Aerial View of Caesarstone Factory
Kibbutz Sdot Yam, Israel
Adjacent to the ancient Roman city of Caesarea
Product Description

Caesarstone® is the original engineered quartz surface. Use it as an attractive, versatile, and distinctive finish for residential, commercial and institutional buildings. Caesarstone is tough enough to withstand wear and tear on just about any interior surface, and beautiful enough for every design scheme.

Use Caesarstone for:
- Countertops and backsplashes
- Shower and tub surrounds
- Lavatory and sinks
- Interior wall cladding
- Table and desk tops
- Wainscots and wall bases
- Toilet compartment partitions
- Fireplace mantles and surrounds*
- Elevator cab walls
- Service counters
- Stair and mezzanine railing systems*

Caesarstone outperforms natural stone. It has four times more flexural strength and two times more impact resistance than granite. It exceeds the standards for marble by even greater margins. Caesarstone also provides greater consistency than ordinary stone that is veined and prone to flaws.

* Some creative applications may not be covered by Caesarstone's Residential Lifetime Warranty. Please refer to your fabricator and our warranty guidelines for further details.
Because of Caesarstone’s superior strength and durability, you may be able to use thinner materials to save weight, or larger pieces to reduce the number of joints. Either way, you save money with a simplified fabrication and installation process. Furthermore, Caesarstone is virtually maintenance free. Its quartz aggregate makes Caesarstone harder and more scratch resistant than either granite or marble, and its high-quality polymer binders make it non-porous and highly resistant to stains.

Caesarstone keeps its good looks without sealants or waxes and meets the stringent sanitation requirements of restaurants, hospitals, and schools.

**Caesarstone Performance**

- Beautiful and durable
- Strong, yet flexible
- Scratch resistant
- Highly stain resistant
- Resistant to many chemicals, acids and solvents
- Does not support mold or mildew
- Heat resistant

**Composition** Caesarstone is approximately 90 percent crushed quartz (silicon dioxide – SiO2), one of nature’s hardest minerals. Quartz is combined with high-quality polyester resins and pigments, and then compacted under intense vibration, vacuum, and pressure into dense, non-porous slabs. The slabs are gauged to precise thickness, and polished to an enduring shine or attractive honed finish. After passing inspection, the back of each Caesarstone slab is imprinted with a zigzag trademark to simplify jobsite identification.

**Colors and Styles** Caesarstone offers the widest spectrum of design options in the quartz surface industry. Our styles range from fine-grained salt-and-pepper patterns to coarse-grained color blends with a variegated visual texture. See our website or contact Caesarstone for color brochures and samples.

Stocked Standards: 59 colors are available with a polished finish – 8 of them are also available in a honed (matte) finish. Three colors are available with a concrete finish.

**Finishes** Caesarstone offers 4 distinctive surface finishes that offer added character beyond the color offering. Caesarstone can be finished on two faces by special order, requiring a minimum order quantity and additional lead-time.
Technical Data Manual

Dimensions

Nominal Thickness:
- ¾” (20mm)
- 1¼” (30mm)

Slab Size:
- 120 inches (3.10m) long, 56½ inches (1.44m) wide.

Polished surfaces have a silk gloss finish with a ratio greater than or equal to 35% at 50°.

Honed is matte finish surface with the look and feel of natural stone, requiring more maintenance yet no sealants.

Concrete™ matte, textured finish which introduces an industrial aged feel to the surface. This unique finish never requires sealing and is designed to acquire a natural patina over time which adds to the character of the surface, yet remains easy to clean and maintain.

Motivo® is a pattern-design application applying a patented embossed effect.

Motivo, White Crocodile 2141C

Quartz Reflections 7141
Qube Restaurant
Seattle, WA

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Concrete™ matte, textured finish which introduces an industrial aged feel to the surface. This unique finish never requires sealing and is designed to acquire a natural patina over time which adds to the character of the surface, yet remains easy to clean and maintain.

