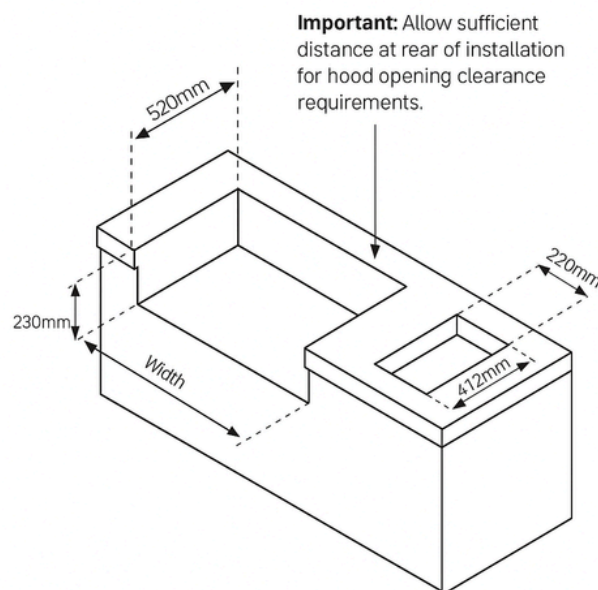
Only our Outdoor+ collection is UV-protected and specifically engineered for use in outdoor environments. All other Better Stone collections are not suitable for outdoor use and must be installed under full cover, such as in alfresco areas within the roof line, and not in direct sunlight.

BBQ Installation Requirements:

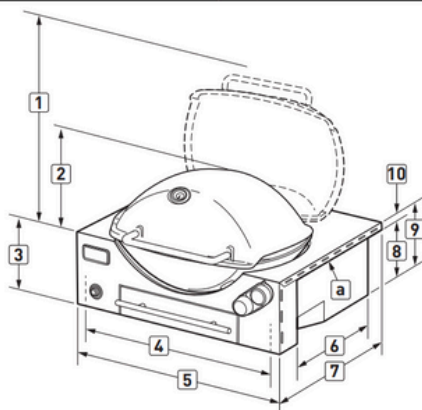
- BBQs vary widely in design, heat output, and usage. Whether your BBQ has a hood or not, no BBQ, hotplate, grill, or heating element should ever come into direct contact with the Better Stone benchtop.
- A minimum 20mm air gap must be maintained around all sides of the BBQ. This is essential to help prevent heat transfer into the stone and allow for proper ventilation

W Failure to maintain this clearance may result in heat cracks, which are not covered under warranty.

- Heat protective mats (ceramic trivets, wooden cutting boards etc) must be used to rest hot platters or cast iron grills. These should be positioned on the surface of the stone immediately adjacent to the cooking surface to protect against thermal shock.
- **W** Damage due to thermal shock around a BBQ is not warranted.
- Where multiple cut outs are required for side by side grill/cooking panels, a minimum rail of 70mm must be left between each cut out. Additional rail supports must be provided for any individual appliance weighing greater than 5kg.
- Butt joints are recommended around the BBQ instead of mitered joints; this will prevent the heat transfer through the glue and stone. It is will also reduce the breakdown of glue around the BBQ area.
- Any air ventilation must be above benchtop height to reduce overheating.
- No temperature exposure to Better Stone should exceed 150° above ambient temperature
- Please also refer to your BBQ Manufacturing guide for proper BBQ installation technique (see examples below).

