

Caesarstone Outdoor Collection

Technical Guide





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sales@caesarstone.co.nz | www.caesarstone.co.nz

Images represented in this manual are indicative renders only to understand the aesthetic opportunities. All fabrication and installation of the Outdoor material should be done as per the recommended guidelines.

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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 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 indoor 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. Fabricators and installers should use these guidelines in addition to the Caesarstone *Fabrication & Installation* manual 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 Concrete finish.

2.2 Dimensions & Weight

Length	3050mm (nominal)
Width	1440mm (nominal)
Thickness	20 mm +/- 1 mm
Weight	198-206kg 45-47 kg/m ²



2.3 Slab Label

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



3. Fabrication Guidelines Specific to Caesarstone Outdoor

Caesarstone Outdoor contains Crystalline Silica which can create harmful airborne dust particles which can be harmful to your health when safe and correct fabrication techniques are not adhered to.

For more information around relating to respirable dust and the health impacts please refer to the *Caesarstone Good Practice Guides - “Steps to Avoid Health Hazards Related to Crystalline Silica Dust”*.

- Caesarstone Outdoor slabs offer fabricators all the same advantages of easy fabrication as indoor Caesarstone. Due to the different composition, Caesarstone Outdoor slabs emit a smell during fabrication that is different from indoor Caesarstone.
- It may be necessary to exert slightly more pressure when working manually.
- When cutting 45° mitred edges, do not exceed a speed of 1 m per minute.
- Cutout guidelines are the same for Caesarstone Outdoor and Indoor Caesarstone:
 - The minimum recommended radius for cutout corners is 10 mm. The larger the radius, the stronger the corner.
 - The minimum recommended distance between a cutout and an edge or join is 60 mm.
- Laminated edges - Due to the high heat transfer around BBQ areas, we recommend that the 20mm 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 20mm.

4. Slab Cleaning During the Fabrication Process

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

- Prior to fabrication
- Post fabrication
- Post install

Along with acetone, the use of products that contain trichlorethane or methylene chloride (such as paint removers or stripper) or cleaning agents which have high alkaline/pH levels is prohibited. If post installation contractors work around the product, particular attention needs to be paid to avoid getting silicone on it or using prohibited cleaning agents to remove silicone. We recommend using Calcium Carbonate CaCO₃ (from your local Glazier) to remove silicone if needed. We recommend removal with Sodium Bicarbonate.

If these products are used it will irreversibly damage the surface, and the Caesarstone Limited Warranty becomes void.

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

- Methylated spirits / 100% alcohol / Iso Propyl 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® 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 (eg. Janola Liquid Bleach) directly onto a Scotch Brite Non-scratch foam scrubber and used as per the recommended process in the Caesarstone Care & Maintenance Guide.

5. Installation Guidelines Specific to Caesarstone Outdoor

5.1 Applicable Regulations

Barbecues fall into the category of gas appliances designed for use without a cooking vessel and are expected to comply with the requirements of domestic cookers.

Australian and New Zealand Standard AS/NZS 5601.1: 2013 Gas installations explain that the required clearance distance between a gas cooking appliance and a combustible surface shall be in accordance with the cooking appliance manufacturer's instruction.

The general premise is - firstly, always follow the cooking appliance manufacturer instructions.

Where barbecue clearances are not specified by the manufacturer, then clearance distances shall be as described in AS/NZS 5601:1 2013.

Always seek advice from a licensed gasfitter and follow the guidelines as set out in AS/NZS 5601.1:2013. Non-compliant barbecue installations will void your Caesarstone Outdoor Warranty.

Caesarstone Outdoor - Fire Rating

Caesarstone Outdoor surfaces achieve a Group Number fire rating of 3 against AS 5637 and an Average Specific Extinction Area of 159.2 m²/kg so it can be used in any area or building class where the use of Group 3 rated products is deemed acceptable. Refer to Section 9 - Technical Data.

5.2 General Guidelines

The enclosure, supporting structure and clearance requirements for Barbecues can vary substantially between different makes and models.

The barbecue should be supported by the kitchen structure or a dedicated frame, not by the Caesarstone Outdoor surface.

The barbecue should not be completely surrounded by the surface - at least one side must be open. If there is a wall behind the barbecue, create 5 mm seams that follow the barbecue edges.

Support Caesarstone Outdoor on a full substrate of concrete, brick, stainless steel or foam core PVC. Do not use wood as it can swell in an outdoor environment.

Every BBQ make and model has its own set of guidelines for installation. Please refer to the guidelines set out by the manufacturer for enclosure construction, ventilation and clearances from combustible materials.

6. Adhesives

Note the Caesarstone Outdoor product is an acrylic based product, not polymer like standard Caesarstone. Please use appropriate material that will not damage the product. Silicone generally used for adhering standard Caesarstone (non-Outdoor) products should not be used on Caesarstone Outdoor or be left on the surface.

