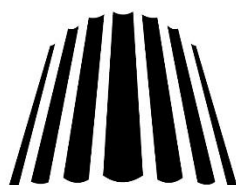




Processing and Maintenance



EXCLUSIVE WAREHOUSE

FOR NATURAL STONE

Emotions in Stone

Processing and Maintenance Manual

Handling

Always handle material with extreme care, by means of suction cups, slab clamps and canvas slings with polyurethane coatings and protective sleeves to prevent sharp edges of the slabs from cutting the slings.

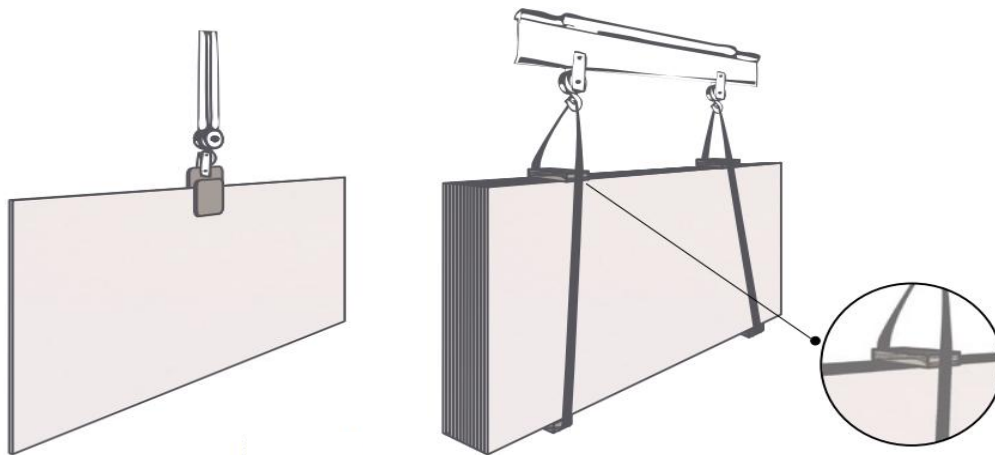
Do not use steel wire rope slings to handle the material.

Always ensure materials are placed flush against another slab or the support.

Avoid dropping of the clamp onto the edges of the slabs, this may cause chipping, slowly lower the clamp into the centre position of the slab. Always perform a balanced lift. (Figure 1)

When handling a bundle of slabs make use of a spreader beam and insert spacers at the top and bottom of the canvas slings to keep inward force and pressure away from the slabs when handling larger quantities. Always ensure you adhere to the weight limitations of your lifting equipment. (Figure 2)

See Illustrations below:



Transporting

During transportation and warehouse storage, the slabs must be held on suitable supports or metal structures such as A-frames, dedicated shelving or crating. When making use of metal frames ensure they are covered with rubber, plastic or foam and free from rust and dirt.

Always protect corners with shock absorbing materials such as polystyrene or foam.

Cover pieces individually with plastic to prevent unwanted scratches during transit. Always transport slabs and cut pieces vertically, protect edges - especially mitered edges from chipping. It is advisable to crate cut to size pieces vertically and pad them with sufficient protective material.

For larger pieces make use of a backing slab as support during transit. Add additional bracing on larger pieces or when cutouts have been made **using offcuts from the same material**. This helps for strengthening. **Do not use quartz to reinforce or brace sintered stone.**

Storage

When storing stock on A-frames ensure that a rigid material like a 30mm granite slab is used as backing to prevent warping and cracking due to the length of the sintered stone slabs.

The supports of the frame must be appropriately treated/covered to prevent rust or any contamination of the loaded material, if a steel frame is rusted and makes contact with the sintered stone it may cause contamination and leave unwanted marks on the material. Always stack slabs with the back of the slabs towards the A-frame to avoid chipping on the face of the slab.

The frame must have suitable wooden, rubber or plastic protection to prevent any impact or abrasion when transporting, handling and storing the material.

Separate the bundles of slabs using wooden strips that are thicker than the ropes used for lifting $\pm 35\text{mm}$. Allowing for enough space to insert slings without causing scratches when forcing it in between the bundles of slabs.

