

Fabrication Instructions

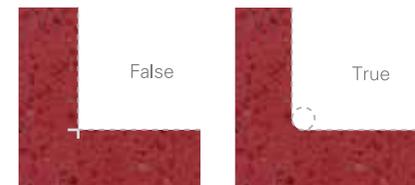
- You should first carry out an exploration on the site for workmanship and application anticipated to be performed. Upon such exploration, you should confirm the compliance of the requested work with the Çimstone products and the rules as contained in the Workshop and Warehouse Manual.
- Supplementary information should be obtained from the Çimstone Technical Application or Sales Department on any required issues.
- If the work anticipated to be performed is in compliance with the Çimstone products and the rules as contained in the Workshop and Warehouse Manual, then the purchase order should be prepared under mutual agreement with the customer.
- In order to ensure sustainable customer satisfaction, make sure to follow the stipulated rules.

Measuring

- Always take the measures of the countertop on the actual installation site by using a template made of a hard, unbending and inflexible material, like a cardboard or graphic paper.
- It is recommended to leave Care and Maintenance instructions for the customer.
- Obtain a written consent from your customer about the cutouts, seam positions, edge profiles and all other fabrication details as well as indicated installation deadlines and do not start cutting the slabs until you are clear about all the information in the order. Follow instructions included in this document during fabrication.
- Once any counter workmanship and application measurements have been taken and installation of bearing furniture and/or constructions in their respective places has been carried out by the relevant suppliers, net measurements should be made on site.
- In taking the net measurements related to the products, workmanship and application of counters, written agreement should be definitely reached on details with the customer.
- The method of carrying the counters to the place where they will be installed should be determined at the time of taking measurements.
- Supplementary information should be obtained about the workmanship and application methods as well as the products to be used on special counters (commercial places, etc.) from the Çimstone Technical Application or Sales Department.

Cutting

- The cutting table should be solid and resistant. It should be perfectly flat; otherwise the worktop can move during cutting.
- Only water-cooled power tools should be used for cutting and polishing Çimstone. The watercooled diamond cutting tools and polishing pads suitable for granite can also be used for Çimstone.
- The diamond cutting disk should be in perfect condition (no missing parts or worn disks)
- Always cut with water. Check there is a continuous clean water flow during the cutting process.
- Cutting square corners will result in stress points which increase the potential of cracks. Thus an angled corner must be drilled with a large diameter core bit having a minimum radius of 5 mm. Cut with the saw up to the joint of the drilled hole.
- And internal angled corner must be rounded. Cut with the diamond saw up to the joint of the drilled hole, leaving the drilled hole intact. Any damage to the drill area will result in a stress point. Avoid dry grinding / polishing of the corner since overheating the area may result in a crack.



Polishing



■ Polishing any Çimstone edge profile should be done in a progressive manner using only granite or marble diamond polishing pads.

■ Use only water-cooled polishing tools. Dry-polishing the edge profile may cause overheating, leaving the edge prone to chipping. Excessive heat undermines the physical structure of the slab, and although not visible to the naked eye, micro-fissures are formed, leading to chipping upon impact, discolouration and an uneven polish. Thus avoid dry polishing.

■ Çimstone recommends the use of premium quality pads for the best polishing results. The quality of the pads being used will affect the time required to complete polishing and the quality of the finish.

■ Recommended polishing process for Çimstone: Honed finish: 100, 200, 400-grit diamond pads, Polished finish: 50, 100, 200, 400, 500-800, 1500-2000, 2000-3000-grit diamond pads are used.

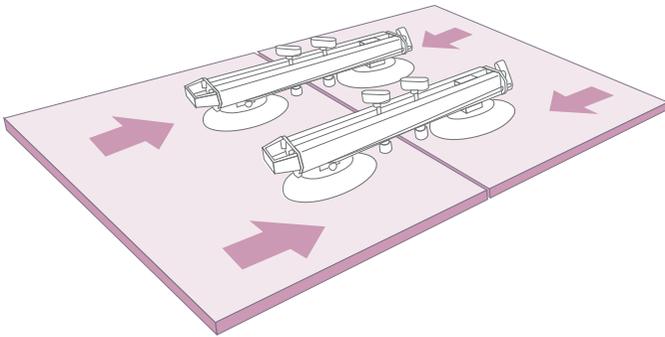
■ Use lower rpm to be used on polishers when using 1000-grit or higher diamond polishing pads.

