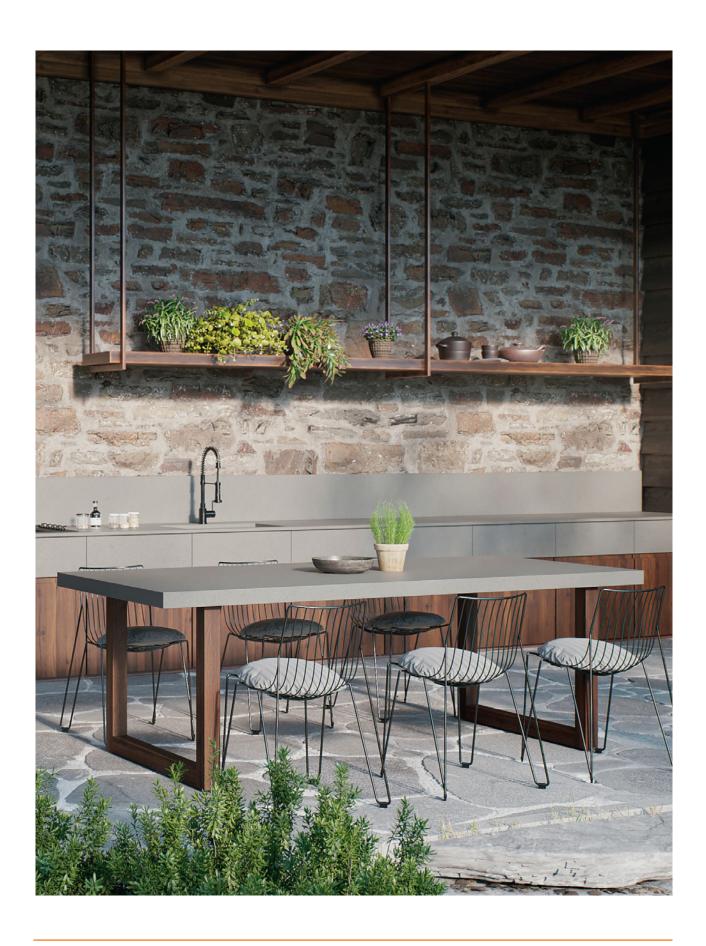




Caesarstone Outdoor Technical Guide





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1. Introduction

Caesarstone introduces the Outdoor Collection. For the first time, Caesarstone has combined the best of all it has to offer by taking the luxury of its much-loved surfaces to the outdoors. Its ground-breaking Outdoor Collection provides the convenience of stain-resistant, easy-to-clean surfaces, while innovating a highly durable material proven to withstand UV rays and the most extreme environmental conditions over the long term. The new Outdoor Collection provides an answer for consumers' desire to cook, dine and entertain comfortably in an outdoor kitchen, come rain, snow or shine.

Caesarstone Outdoor performs the same as traditional Caesarstone in most aspects relating to fabrication, installation, repairs, and care & maintenance. Therefore, in most cases, the same procedures, tools and equipment can be used for both products.

There are, however, some minor differences, which are specified in this technical guide. Stonemasons and installers should use these guidelines in addition to the Caesarstone *Fabrication & Installation Guide* for optimum work with Caesarstone Outdoor.

Please note that Caesarstone Outdoor is not suitable for flooring and wall cladding.



2. Slab Data

2.1 Finishes

Caesarstone Outdoor is available in a Honed finish.

2.2 Dimensions & Weight

Length	3040 mm +/- 10 mm
Width	1440 mm +/- 10 mm
Thickness	20 mm +/- 1 mm
Weight	189-210 kg/slab 43-48 kg/m²



2.3 Slab Label

- The Caesarstone Outdoor slab label has a blue border.
- The rest of the slab label is the same as for traditional Caesarstone.



3. Fabrication Guidelines Specific to Caesarstone Outdoor

Caesarstone Outdoor contains up to 90% crystalline silica. Fabrication of Caesarstone Outdoor generates respirable dust which can be harmful and dangerous to your health when safe and correct fabrication techniques are not adhered to. For more information relating to respirable dust and the health impacts please refer to the Caesarstone *Good Practice Guide - Steps to Avoid Health Hazards Related to Crystalline Silica Dust* or Caesarstone's online Master of Stone Training Centre at: mos.caesarstone.com.au.

- Caesarstone Outdoor slabs offer stonemasons all the same advantages of easy fabrication as traditional Caesarstone. Due to the different composition, Caesarstone Outdoor slabs emit a smell during fabrication that is different from traditional Caesarstone.
- It may be necessary to exert slightly more pressure when working manually.
- Set the RPM at 1600.