For storage, and especially for transportation, the wooden strips used to separate the bundles of slabs must be centred on the slab and be about 1,2 meters apart. **See Figure 1 below.**

The material is not weather sensitive, and can also be stored outside as long as it rests on a solid base made from metal that is covered with a rubber, plastic or wooden base, if the upright supports are made from steel they have to be rust free and have a rubber strip down the length of the support to avoid direct contact with the slab. The top must be protected by a suitable cover to ensure it does not allow any water or dust in between that will cause abrasion or leave marks. **See figure 2 below.**

Figure 1

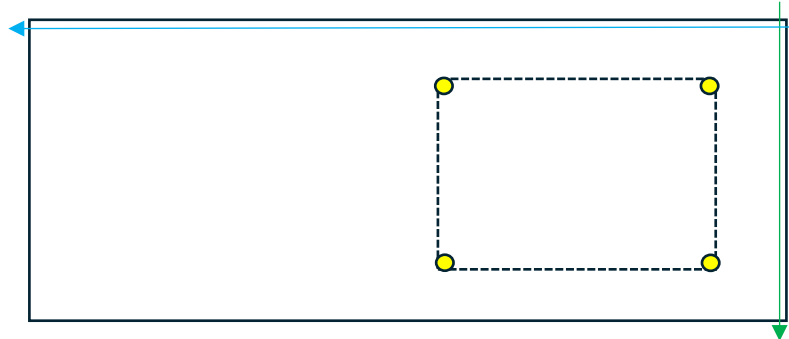


Figure 2



Processing

Slabs are factory rectified. It is still recommend to do a tension release cut marked 10mm on the inside, and done on one short, and one long side of the slab. 1st Cut on long side (Blue Arrow) 2nd Cut on short side (Green Arrow).



All cut outs and internal angles requires drilling on the inside corners of the marked area (yellow dots) where the cut out will be made. The corners must be done at a minimum radius of 5mm.

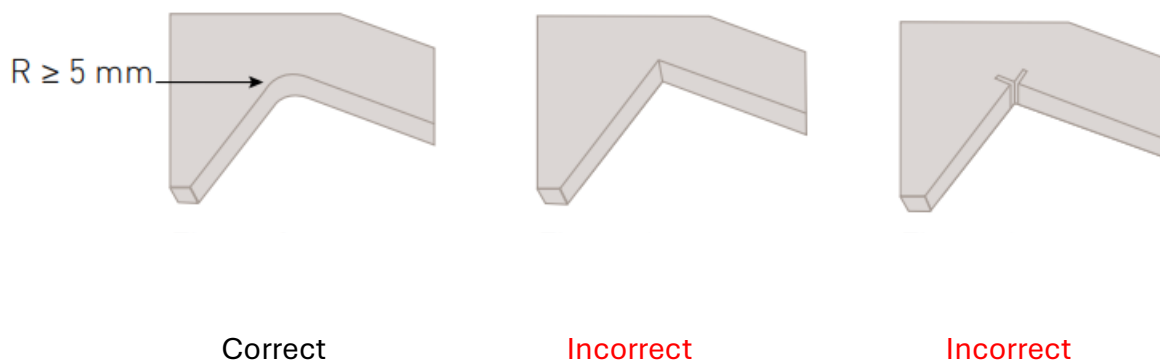
DO NOT ALTER RADIUS WITH A GRINDER OR OTHER TOOLS, THIS WILL CREATE WEAK SPOTS AND CAUSE POTENTIAL CRACKS/BREAKAGE.

Connect drilled corners for cut out by cutting a precut from one to the other. Leave the core of the cut out inside and finish cut out on site to provide strength during handling.

The blade must be tangent to the circumference of the hole to prevent cutting beyond marked areas. Always use sharp diamond blades and other tooling designed specifically for the processing of sintered stone.

The cutting direction must always be in the same direction as the rotation of the cutting disc.

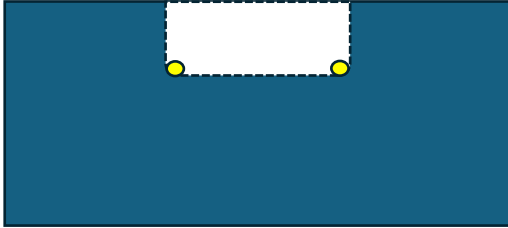
See illustration below for a closer look at the correct method.