Motivo® is a pattern-design application applying a patented embossed effect.
Limitations  Caesarstone is recommended for interior use only.

Intense Heat: Caesarstone tolerates brief exposures to moderately hot temperatures. Trivets or hot pads should always be used.

Chemicals: Avoid contact with products containing trichloroethane or methylene chloride (such as paint removers or strippers), abrasives, alkaline levels with a pH greater than 8, hydrofluoric acid, liquid bluing, gentian violet, and aggressive cleaning compounds like oven or grill cleaners.

Acids: Caesarstone is not affected by solutions of common acids including hydrochloric, muriatic, and sulfuric acids. In concentrated solutions, after exposures of 24 hours, some acids such as nitric acid will discolor Caesarstone, though they will not compromise the strength of the material. Hydrofluoric acid spills should be cleaned immediately because it will react with quartz in Caesarstone. In the event of accidental exposure to these products, thoroughly rinse Caesarstone with clean water as soon as possible; take care to protect skin and eyes.

Bases: Sodium hydroxide and potassium hydroxide in 10% or higher concentrations will etch Caesarstone surface; spills should be cleaned from immediately. In household concentrations, such as those found in home drain cleaners, sodium and potassium hydroxide have no effect on Caesarstone.

Solvents: Caesarstone resists a wide range of commercial and industrial solvents. Household cleaners and industrial strength solutions of methyl ethyl ketone (MEK) have shown no effect on Caesarstone. Solvents that can be safely used in pure concentrations only on Caesarstone include:

- Acetone
- Mineral Spirits
- Methylene Chloride
- Lacquer Thinner
- Isopropyl Alcohol
- Trichloroethane

Staining Agents: Caesarstone resists common laboratory staining agents. It is not permanently stained by povidone-iodine (Betadine), potassium permanganate or tincture of iodine. Residual stains of Betadine or iodine on light-colored Caesarstone cleans off with chlorine bleach. Black and dark colors of Caesarstone show no stain from these agents. Some colors of Caesarstone can be stained by prolonged contact with solutions of gentian violet, blue ink and some lipsticks.
Cosmopolitan White 5130
Sustainable Standards and Certifications

ISO 14001 and 9001 Certification: Caesarstone is the first quartz surfacing company to receive ISO 14001 and 9001 Environmental Management Systems certification. This international standard provides a procedural framework to create policies and solutions that will assist Caesarstone reach environmental targets.

OHSAS 18001 Certification: Certifies Caesarstone as compliant with Occupational Health and Safety Management System specifications – taking a proactive approach to its occupational health and safety risks.

ANSI/NSF Standard 51 – Food Equipment Materials: Caesarstone is safe for use in food preparation areas and is easy to clean and sanitize.

GREENGUARD & GREENGUARD GOLD - Certification No: 5464-410 & 5464-420
All Caesarstone surfaces comply with American GEI (GREENGUARD Environmental Institute) certification which primarily verifies that Caesarstone’s products meet the most stringent indoor air emission standards.
GREENGUARD Gold Standard, evaluates the sensitive nature of school populations combined with the unique building characteristics found in schools, and presents the most rigorous product emissions criteria to date.

USGBC: Caesarstone ranks high with the United States Green Building Council, crediting entrepreneurs and contractors using our materials with LEED points – making Caesarstone the natural partner in advanced projects, built according to green construction practices.

