

SECTION 12 36 00

COUNTERTOPS

PART 1 – GENERAL

1.1 PURPOSE

- A. This guideline is intended to provide useful information to the Professional Service Provider (PSP) to establish a basis of design. PSP is to apply the principles of this section such that the University of Texas at Arlington (UTA) may achieve a level of quality and consistency in the design and construction of their facilities. Deviations from these guidelines must be approved by UTA and may require justification through Life Cycle Cost (LCC) analysis and submitted to UTA for approval.

1.2 LESSONS LEARNED AND DESIGN CONSIDERATIONS

- A. **Use chemical resistant laminate in laboratory settings; otherwise, use standard or general purpose laminate for other spaces unless a solid surface or stone material is specified.**
- B. **Materials specific to location:**
 - 1. **Plastic Laminate (P-lam) –**
 - a. **Break room cabinet countertops in areas which do not need an executive level of aesthetics and where the budget does not permit other materials.**
 - b. **Restroom vanity countertops in areas which do not an executive level aesthetics and where the budget does not permit other materials.**
 - c. **Classroom cabinet countertops.**
 - 2. **Solid Surfacing –**
 - a. **Break room cabinet countertops in areas requiring an executive level of aesthetics.**
 - b. **Restroom vanity countertops in areas requiring an executive level of aesthetics.**
 - 3. **Natural Quartz and Resin Composite –**
 - a. **Break room cabinet countertops in areas requiring an executive level of aesthetics.**
 - b. **Restroom vanity countertops in areas requiring an executive level of aesthetics.**

1.3 SECTION INCLUDES

- A. Countertops for architectural cabinet work.
- B. Wall-hung counters and vanity tops.

1.4 RELATED REQUIREMENTS

- A. Section 06 41 00 - Architectural Wood Casework.
- B. Section 11 53 00 - Laboratory Equipment: Work surfaces inside fume hoods.

1.5 REFERENCE STANDARDS

- A. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; current edition.
- B. ISFA 2-01 – Classification and Standards for Solid Surfacing Material; current edition.
- C. ISFA 3-01 – Classification and Standards for Quartz Surfacing Material; current edition.
- D. MIA (DSDM) - Dimensional Stone Design Manual; VII, current edition.
- E. NEMA LD 3 - High-Pressure Decorative Laminates; current edition.
- F. PS 1 - Structural Plywood; current edition.

1.6 SUBMITTALS

- A. See Division 01 for submittal procedures.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Specimen warranty.
- C. Shop Drawings: Complete details of materials and installation.
- D. Verification Samples: For each finish product specified, minimum size 6 inches square, representing actual product, color, and patterns.
- E. Test Reports: Chemical resistance testing, showing compliance with specified requirements.
- F. Maintenance Data: Manufacturer's instructions and recommendations for maintenance and repair of countertop

GUIDE SPECIFICATIONS FOR DESIGN AND CONSTRUCTION DOCUMENTS

surfaces.

1.7 QUALITY ASSURANCE

- A. Fabricator Qualifications: Same fabricator as for cabinets on which tops are to be installed.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.9 FIELD CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 - PRODUCTS