General Cutting Requirements

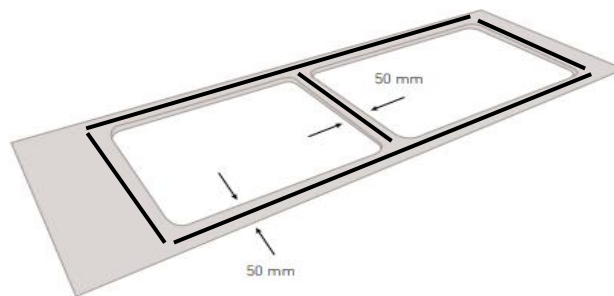
Sufficient flow of water directed at front and sides of the blade where making first contact with material and as close as possible to the contact point. Cut on a flat and level surface that supports the slab fully when laid for cutting. Reduce the feed rate by 50% upon entry and exit cuts.

Do not perform reverse cutting, always cut in the direction that the blade rotates. For smaller cut outs use a minimum of Core drill size of 10mm. On larger cut outs use a 35mm Core drill. In the event that a counter top needs to be cut to take on the shape of a column or structure, perform core drilling in the corners. See Diagram below.

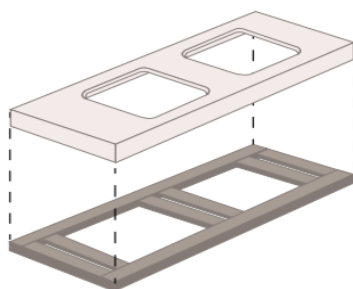


Sink cut outs and substructures

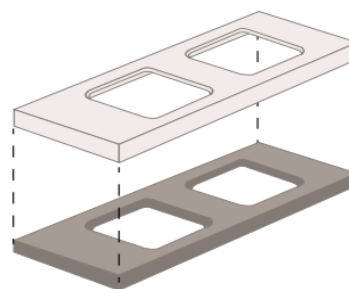
Allow for a minimum margin of 50mm to be left over once sink cut outs have been made. The margin may be reinforced by using offcuts or pieces Stratus Sintered Stone, do not use other materials for strengthening around cut outs.



Examples of Sub-Structures for Reinforcing or Support

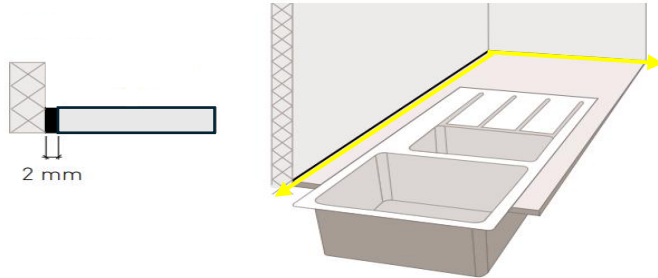


Cross Bracing



Solid Support

Always allow for a 2/3mm tolerance between walls and Stratus Sintered Stone upon installation. Use silicone to fill the gap left for tolerance, this allows for any thermal expansion or movement to take place without harming the installed materials. Alternatively use gaskets provided by appliance manufacturers to leave the required gap. When installing a flush fitting sink leave 2mm tolerance between routed edge and sink rim, when fitting a drop in sink leave 2mm on the inside of your cut out.



The yellow lines indicate where to leave the 2/3mm tolerance

Do not force tops into position, avoid bumping against walls or other hard surfaces to prevent chipping or cracks.

Ensure sub-structure that the tops will be mounted on is level and kosher, it needs to have sufficient supports for the top to rest on.

Support Intervals:

Every 400 – 600mm in the width of the cabinetry or sub-frame, add support bracing or make use of a cantilever especially on longer spans or areas with no cabinetry beneath (like overhangs). Supports should rather be used more frequent to avoid any bending or stress points.

Under-Cabinet Supports:

Add strong stable support directly beneath the countertop at every point where the countertop spans across a cabinet or shelf. If there are any gaps or unsupported areas, especially near sink cutouts or overhangs, use brackets, bracing, corbels, or additional reinforcement to maintain stability.

