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# Caesarstone Outdoor Technical Guide

Caesarstone University

 | Manual version January 2020

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# Contents

# 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 2 finishes: Concrete and Honed.**

## 2.2 Dimensions & Weight

| | | |
|---|---|---|
| **Length** | 3050 mm (120") +/- 10 mm ($^3/_8$") | |
| **Width** | 1440 mm (56 $^1/_2$") -/+ 5 mm ($^3/_{16}$") | |
| **Thickness** | 20 mm +/- 1 mm | |
| **Weight** | 189-210 kg/slab<br>43-48 kg/m² | 417-463 lb<br>8-10 lb/ft² |

# 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 up to 92% crystalline silica. Fabrication of Caesarstone Outdoor generates respirable dust that is dangerous to your health. For more information about this danger and means of protection that you should implement please see the *Caesarstone Good Practice Guide - Steps to Avoid Health Hazards Related to Crystalline Silica Dust* at: mos.caesarstone.com.**

- Caesarstone Outdoor slabs offer fabricators all the same advantages of easy fabrication as indoor Caesarstone. Due to the different composition, Caesarstone Outdoor slabs give off a smell during fabrication that is different from indoor Caesarstone; and it may be necessary to exert slightly more pressure when working manually.
- When cutting 45° miter edges, do not exceed a speed of 1 m (40") per minute.

Measuring can also be performed via laser, which is automatically converted by computer software into a work plan.

**Note: Cutout guidelines are the same for Caesarstone Outdoor and indoor Caesarstone:**

- The minimum recommended radius for cutout corners is 10 mm (3/8"). The larger the radius, the stronger the corner.
- The minimum recommended distance between a cutout and an edge or seam is 60 mm (2 1/2").

# 4. Installation Guidelines Specific to Caesarstone Outdoor

## 4.1 General

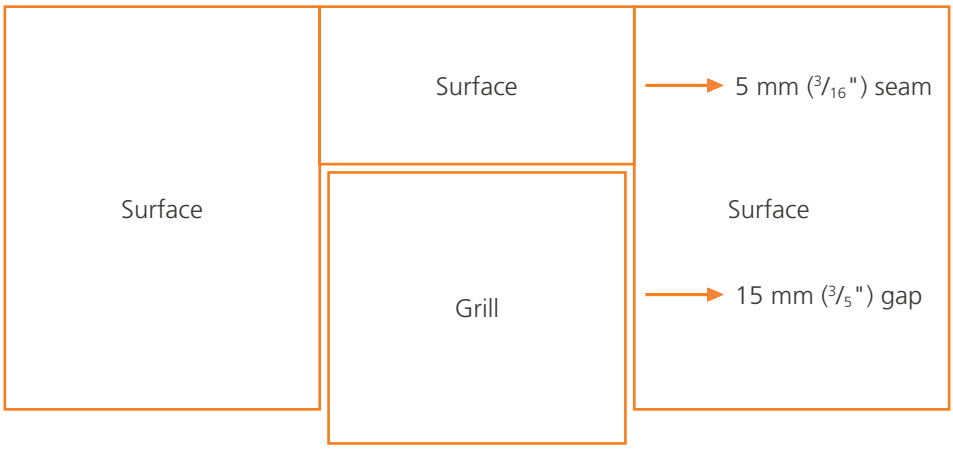
- Support Caesarstone Outdoor on a full substrate of concrete, brick or stainless steel. Do not use wood as it can swell in an outdoor environment.
- Apply thermal insulation tape on the edges of the surface close to the heat source (around the grill). The insulation material must be able to withstand the potential heat generated. If insulation material is not used the heat may damage the surface.

## 4.2 Grill Installation Guidelines

- The grill should be supported by the kitchen structure or a dedicated frame, not by the Caesarstone Outdoor surface.
- The grill should not be completely surrounded by the surface - at least one side must be open.
- Provide a minimum gap of 15 mm ($^{3}/_{5}$") between the grill and the edge of the cutout.

## Installation with wall behind grill

- If there is a wall behind the grill, create 5 mm (3/16") seams that follow the grill edges.
- Leave at least 10 cm (4") between the grill and the wall behind the grill.




# 5. Adhesives

- To seam Caesarstone Outdoor use outdoor adhesive such as **Tenax Glaxs** or **Akemi Hyperclear.**
- To connect Caesarstone Outdoor to the substrate or to install as a backsplash use outdoor adhesive or thin set.

**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. 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.
- 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.

# 7. Certificates

NSF

USGBC

LEED

HPD v2.1.1

ISO 9001:2015

ISO 14001:2015

OHSAS 18001:2007

# 8. 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$^3$ |
| 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<br>Change in mass: -0.01%-0.04%<br>Change in flexural strength: -2.7%-7% |
| Boiling Water Resistance[2] | No effect |
| High Temperature Resistance[3] | No effect |
| UV Resistance | Color change of up to 4 delta E units may occur in a period of 5 years of external use[4] |
| Surface Burning | ASTM E84 (Class A) |
| Thermal Expansion Coefficient | 30-50 · $10^{-6}$ $^oC^{-1}$ |

1 based on ANSI Z 124.6

2 based on ANSI NEMA LD3-3.5

3 based on ANSI NEMA LD3-200

4 estimated value

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