2.1 COUNTERTOPS

- A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS).
- B. Plastic Laminate Countertops: High-pressure decorative laminate (HPDL) sheet bonded to substrate.
 - 1. Laminate Sheet, Type __: NEMA LD 3, Grade HGS, 0.048 inch nominal thickness.
 - a. Finish: Matte or suede, gloss rating of 5 to 20.
 - b. Surface Color and Pattern: To be selected by Architect.
 - 2. Exposed Edge Treatment: Square, substrate built up to minimum 1-1/4 inch thick; covered with matching laminate.
 - 3. Back and End Splashes: Same material, same construction.
 - 4. Fabricate in accordance with AWI/AWMAC/WI (AWS), Section 11 - Countertops, Custom Grade.
- C. Solid Surfacing Countertops: Solid surfacing sheet or plastic resin casting over continuous substrate.
 - 1. Flat Sheet Thickness: 1/4 inch, minimum.
 - 2. Solid Surfacing Sheet and Plastic Resin Castings: Complying with ISFA 2-01 and NEMA LD 3; acrylic or polyester resin, mineral filler, and pigments; homogenous, non-porous and capable of being worked and repaired using standard woodworking tools; no surface coating; color and pattern consistent throughout thickness.
 - a. Finish on Exposed Surfaces: Matte, gloss rating of 5 to 20.
 - b. Color and Pattern: To be selected by Architect.
 - 3. Other Components Thickness: 1/2 inch, minimum.
 - 4. Exposed Edge Treatment: Built up to minimum 1-1/4 inch thick; square edge; use marine edge at sinks.
 - 5. Back and End Splashes: Same sheet material, square top; minimum 4 inches high.
 - 6. Skirts: As indicated on drawings.
- D. Natural Quartz and Resin Composite Countertops: Sheet or slab of natural quartz and plastic resin over continuous substrate.
 - 1. Flat Sheet Thickness: 1-1/4 inch, minimum.
 - 2. Natural Quartz and Resin Composite Sheets, Slabs and Castings: Complying with ISFA 3-01 and NEMA LD 3; orthophthalic polyester resin, mineral filler, and pigments; homogenous, non-porous and capable of being worked and repaired using standard woodworking tools; no surface coating; color and pattern consistent throughout thickness.
 - a. Factory fabricate components to the greatest extent practical in sizes and shapes indicated; comply with the MIA Dimension Stone Design Manual.
 - b. Finish on Exposed Surfaces: To be selected by Architect.
 - c. Color and Pattern: To be selected by Architect.
 - 3. Other Components Thickness: 3/4 inch, minimum.
 - 4. Back and End Splashes: Same sheet material, square top; minimum 4 inches high.

2.2 ACCESSORY MATERIALS

- A. Plywood for Supporting Substrate: PS 1 Exterior Grade, A-C veneer grade, minimum 5-ply; minimum 3/4 inch thick; join lengths using metal splines.
- B. Adhesives: Chemical resistant waterproof adhesive as recommended by manufacturer of materials being

GUIDE SPECIFICATIONS FOR DESIGN AND CONSTRUCTION DOCUMENTS

joined.

- C. Joint Sealant: Mildew-resistant silicone sealant, color to match countertop.

2.3 FABRICATION

- A. Fabricate tops and splashes in the largest sections practicable, with top surface of joints flush.
 - 1. Join lengths of tops using best method recommended by manufacturer.
 - 2. Fabricate to overhang fronts and ends of cabinets 1 inch except where top butts against cabinet or wall.
 - 3. Prepare all cutouts accurately to size; replace tops having improperly dimensioned or unnecessary cutouts or fixture holes.
- B. Provide back/end splash wherever counter edge abuts vertical surface unless otherwise indicated.
 - 1. Secure to countertop with concealed fasteners and with contact surfaces set in waterproof glue.
 - 2. Height: 4 inches, unless otherwise indicated.
- C. Solid Surfacing: Fabricate tops up to 144 inches long in one piece; join pieces with adhesive sealant in accordance with manufacturer's recommendations and instructions.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.2 INSTALLATION

- A. Securely attach countertops to cabinets using concealed fasteners. Make flat surfaces level; shim where required.
- B. Attach plastic laminate countertops using screws with minimum penetration into substrate board of 5/8 inch.
- C. Seal joint between back/end splashes and vertical surfaces.

3.3 TOLERANCES

- A. Variation From Horizontal: 1/8 inch in 10 feet, maximum.
- B. Offset From Wall, Countertops: 1/8 inch maximum; 1/16 inch minimum.
- C. Field Joints: 1/8 inch wide, maximum.

3.4 CLEANING

- A. Clean countertops surfaces thoroughly.

3.5 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Date of Substantial Completion.