■ The machine rotational speed should be maximum 3500 rpm. We recommend the use of wet air polishing tools.

Do not change the original surface finish of the slabs by re-polishing, honing, sealing, or otherwise altering the factory finish. Never allow such modifications particularly on seams and edge details.

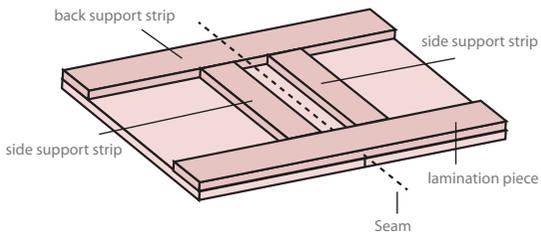
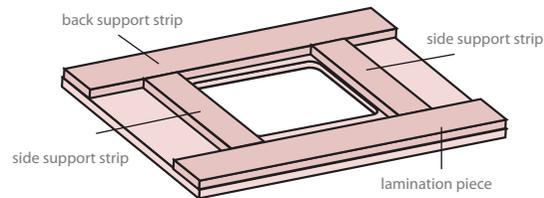
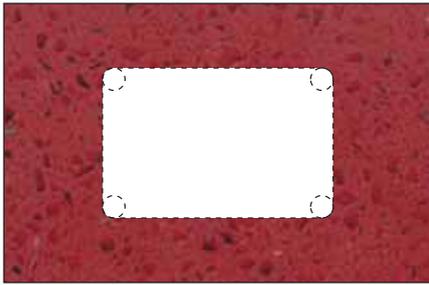


Seams



- It is highly recommended to use a special spanner to fasten the seams.
- In order to achieve a minimally visible seam, the adhesive used must be pigmented to a colour similar to that of the material being installed.
- Grooves should be created in surfaces to be joined to allow space for glue. Extra glue should be placed at all corners and around joints.
- In case of an angular shaped kitchen, the surfaces of the countertop should be joined at the corners. If possible, an L shaped top should not be cut from one solid piece. Where an inside corner is unavoidable it should be rounded with a decorative radius of 2 to 10 cm in order to reduce potential cracks.
- Provide support under all seams. If the margin between the cutout and the seam is less than 15 cm, the area needs to be supported.
- Çimstone prohibits the surface polishing of seams.
- Never install mechanical fasteners (screws, nails, etc.) into Çimstone.
- It is recommended to take customer consent upon the locations of all seams prior to manufacturing.
- Seams should never be positioned over a dishwasher.
- The type of adhesive to be used in such places as the joints, seams, etc. of domestic counters should be polyester-based. A groove 4 mm wide and 4 mm deep should be opened on the corresponding surfaces in the joints and the adhesive filled in these grooves in order to improve the binding properties of the adhesive.

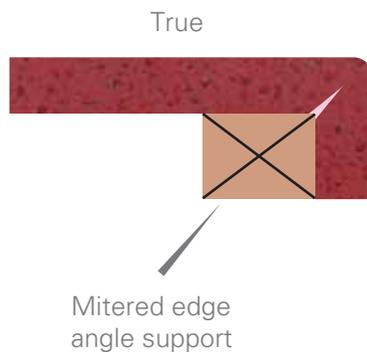
Cutouts



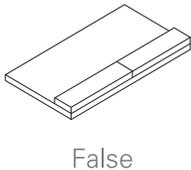
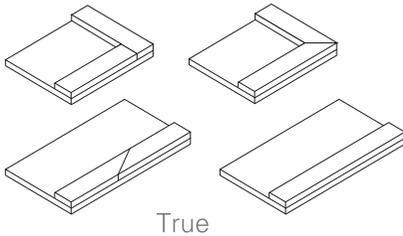
- Reinforced cutouts by the use of an accurate template are one of the most essential elements to the successful completion of a cutout in Çimstone.
- Cross cutting should be avoided. When preparing a cutout, first the corner holes should be drilled by a large diameter core bit and then a diamond blade should be used for cutting between the corners.
- If the distance between the cutout and a joint is less than 15 cm, the area needs to be reinforced with a minimum 20 mm Çimstone strip. Ensure that all joints are placed at the junction of the base cabinets or a solid slat be fitted under the joint.
- All cut outs should always be reinforced at the back with Çimstone support strips adhered all around the drilled area via polyester.
- When preparing a cutout always use a core bit. Avoid damaging the drill area with a cutting disk.
- Damage to the drilled area can result in stress points that may lead to hairline cracks. All cuts should be done using only wet diamond cutting tools to avoid generating excessive heat, which could also result in hairline cracks.
- Always allow an extra 3 mm between the appliance and the edge of the cutout for expansion.
- The main consideration is to keep the alteration work at the actual installation site to a minimum. Thus pay due attention to complete all the cutouts and other special workmanship at the workshop.
- If the seam overlaps a cutout, we advise you reinforce the seam by placing Çimstone support strip(s) beneath.
- In the counter workmanship and application of domestic, business, etc. counters, auxiliary insulation materials should be used to prevent direct contact with cold and heat.