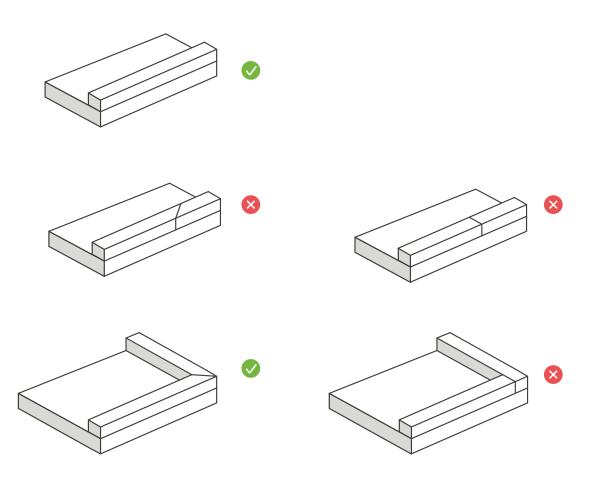


3.1 Laminated Edges

- Due to the high heat transfer around BBQ areas, we recommend that the 20 mm slab is used for edges without reverting to a thicker mitred edge to reduce the risk of delamination.
- For thicker edges, a butt edge / laminated edge is the recommended option for an edge more than 20 mm. Glue a strip of 20 mm thickness and at least 70 mm depth underneath the surface as shown below:



• Create joins in laminated edges as shown in the diagrams below:



4. Slab Cleaning During the Fabrication Process

At no time should acetone or thinners be used on Caesarstone quartz surfaces, including this Outdoor Collection, either:

- Prior to fabrication
- Post fabrication
- Post install

Along with acetone, the use of products that contain trichloroethane or methylene chloride (such as paint removers or stripper) or cleaning agents which have high alkaline / pH levels is prohibited. If these products are used, the Caesarstone Limited Warranty becomes void.

Our recommended cleaning solutions during the fabrication process and post install are:

- Methylated spirits / 100% alcohol / isopropyl alcohol
- Always use a clean microfibre cloth that has not been used for other cleaning purposes, as it may transfer oils and other contaminants to the Caesarstone Outdoor surface.

For any stubborn stains that need removal prior to client handover, Caesarstone Crème Cleanser can be used with the addition of two drops of household bleach (e.g., White King Liquid Gel Bleach) directly onto a Scotch Brite™ Non-Scratch Foam Scrubber and used according to the recommended process in the Caesarstone *Care & Maintenance Guide*.



5. Installation Guidelines Specific to Caesarstone Outdoor

5.1 General

 Support Caesarstone Outdoor on a full substrate of concrete, brick or cement board. Do not use wood as it can swell in an outdoor environment.

5.2 BBQ Installation Guidelines

The enclosure, supporting structure and clearance requirements for BBQs can vary substantially between different makes and models. Every BBQ make and model has its own set of guidelines for installation. Please refer to the guidelines set out by the manufacturer. Always read and follow the BBQ manufacturer's instructions for enclosure construction, ventilation and clearances from combustible materials and the surface.

- The BBQ should be supported by a brick structure or a dedicated frame, not by the Caesarstone Outdoor surface.
- The BBQ should not be completely surrounded by the surface at least one side must be open.
- Ensure that the BBQ pane is located above the level of the Caesarstone Outdoor surface.
- Where BBQ clearances are not specified by the manufacturer, consider the clearance distances as described in the relevant standard for the BBQ appliance (such as AS/NZS 5601:1 2013) or as advised by a licensed gasfitter.
- In any event, clearance between the BBQ and the edge of the cutout must be no less than 15 mm.
- Create 5 mm seams that follow the BBQ edges.
- Create seams for all inside corners around the BBQ or on appliance cutouts. A 5 mm seam is recommended for each corner seam (see diagram B).
- If there is a wall behind the BBQ, the surface depth between the BBQ and the wall must be at least 200 mm (see diagram B).
- Use of ceramic heat-resistant tape and heat-resistant, flexible, neutral cure silicone on the surround of the BBQ / appliance cutout is strongly recommended.
- See the diagrams below as an example of specifications to be considered along with manufacturers recommendations.
- Please note that non-compliant BBQ installations will void your Caesarstone Outdoor Warranty.