Sustainable Composition of Product

- Approximately 90% quartz, an abundant natural resource and by-product from mining other minerals.
- Low volatile organic compound (VOC) emissions, contributing to indoor-air quality.
- Less toxic than wood according to the UPITT standard in New York City building code.
- Continually developing recycled colors to add to our product line.
International Living Future Institute

LBC Compliant

Verification that a product complies with the Living Building Challenge Red List. Declare gives manufacturers an expanded point of entry into the most groundbreaking restorative projects in the world. Project teams pursuing the Living Building Challenge - widely accepted to be the most advanced green building standard in the world.
SCS Certified Products

Scientific Certification Systems (SCS) has completed the certification assessment and has approved SCS Recycled Content Certification for Caesarstone’s colors. As a global leader in independent certification and verification of environmental and sustainable stewardship, SCS has developed internationally recognized standards and certification programs in pursuit of the highest level of environmental performance and social accountability.
<table>
<thead>
<tr>
<th>Color</th>
<th>Percentage of pre-consumer recycled content</th>
<th>Registration Number</th>
<th>Stamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>6350 Chocolate Truffle</td>
<td>15% or more crushed clear glass</td>
<td>SCS - MC - 02244</td>
<td></td>
</tr>
<tr>
<td>7141 Quartz Reflections</td>
<td>24% or more crushed mirror</td>
<td>SCS - MC - 02241</td>
<td></td>
</tr>
</tbody>
</table>

Oyster 9601
Marc-Michaels Interior Design Inc.
Product Usage

Manufacturing:

- 97% of water used during manufacture is reclaimed using filtration and recycling systems.
- Regenerative thermal oxidizers remove particulate matter from the atmosphere, reducing air pollution and ensuring a safer work environment.

Regional Fabrication: Countertops and other Caesarstone products can be produced by fabricator located close to building site.

Product Lifespan: Caesarstone is a very durable material. A limited lifetime warranty is available.

Recommended Cleaning and Maintenance: Caesarstone is a very low-maintenance material. Unlike natural stone, it does not require periodic resealing for stain resistance, and its good looks can be maintained without the use of harsh cleaning chemicals. This improves indoor-air quality and the environmental impact of sealer and cleaning chemicals.

Product Reuse: The high strength of Caesarstone can make it possible to remove countertops and other installations without excessive breakage. The durability of the material then makes it possible to reuse Caesarstone in another location.
# Technical Data

<table>
<thead>
<tr>
<th>Test Performed</th>
<th>Test Standard</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical Properties</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Absorption</td>
<td>ASTM C97*</td>
<td>&lt;0.05%</td>
</tr>
<tr>
<td>Density</td>
<td>ASTM C97* EN 14617-1</td>
<td>2.2-2.4 gr/cm³</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>ASTM C880 EN 14617-2</td>
<td>6,500-10,770 psi; 44.8-74.3 MPa</td>
</tr>
<tr>
<td>Dimension Stability</td>
<td>EN 14617-12*</td>
<td>Class A</td>
</tr>
<tr>
<td>Electrical Stability</td>
<td>EN 14617-13*</td>
<td></td>
</tr>
</tbody>
</table>
<pre><code>|                        |                     | Volume resistance ($R_v$) = $0.92 \times 10^{14} \Omega$ |
|                        |                     | Volume resistivity ($\rho_v$) = $4.88 \times 10^{14} \Omega\text{m}$ |
</code></pre>
<p>| <strong>Durability</strong>          |                     |                                              |
| Impact Resistance       | ASTM D1709* EN 14617-9*| 26.3 lbs (117N) 4,000 - 10,000 (J)            |
| Compressive Strength    | ASTM C170* EN 14617-15*| 21,312 - 27,133 psi 178.3-210.6 MPa          |
| Abrasion                | ASTM C501* ASTM C1243 EN 14617-4*| 216-696  Volume of chord: $V=132-244$ mm³  Groove length = 21.8 mm or $V=86$ mm³ |
| Freeze-Thaw Resistance  | ASTM C1026* EN 14617-5*| No defects after 15 freeze-thaw cycles No defects after 25 freeze-thaw cycles |
| Mohs Hardness Scale     |                     | 6.5-7                                       |</p>

**Stain, Chemical Resistance and Cleanability**

| Stain Resistance        | ANSI Z124.6         | Pass                                        |
| Wear and Cleanability   | ANSI Z124.6         | Pass                                        |
| Chemical Resistance     | ANSI Z124.6 EN 14617-10* | Pass Class $C_a$ |