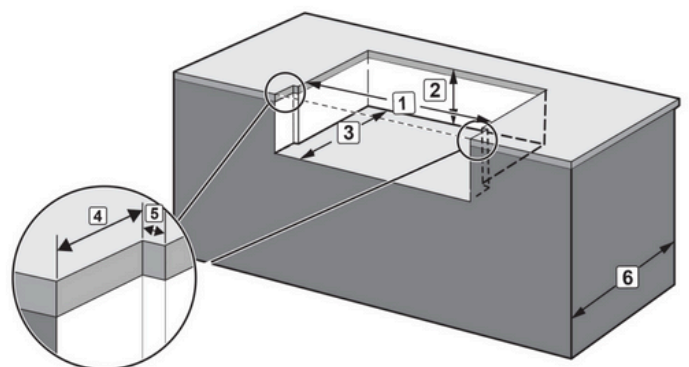


Q3600N+ DIMENSIONS



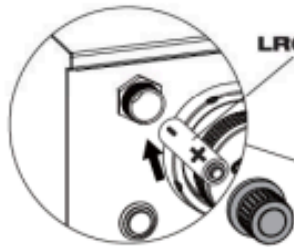
1	573 mm (22.56")	6	437 mm (17 3/8")
2	220 mm (8.67")	7	622 mm (24 1/2")
3	258 mm (10 1/8")	8	225 mm (8 7/8")
4	813 mm (32")	9	253 mm (9 1/8")
5	864 mm (34")	10	29 mm (1 1/8")
a Mounting flange			

CUTOUT DIMENSIONS AND TOLERANCES

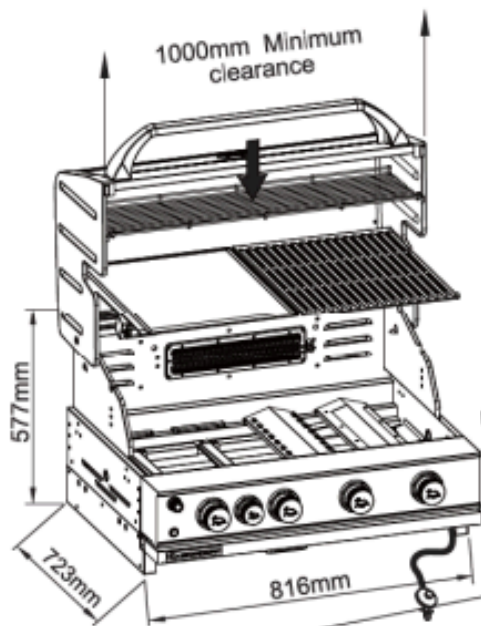
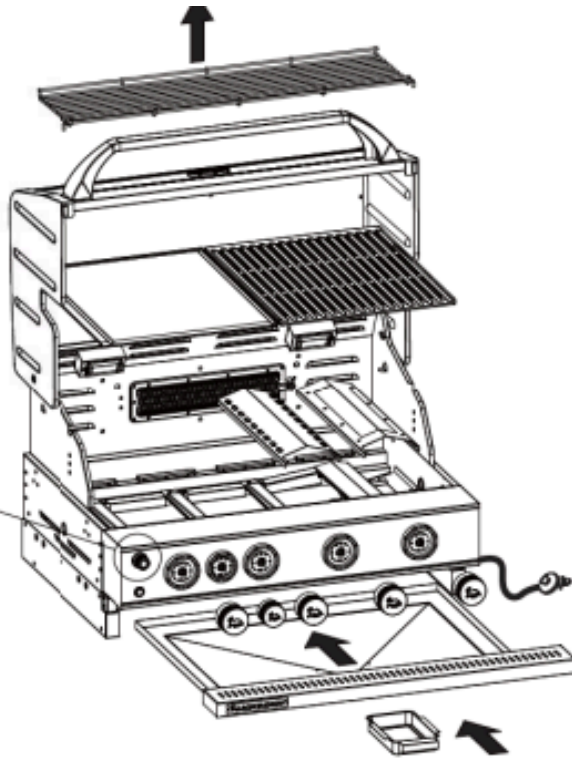


	CUTOUT DIMENSIONS	TOLERANCES
1	820 mm (32.28")	+2 mm
2	230 mm (9.05")	+3 mm
3	570 mm (22.44")	+6 mm
4	65 mm (2.55")	+2 mm
5	25 mm (0.98")	+2 mm
6	660 mm (25.98") minimum	n/a
X	Allowance for countertop overhang (typically 20 mm)	n/a