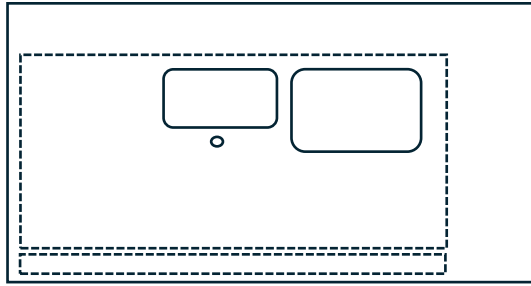
Edge Supports:

Ensure enough solid edge support, particularly at corners and along areas with overhangs. For larger overhangs (e.g., breakfast bars), consider corbels or a metal reinforcement system. These can be incorporated into the design without disturbing the overall design aesthetics.

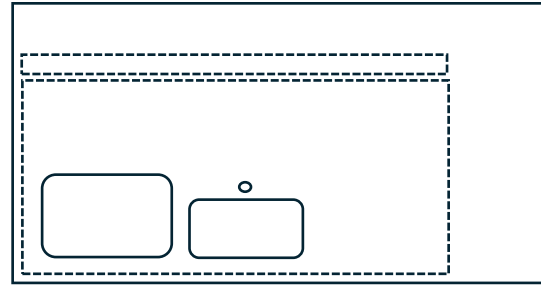
Sinks and Heavy Fixtures:

Areas where a sink, stove, hob, or heavy appliances are located should have extra reinforcement. It is recommended to add additional support right under those areas to handle the load and prevent any stress on the counter tops.

Always make sink holes and cut outs as close as possible to the core of the slab and the aprons around the edges.



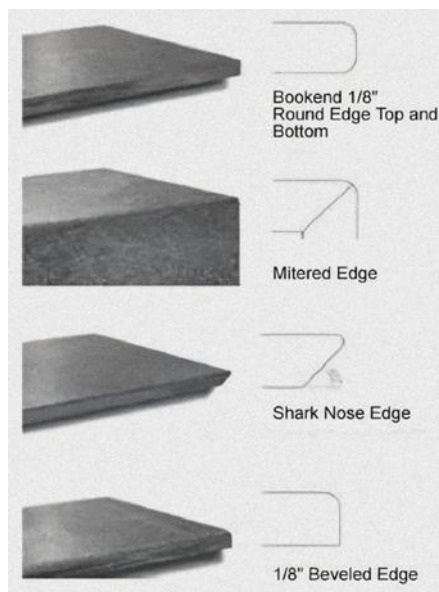
Correct



Incorrect

Recommended Edge Profiles:

- Bookend Edge 3mm
- Mitered Edge 3mm
- Shark Nose Edge 5mm
- Bevelled Edge 3mm



Overhangs:

During the design phase it is advisable to consider adequate and strong support. Like cantilevers and steel supports where needed. The chart below illustrates the parameters for supported and unsupported overhangs.

Stratus Sintered Stone advises that all overhangs should be supported to prevent and provide resistance against chips and cracks when dropping heavy items on it.

Unsupported overhangs

Ensure that a counter top with no cut out never has an overhang longer than 150mm.

Ensure that a counter top with a cut out never has an overhang that exceeds 90mm.

No overhangs or areas should be left unsupported and not exceed the above parameters. Make use of steel / solid wood substructures that are level.

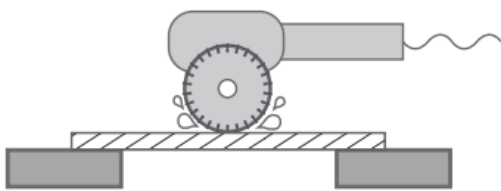
Manual Processing:

Cutting

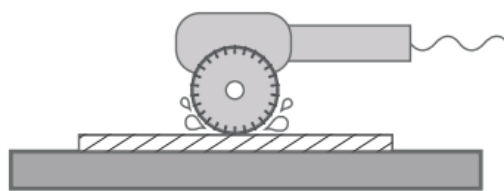
Always use plenty of water for cooling and dust suppression. Stratus Sintered Stone does not recommend dry cutting. The slabs must be properly supported during any manual processing. The support should be rigid, perfectly flat and in good condition. A rigid wooden support is recommended.