Mitered Edges

- Mitered edges should be done at a 45° angle to ensure maximum strength. Do not cut edges at less than 45° as this makes the edge prone to physical damage such as chipping.
- The joint should be clean, flush, and parallel.
- Ensure that the adhesive is thoroughly distributed throughout the joint for maximum strength. Mitered edges have the greatest area of weakness and are most prone to chipping. Chipping is most prevalent where the application of the adhesive is not evenly distributed throughout the joint.
- Incorrect angles restrict the type of edge that can be produced, since the larger the edge profile, the larger the joint that is visible.



Laminations/ Double Thickness



- On seams and lamination areas, it is necessary to grind notches or grooves on the surfaces to be bonded together. These notches provide a space for the adhesive within the joint.
- In order to achieve a minimally visible seam, the adhesive used (gel polyester) must be pigmented to a colour similar to that of Çimstone being installed and the suitable mixture must be prepared by adding the accelerator and the hardener.
- Place the adhesive on both sides of the pieces making up the edge, join them together and press with clamps. Clamp the laminated edge every 10 cm.
- Once the glued and clamped stone is allowed to dry off, cut it together with the lamination strip before proceeding with polishing.
- When laminating, it is important to make sure that the lamination piece is the full length of the top piece and cut at 45° on the corners.
- If you can not use full-length lamination pieces and a joining of the lamination pieces is unavoidable, the joint must be cut at 45°. Thus it would reduce stress on the material that may cause stress fractures.
- The lamination strip should be cut from the same slab as the countertop surface material to ensure a colour match.
- It is recommended when cutting the piece to be laminated, to add the lamination piece size to the cutting measurements, so that the lamination piece will be in the same length and same colour with the countertop.
- The piece to be used in double thickness which shall be placed on the lower surface should be of the form and width to correspond to the bearing furniture.
- Provide back support strips to coincide with lamination and balance the countertop.

In order to prevent any damage to the lower bearing furniture, a water drip moulding 4 mm wide and maximum 2 mm deep should be provided on the lower surface of the counter.

Adhesives



■ In order to achieve a minimally visible seam, the adhesive used must be pigmented to a colour similar to that of the material being installed. This can be done using colour paste pigments mixed with the adhesive to achieve a colour match.

■ Pay attention to use the colour paste pigments, accelerators, hardeners of the same brand that is used as the gel polyester.

■ It is important that a flexible antibacterial adhesive, such as 100% clear silicone adhesive be used to fix the countertops to the cabinets, substrate, or to secure Çimstone backsplashes to the wall.

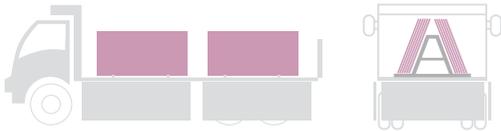
■ The use of non-flexible adhesives, such as epoxies, liquid nails, or construction adhesive, is not recommended.

■ Highly binding, leakproof and strong adhesives should be used in the joints in direct contact with heat and cold in workmanship and applications on special counters (commercial places, etc.). A groove 4 mm wide and 4 mm deep should be opened on the corresponding surfaces in the joints and the adhesive filled in these grooves in order to improve the binding properties of the adhesive.