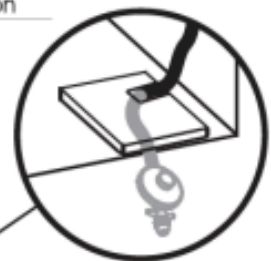
2: 4mm x 16mm



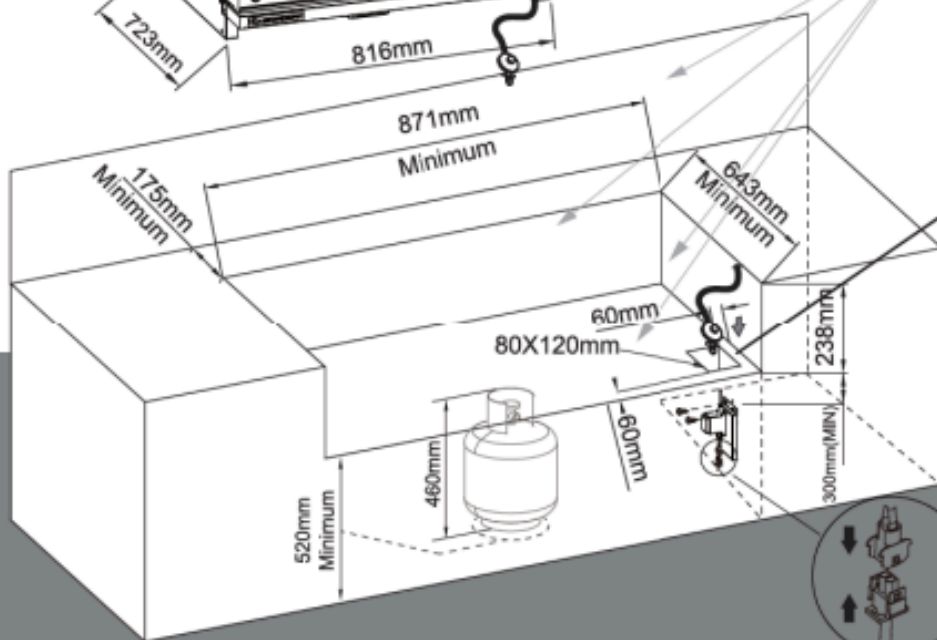
LR6 AA 1.5V



Non-combustable construction



Please block this hole (for example using a piece of steel panel to block the hole) after the regulator has gone through.



Attach the BBQ light wire to transformer



BBQ Light

Note: Please use non-combustible material for the bench top.