**Notes:** Test reports and certifications can be viewed at www.caesarstoneus.com.

- *Results represent a partial series range.*
- **Some models require scrubbing to remove stains.**
Pure White 1141
Phillip Lim & Saks Company, NY
Design by Mancini Duffy
### Thermal Properties

<table>
<thead>
<tr>
<th>Test Performed</th>
<th>Test Standard</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear Thermal Expansion</td>
<td>ASTM D696</td>
<td>-30 to +30°C: $1.3 - 1.9 \times 10^{-5}$ cm/cm/°C</td>
</tr>
<tr>
<td></td>
<td>EN 14617-11'</td>
<td>-30 to +30°C: $2.1 \times 10^{-6}$ (°C$^{-1}$);</td>
</tr>
</tbody>
</table>
|                                |               | -30 to +60°C: $2.7 \times 10^{-6}$ (°C$^{-1}$)                         | *
| Thermal Conductivity           | EN 12664/ISO 8301' | 1.75 W/m. •°K (mean T of 10°C)                                        | *
| Thermal Shock                  | EN 14617-6'   | No visual defects after 10 cycles                                      |
| Boiling Water Resistance       | NEMA LD3-3.5  | Pass                                                                   |
| High Temperature Resistance    | NEMA LD3-3.6  | Pass                                                                   |

### Safety

<table>
<thead>
<tr>
<th>Test Performed</th>
<th>Test Standard</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigarette Test</td>
<td>ANSI Z124.6</td>
<td>Pass</td>
</tr>
<tr>
<td>Surface Burning</td>
<td>ASTM E84'</td>
<td>Class 1 and Class A</td>
</tr>
</tbody>
</table>
| Fire Classification  | EN 13501-1'   | Wall cladding: B-s1-d0; Flooring and stairs: B-fl-s1                   | *
| Static Coefficient of Friction | ASTM C1028' | As received — Dry: 0.8; Wet: 0.6; As renovated — Dry: 0.9; Wet: 0.6         |
| Slip Resistance      | DIN 51130'    | Oil wet ramp: R9-10; Wet barefoot ramp: C                              |
|                      | DIN 51097'    | Wet: 13-21 SRV; Dry: 43-53 SRV; Four S rubber pendulum: 25-30 BPN    |
|                      | EN 14231'     | Wet barefoot ramp: B                                                   |
|                      | AS/NZS 4586*  | Oil wet ramp: R10                                                      |

### Certifications and Approvals

<table>
<thead>
<tr>
<th>Test Performed</th>
<th>Test Standard</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 14001</td>
<td>Environmental Management Systems</td>
<td>Certified by IQNet Certificate # IL-44679</td>
</tr>
<tr>
<td>ISO 9001</td>
<td>Quality Systems – Model for Quality Assurance in Production, Installation, and Servicing</td>
<td>Certified by IQNet Certificate # IL-29318</td>
</tr>
<tr>
<td>OHSAS 18001</td>
<td>Health and Safety Systems</td>
<td>Certified by IQNet Certificate # IL-43226</td>
</tr>
<tr>
<td>Kosher</td>
<td>Certified by Rabbi Yisrael Rozen, the Zomet Institute</td>
<td>Certificate # 58-003-523-6</td>
</tr>
<tr>
<td>GREENGUARD</td>
<td>Greenguard &amp; Greenguard Gold</td>
<td>Caesarstone is a low-emitting material. Certificate # 5464-410 &amp; 5464-420</td>
</tr>
<tr>
<td>Scientific Certification Systems (SCS)</td>
<td>Recycled Content</td>
<td>Certified by SCS See page 11</td>
</tr>
<tr>
<td>New York City Materials and Equipment Acceptance (MEA)</td>
<td>Approved by City of New York</td>
<td>MEA 202-08-M</td>
</tr>
<tr>
<td>ANSI/NSF Standard 51</td>
<td>Food Equipment Materials</td>
<td>Listed by NSF Safe to use in food preparation areas.</td>
</tr>
<tr>
<td>Declare</td>
<td>LBC Compliant</td>
<td>International Living Future Institute Complies with the Living Building Challenge Red List.</td>
</tr>
</tbody>
</table>

**Notes:** Test reports and certifications can be viewed at www.caesarstoneus.com.

* Results represent a partial series range.