Square or rectangular holes (e.g. cut outs for electrical plugs) must have a rounded edge with a minimum radius of 5mm at all four corners. Once the cut has been completed, it is recommended to lightly sand the upper and lower edge using 60/120 grain diamond sandpaper to prevent unwanted chipping and cuts from sharp edges.

Ensure the use of diamond cutting tools, tools that are sharp and in working condition. Do not force cutting, apply mild pressure when drilling, but allow the machine and cutting tool to do the cutting.



Incorrect

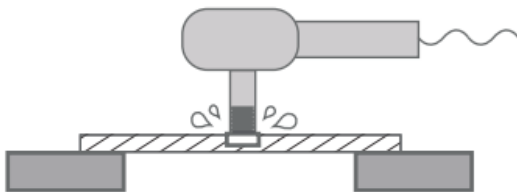


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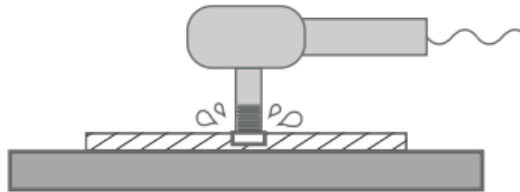
Drilling

The part to be drilled must be properly supported with a rigid support base, as in the case when performing cutting; during drilling avoid any hammering, ensure the drill is not set on the hammer setting to avoid breakage. Use enough water for cooling and dust suppression. Do not recommend resorting to dry cutting.

Ensure the use of diamond cutting tools, tools that are sharp and in working condition. Do not force drilling, apply mild pressure when drilling, but allow the machine and cutting tool to do the cutting.



Incorrect



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General Cleaning and Maintenance:

Daily Cleaning

Surface Cleaning: Wipe down the countertop with a damp cloth and mild dish soap or a gentle cleaner like AKEMI Triple Effect. Avoid harsh chemicals like bleach, ammonia, or abrasive cleaners.

Drying: After cleaning, dry the surface with a micro fibre cloth to prevent water spots or streaks.

Tough Stains

Stubborn Stains: For tough stains like grease or food splashes, use a non-abrasive cleaner like AKEMI Stone Cleaner. Apply, let it sit for 5 – 10 Minutes, then gently scrub with a soft cloth or non-abrasive sponge.

Avoid Scrubbing Pads: Do not use abrasive sponges or steel wool as they can scratch the surface.

Dealing with Spills

Spills: Although Stratus Sintered stone is a highly stain resistant material clean spills immediately to avoid long terms staining, especially with acidic liquids like wine, vinegar, or citrus juice. Use a soft cloth or paper towel to blot/dab, do not rub to avoid spreading.

Grease/Sticky Residue: For greasy stains or sticky residue, use a mild degreaser like AKEMI triple effect or AKEMI stone cleaner and micro fibre cloth, then rinse thoroughly with water.

Preventing Damage

Hot Items: Although Stratus Sintered stone is highly heat resistant avoid placing hot pots, pans, or appliances directly on the countertop. Use trivets or heat pads to protect the surface from thermal shock or discoloration and to promote the longevity of your counter top.

Sharp Objects: While sintered stone is durable and highly scratch resistant, avoid cutting directly on the countertop. Always use a cutting board to prevent scratches.

Protecting the Surface

Sealing: Sintered stone is non-porous, so it doesn't require sealing. However, regular cleaning will help maintain its look and integrity.

Avoid Direct Contact with Harsh Chemicals: Do not use products containing bleach, acid-based cleaners, or strong solvents that can degrade the finish.

Routine Maintenance

Occasionally, buff the surface with a Micro Fibre cloth and AKEMI Triple effect to maintain the surface.

Edge Care: Be mindful of the edges and corners, as they can be more vulnerable to chipping. Handle with care, and avoid dropping heavy items near edges.

Long-Term Care

Surface Inspection: Periodically inspect the countertop for any signs of damage or wear. If you notice chips or cracks, contact a professional for repair.

Avoid Heavy Impact: Although durable, sintered stone can crack under heavy impact. Always handle with care and avoid dropping heavy objects on the surface.



Stratus
Sintered Stone



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FOR NATURAL STONE
Emotions in Stone

**Consult your Stratus Sintered Stone Specialist at Exclusive Warehouse for Natural
Stones for any additional product information.**

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