Diagram A:

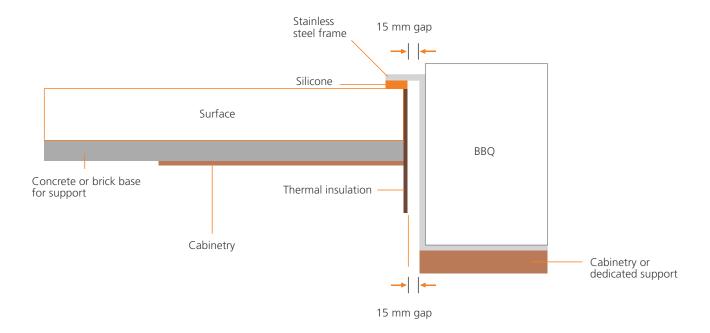
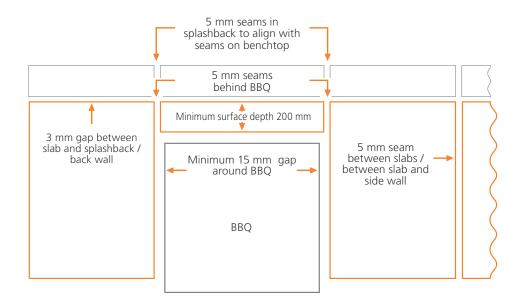


Diagram B:



• If there is a wall behind the BBQ, the surface depth between the BBQ and the wall must be at least 200 mm.

6. Adhesives

Please note that Caesarstone Outdoor is an acrylic, polymer-based product. Please use appropriate material that will not damage the product.

- To seam Caesarstone Outdoor use flexible, neutral cure silicone suitable for outdoor use or AKEMI® MS Adhesive Sealant, without silicone.
- To connect Caesarstone Outdoor to the substrate or to install as a splashback use thin set. Latex-modified thin set such as LATICRETE® 254 Platinum is preferred.
- To glue edges, use an adhesive suitable for outdoor use such as AKEMI® Everclear 225 or AKEMI® Hyperclear.
- Thoroughly clean areas to be joined with alcohol.
- When preparing joins, apply a layer of protection such as beige masking tape. Do not use blue painter's tape as the adhesive in the tape may react chemically with the silicone and damage the surface. Any tape used should not be left on the surface for longer than the working period.
- Alcohol is recommended for cleaning during installation. Use of acetone and thinners is forbidden on Caesarstone Outdoor and will void warranty.

Note: Before using, please read and follow the adhesive manufacturers' instructions. Pay attention to the guidelines regarding weather and temperature conditions at the time of application.

7. BBQ Type & Operation

- Do not use charcoal BBQs; the heat range cannot be regulated, and embers may damage the surface.
- Do not use high-powered BBQs that reach extremely high temperatures as this may damage the surface or splashback.
- Do not operate BBQs at temperatures above 370°C. Although this is not a surface temperature limit, operation at extreme temperatures may cause damage to surrounding surfaces.
- Do not use self-cleaning options in BBQs; this setting may reach up to 538°C.

8. Care & Maintenance

Care & maintenance, and stain removal for Caesarstone Outdoor are the same as for traditional Caesarstone. In addition, we recommend the following to keep your Caesarstone Outdoor looking its best:

- Cover the surface when not in use.
- Do not leave metal objects on the surface as they may cause rust stains.
- Do not use deep fat fryers and turkey fryers on the surface.
- Clean any stains or residue as soon as possible to prevent them from drying on the surface.
- Do not use acetone or thinners.

9. Standards & Certificates











ILGBC

USGBC

GREENGUARD GOLD

GREENGUARD

NSF



ISO 9001:2015



ISO 14001:2015



ISO 45001:2018 OHSAS 18001:2007



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10. Technical Data

PROPERTY	RESULTS
Flexural Strength	>55 MPa
Freeze-thaw Resistance	No obvious damage after 150 freeze-thaw cycles
Bulk Density	>2.1 gr/cm ³
Water Absorption	<0.6% (per 10 days absorption)
Impact Resistance	>9 J
Stain Resistance ¹	Pass
Chemical Resistance ¹	Pass
Linear Thermal Expansion	30°C-100°C: 3.0-5.0 x 10 ⁻⁵ per °C
Thermal Conductivity	1.45-1.55 W/(m·K)
Thermal Shock	No obvious change Change in mass: -0.01% to 0.04% Change in flexural strength: -2.7% to 7%
Boiling Water Resistance ²	No effect
UV Resistance	Colour change of up to 4 delta E units may occur in a period of 5 years of external use ³
Surface Burning (ASTM E84-19)	Class A
Ignitability (ASNZS 1530.30)	4 (Range 0-20)
Spread of Flame Index (ASNZS 1530.30)	0 (Range 0-10)
Heat Evolved Index (ASNZS 1530.30)	1 (Range 0-10)
Smoke Developed Index (ASNZS 1530.30)	3 (Range 0-10)
Average Specific Extinction Area ⁴ (ASNZS 3837)	159.2 m²/kg

^{1.} based on ANSI Z 124.6

^{2.} based on ANSI NEMA LD3-3.5

^{3.} estimated value

 $^{4.\} The\ Caesarstone\ Outdoor\ Collection\ is\ available\ in\ various\ colours.\ The\ test\ results\ pertain\ only\ to\ model\ 515\ -\ Palm\ Shade.$