Transportation



- Do not allow any parts to slide around during transportation.
- Transport Çimstone vertically with the front side facing downside and all countertop sections touching face-to-face or back-to-back.
- Removable "A" frame and vertical piping rack designs are best for transportation. The slabs and all parts should be securely fastened to the rack by straps.
- Brace all cutouts to avoid flexing of the seams and corners.
- Make sure that you ship the counters wrapped up in protective materials (blankets, rugs, etc.) in order to protect them against any risks such as bending, long/short side distortions, surface irregularities, etc. which may occur in transit.
- In cases where counters may not be handled in the stairwell or by the elevator especially in high-rise buildings, you may carry out the handling operation by means of a mobile crane or a hoist by taking all safety measures upon reaching an agreement with your customer.



Installation Instructions

Preparing the job site

- Ensure that all cabinets are levelled and supported prior to the installation of the tops.
- If the cabinets are on adjustable legs, ensure that all legs are evenly tensioned to prevent any movement.
- The cabinets should be affixed to each other and then secured to the back wall.
- In case of a dishwasher, make sure that the surrounds of the cutouts is properly supported.
- Any alteration work may be best done away from the actual installation site. Never use Çimstone top for such a purpose.
- In order to prevent the surface from being damaged during the work, place protective materials (blankets, rugs, etc.) on the counter components.
- Consider the sequence of on-site seams that will allow for the optimum installation.
- Verify before final installation that the top fits on the place intended for installation.
- Counter skirting should also be prepared by using the slabs manufactured on the same date and installed with strong, waterproof and quality silicone adhesives with minimum joints.

Use only water-cooled tools for cutting and polishing Çimstone.

Fitting

- Allow space of at least 5 mm at each wall since Çimstone needs room to expand.
 - Çimstone should be supported on a strong perimeter frame. Front-to-back support should be provided every 1-meter. Çimstone frame support may be made from several types of materials like moisture resistant M.D.F. board, moisture resistant plywood, metal profiles or Çimstone strips. Do not use any material that is not structural in nature. Such supports should be provided under all seams.
 - Place the countertop vertically on the floor with the bare side down (chamfered edge facing the ceiling). When affixing the surface to the supports, use only dabs of flexible silicone 30 cm apart.
 - The size of the countertop pieces should be checked whether they fit their intended places. Irregularities should never be compensated by changing the connection points. This can cause damage to the tops.
 - Support is required across the top of a dishwasher space and over an under-counter oven. Use extra silicone on all corners, joints and around all cutouts. Tape the slab along the contact joint, in order to prevent the contacts of adhesive with the slab face.
 - Countertop pieces should be pressed together with the contact surfaces. Çimstone should be clamped or braced in position until the adhesive sets.
 - Clean the seams and the contact points well with acetone or denatured alcohol. Thoroughly rinse the surface with clean water to remove residue.
 - For all sink or basin installations, whether they are top-mount or under-mount, it is recommended to follow the sink manufacturers' instructions.
 - For under-mount sink installations, bevel 3-4 mm the edges around the cutout to reduce the risk of chipping.
 - All sink installations should be fully supported independent of the Çimstone top.
 - Cast-iron or other heavy sink installations should be fully supported by using plywood underlayment, professional sink-setter or support rail system.
 - Under no conditions affix mechanical fasteners (screws, nails, etc.) directly to Çimstone.
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Installation of Backsplash

- Counter panels should also be prepared by using the slabs manufactured on the same date and installed with strong, waterproof and quality silicone adhesives with minimum joints.
- Clean the surface of the countertop and cladding from dust.
- Check that the wall is level.
- Check if the cladding fits in its intended place. Measure larger pieces exactly prior to lifting.
- Clean the contact surfaces with acetone.
- Apply dabs of silicone to the wall and place the cladding.



Finishing Touches and Cleaning



- Remove the adhesive and silicone residue, which were left on the top during installation. However beware and strictly inform your customer that the acetone used to remove such remains should never be used for daily cleaning.

- Clean the surface with a liquid cleaner specified in the Care and Maintenance instructions and then rinse thoroughly with water.

- If there is further construction work to be performed at the job site following the completion of the surface, ensure that Çimstone surface is properly protected by sheltering the entire top either with cardboard or another protective material.

- Make sure to leave a Care and Maintenance manual with the customer.

- Make your customer aware that any following workmanship must not use the new countertop as a workbench, a stepping or a standing platform, and that any trades using solvents or adhesives should take due care to avoid and / or remove any spills created by their solvents or adhesives.

- We strongly recommend that you photograph the actual installation and get your customers' written confirmation stating their satisfaction with the material and workmanship at the end of the job to cover you against damages caused by others.