Installation

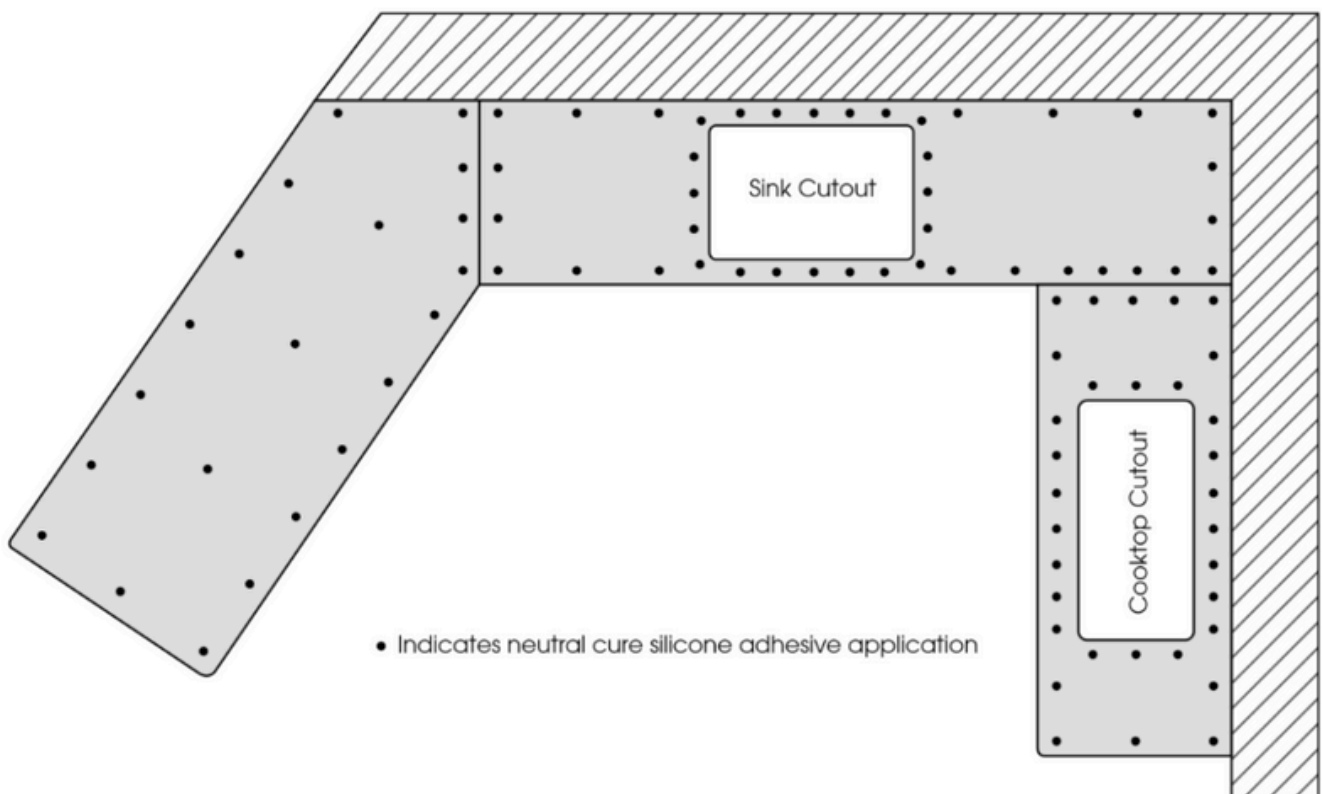


Installation

The following should be carried out prior to installation:

- Check, measure and ensure the correct cabinets are in their correct locations.
- Ensure all cabinets are level and on a true (same) plane.
- Ensure good weight transfer from the top through the ends (gable) or divisions to the floor.
- All cabinets must be firmly attached to the wall/s, and island cabinets must be well fixed to the floor.
- Cabinet rails meet the minimum specifications.
- Adequate benchtop support is in place.
- **W** Should the benchtops be installed on evidently non-complying cabinets and the stone installation fails, no post-installation warranty claims will be recognised by Better Stone.

Installation to be completed with silicone blobs as per image below:



Environment, Standards & Certificates



Sustainability is at the heart of everything we do

It's more than a goal — it's a principle that shapes our decisions, drives innovation, and guides our actions. We're committed to improving the sustainability of our products across their entire lifecycle. From manufacturing to end use, we take a comprehensive approach to environmental responsibility, health, and safety throughout our value chain.

Better Stone is proudly **NSF certified**, ensuring our surfaces meet the highest standards for safety, quality, and hygiene. Whether you're designing a home kitchen or a commercial space, our stone benchtops are tested and trusted for food-safe performance and lasting durability.

Better Stone surfaces are proudly certified to meet the highest standards in indoor air quality. Our materials have earned **GREENGUARD Gold Certification**, a distinction reserved for products that meet strict chemical emissions limits — especially important for environments like schools and healthcare facilities. This certification reflects Better Stone's commitment to supporting healthier indoor spaces through low-emitting, rigorously tested surfaces.



STAIN RESISTANT



IMPACT RESISTANT



HEAT RESISTANT



WATER RECYCLING



GLOSS



SCRATCH RESISTANT



CHEMICAL RESISTANT



WATER RESISTANT



LIFETIME WARRANTY



EASY CLEANING



UV PROTECTED



HARDNESS 6.0+



NSF



GREENGUARD



<1% CRYSTALLINE SILICA

BetterStone

A New Era of Stone