** Some models require scrubbing to remove stains.
Fabrication and Installation

General

Caesarstone can be fabricated and installed in much the same manner as natural stone. A Caesarstone Fabrication and Installation Manual is available upon request. Standard industry references can also be consulted: The Marble Institute of America’s Dimension Stone Design Manual provides reliable information for many types of interior stone construction, and the Tile Council of America’s Handbook for Ceramic Tile Installation has recommendations for stone tile installation.

Shipping, Storage, and Handling

Handle Caesarstone with care to avoid breakage or damage. Transport and store in racks in the near-vertical position to prevent warping. Keep finished face toward finished face, and protect against rubbing. Store inside, away from direct exposure to sun, and between 25°F and 130°F (−4°C and 54°C).
Fabrication

Use of a Certified Caesarstone Fabricator is required.

Observe the following guidelines:

• Cut and polish Caesarstone with water-cooled power tools.
• Lay out materials to minimize joints and to avoid L-shaped pieces.
• Verify field measurements and inspect material for defects prior to fabrication.
• Inside corners should have $\frac{3}{8}$ inch (10mm) minimum radii to reduce potential for crack propagation.
• Substrates supporting quartz surfaces should be plumb, level, and flat to within $\frac{1}{16}$ inch in 10 feet (1.6mm in 3048mm). Supports and blocking should be securely installed.
• Provide fabricator with accurate templates showing cutouts required for installation of items installed on or penetrating through Caesarstone.
Edge Details

Common

- Double Radius
- Bevel
- Double Bullnose
- Miter Edge
- Bevel Square
- Radius

Ornate

- Ogee Bullnose
- Ogee Square Step
- Ogee Bullnose Step
- Triple Egg
- Triple Bullnose
- Triple Ogee

* More edge details are available
Installation over Countertops

Caesarstone must be supported on a strong perimeter frame or on a full deck support of plywood that will keep it flat within \(\frac{1}{16}\)" (1.6mm) per 18" (3000mm) and support the countertop weight for the useful life of the top.

- Front-to-back support within the cabinet should be provided every 24". Plan for front-to-back support strips 2.5"-wide (40mm–100mm) to coincide with cutouts and periodic support. Support must be provided under all countertop joints.

- The use of \(\frac{3}{4}\)" material requires the use of a minimum \(\frac{3}{8}\)" thick plywood sub top if the edge detail is 1¼" or greater. Some types of cabinets may require the use of \(\frac{3}{4}\)" plywood for European-style frames and supports.

- Leave \(\frac{1}{8}\)" (3mm) minimum clearance between the plywood and built-up edges.

**NOTE:** Support is required across the top of a dishwasher space and over an under-counter oven.

Supports for Overhang

As a general guideline, support is required for overhangs of Caesarstone. The following guidelines are for standard cabinets 24" in depth.

<table>
<thead>
<tr>
<th>Depth of Overhang</th>
<th>2CM ((\frac{3}{4})&quot;&quot;) with (\frac{3}{8})&quot; sub top</th>
<th>2CM ((\frac{3}{4})&quot;&quot;)</th>
<th>3CM (1¼&quot;&quot;)</th>
<th>RECOMMENDED SUPPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;8&quot; (200mm)</td>
<td>&lt;12&quot; (300mm)</td>
<td>&lt;16&quot; (40mm)</td>
<td>No additional support required</td>
<td></td>
</tr>
<tr>
<td>8–16&quot; (200–400mm)</td>
<td>12–20&quot; (300–500mm)</td>
<td>16–24&quot; (400–600mm)</td>
<td>Brackets required at 24&quot; (600mm) intervals</td>
<td></td>
</tr>
<tr>
<td>&gt;16&quot; (400mm)</td>
<td>&gt;20&quot; (500mm)</td>
<td>&gt;24&quot; (600mm)</td>
<td>Legs, columns or panels required at 24&quot; (600mm) intervals</td>
<td></td>
</tr>
</tbody>
</table>