For joins, seams and substrate connections, always talk to a qualified supplier of adhesive materials to ensure an appropriate solution is used and all adhesive manufacturers instructions are followed.

Options include:

CDK Stone www.cdkstone.co.nz info@cdkstone.co.nz

Laticrete www.globaltile.co.nz/laticrete enquire@globaltile.co.nz

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.

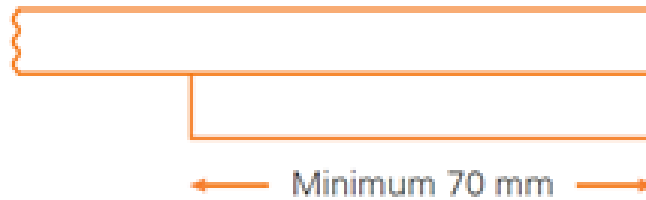
Note: Before using, please read and follow the adhesive manufacturers' instructions. Pay attention to the guidelines regarding weather and temperature conditions at the time of application.

6.1 Gluing Edges

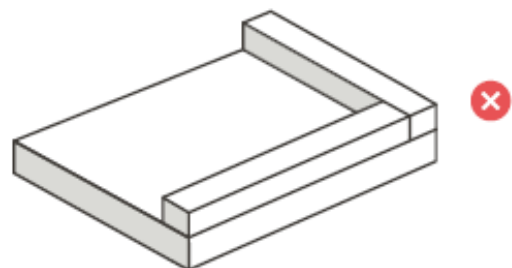
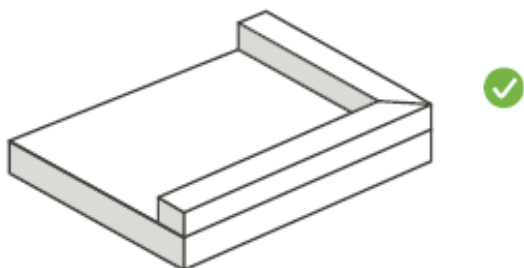
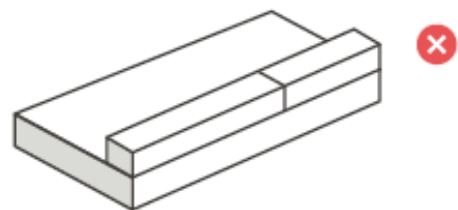
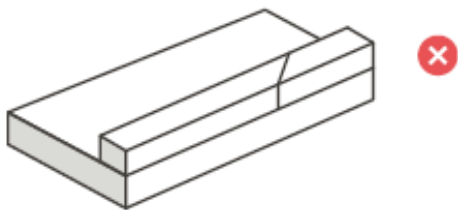
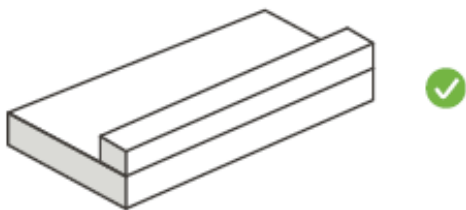
To create edges thicker than the slab thickness, use one of the following methods:

Create 45° mitre edges.

Glue a strip of 20 mm (3/4") thickness and at least 70 mm (23/4") depth underneath the surface as shown below:



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



7. Care & Maintenance

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

- Cover the surface when not in use for long periods.
- Do not leave metal objects on the surface as they may cause rust stains.
- Do not use deep fat 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.

8. Certificates



HPD v2.1.1



SCS



GREENGUARD



ISO 9001:2015



ISO 14001:2015



OHSAS 18001:2007



9. Technical Data

PROPERTY	RESULTS
Flexural Strength	>55 MPa
Freeze-thaw Resistance	No obvious damage after 20 freeze-thaw cycles
Bulk Density	>2.2 gr/cm
Water Absorption	<0.1% (per 10 days absorption)
Impact Resistance	>9 J
Stain Resistance ¹	Pass
Chemical Resistance ¹	Class C4
Thermal Conductivity	0.76 W/(m·K)
Thermal Shock	No obvious change Change in mass: -0.01%-0.04% Change in flexural strength: -2.7%-7%
Boiling Water Resistance ²	No effect
High Temperature Resistance ²	No effect
UV Resistance	Color change of up to 4 delta E units may occur in a period of 5 years of external use ³
Surface Burning	ASTM E84 (Class A)
Thermal Expansion Coefficient	$30-50 \cdot 10^{-6} \text{ }^{\circ}\text{C}^{-1}$
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)

References above are as per the following standards:

¹ based on ANSI Z 124.6

² based on ANSI NEMA LD3-3.5

³ estimated value