Linen 2230
Installation

A trial installation is recommended to ensure that fabricated components fit accurately and to make necessary adjustments. Allow gaps for expansion of not less than \( \frac{1}{8} \) inch per 5 feet (1.6mm per 1.5m) when Caesarstone is installed between walls or other fixed conditions. Clean surfaces to receive adhesives and apply adhesives as described below. Set Caesarstone gently into position. In many conditions of use, Caesarstone should be adequately secured with 100% clear silicone adhesive only.

Adjacent pieces of Caesarstone should be tight fitting, level, and neat. Cement adjacent pieces together with high quality polyester or epoxy stone adhesives. Use products that are recommended by their manufacturers for conditions of use. Follow stone adhesive manufacturer's instructions. Stone adhesive should be tinted to match or complement the Caesarstone color. Fill joints and clamp or brace Caesarstone in position until stone adhesive sets. Seal joints between backsplashes and countertops and around tub and shower enclosures with high quality 100% silicone.

Caesarstone recommends the use of adhesives, sealants, and solvents that are compatible with sustainable construction practices.

Precautions  Observe good stone working and safety practices at all times and comply with applicable building codes and regulations. While rigorous quality control is maintained in the manufacture of Caesarstone, minor variations in appearance and aggregate distribution can occur. Adjacent pieces should be from the same batch and inspected for visual compatibility before fabrication.
Availability

Stocked colors and textures are inventoried in convenient locations throughout North America. Caesarstone is also available internationally.

**Costs**  Caesarstone is priced below the cost of many natural stones. Additional savings result from Caesarstone's strength that can simplify fabrication, reduce breakage, and allow for the use of thinner materials. Its durability and low maintenance requirements provide further lifecycle economies. Current pricing is available by contacting Caesarstone or Caesarstone distributors.
Polished Surfaces  Its hard, nonporous polished surface makes Caesarstone simple to clean. In most cases, soap and water or a mild detergent is all that is required to maintain its luster. While Caesarstone does not require sealants or waxes to maintain its luster.

If required, adhered materials like food, gum and nail polish can be scraped away with a plastic putty knife; marks left by the putty knife can be removed with Soft Scrub® Gel with Bleach. Squeeze a small amount on a soft damp cloth and wipe the surface, then rinse thoroughly with clean water to remove residue.

Honed, Concrete, and Motivo™ Finishes  Please understand that Honed, Concrete and Motivo™ finishes will require more daily maintenance than our polished finishes. Since there is more exposed surface area with these finishes, metal marks, fingerprints and other signs of daily living will show on these materials. Most of these marks can be easily removed with little effort and cleaning products such as Soft Scrub® Liquid Gel with Bleach. Squeeze a small amount on a soft damp cloth and wipe the surface, then rinse thoroughly with clean water to remove residue.

Find Out More. For further information about Caesarstone Quartz Surfaces, please visit our website at www.caesarstoneus.com.
Lifetime Warranty

As of February 15, 2008 – Lifetime residential warranty and a 10-year limited commercial warranty are available for Caesarstone. Caesarstone warrants that its quartz surfacing material complies with Caesarstone’s published product data.

Because Caesarstone does not have control of fabrication or installation, Caesarstone disclaims incidental and consequential damages and buyer’s sole remedy is repair or replacement of defective material at Caesarstone’s discretion.

Some restrictions apply. Copies of our Lifetime Warranties are available at authorized dealers.
Learn more by visiting www.caesarstoneus.com or calling 877.978.2798.