PART 4 APPENDIX

4.1 PRODUCT DATA / CUT SHEETS

- A. Wilsonart Laminate – Commercial
- B. Wilsonart Chemsurf Chemical-Resistant Laminate
- C. Pionite, Standard Laminate / ChemGuard Chemical Resistant Laminate
- D. Lamin-Art, General Purpose High-Pressure Decorative Laminate
- E. Dupont Corian, Solid Surface
- F. Wilsonart Solid Surface
- G. Caesarstone, Engineered Quartz surfaces

END OF SECTION

 Wilsonart®
LAMINATE



OUR SUSTAINABILITY JOURNEY

For more than 60 years, being a responsible member of the global community has been woven into all aspects of our company culture. **Our commitment** is to provide high quality products, reliable services, secure jobs, and community support.

Zero Waste



No unnecessary materials
or processes

Zero Impact



Environmentally
responsible materials

Zero Barriers



Individual growth
and engagement

OUR ENVIRONMENT

- ✓ Continuous product/process improvement
- ✓ Minimal impact on environment
- ✓ Thousands of SKUs of FSC® Mix Credit Certified HPL
- ✓ First North American laminate manufacturer to achieve Forest Stewardship Council® Chain of Custody Certification

PROCESSES

We strive to ensure our manufacturing and distribution processes leave minimal impact on the environment. Our sustainability programs include energy management, waste management, eco-friendly product transportation, and raw materials partnerships with suppliers who are equally committed to sustainable business practices. Visit wilsonart.com/sustainability to learn more.

PRODUCTS

Wilsonart continually innovates the laminate surface, seeking to improve sustainability without sacrificing performance. 30% of fiber used to make Wilsonart® Laminate comes from recycled sources. The recycled content in Wilsonart Laminate is certified by SCS Global Services. Our laminates are also UL GREENGUARD Gold Certified for low chemical emissions, which can assist you in earning LEED® certification. All standard Wilsonart Laminates are available on request as FSC® Mix Credit, SCS-COC-002415. Wilsonart is proud to be the first adhesive manufacturer to have its low-emitting PVA and woodworking adhesives recognized by UL's GREENGUARD Certification Program for indoor air quality. wilsonart.com/laminate-certificates.





CHEMSURF® CHEMICAL-RESISTANCE

Specifically designed for environments where chemicals and harsh cleaners are used, Wilsonart® Chemsurf® provides exceptional chemical resistance without sacrificing design or style.



FIRE-RATED

This long-lasting, beautiful laminate meets or exceeds the fire codes across the country and comes in a wide range of patterns and colors.



HIGH WEAR

Low-cost and built to take the extra wear that comes with high traffic commercial projects, Wilsonart® High Wear Laminate boasts more than five times the industry standard for abrasion resistance.



WILSONART X YOU

Customize any surface with Wilsonart X You. Bring us your designs, and we'll create a laminate that is uniquely yours. Visit wilsonart.com/wilsonartxyou.



VIRTUAL DESIGN LIBRARY

Reach beyond the wallboard with Wilsonart's expanded design library. From photo realistic imagery to abstract and artistic graphics, Wilsonart offers a wide range of patterns to fit your needs. Learn more at wilsonart.com/vdl.



RE-COVER™

RE-COVER™ combines vertical grade laminate and adhesive to create an alternative time – and money – saving option to standard laminate installation and fabrication.



COMPACT

Available in thicknesses from 1/10" to 1", Wilsonart® Compact Laminate is a durable solution for high-impact surfaces such as lockers and cabinets, elevator cabs, and toilet partitions.



CHALKBOARD

Wilsonart® Chalkboard is the perfect solution for any space or application that demands a durable and affordable writing surface, and unlike other chalkboard surfaces, it requires no special maintenance.



MARKERBOARD

The ideal laminate writing surface for classrooms, business and administrative offices, message centers, athletic facilities, or as a menu board.



COORDINATED SURFACES

The best-matched HPL, TFL Panel and Edgeband solution in surface design and texture. Visit wilsonart.com/cs.



SOLICOR™ & SOLICOR™ COMPACT

Wilsonart® Solicor™ is a specialty laminate created with a solid color core – eliminating the troublesome “brown line” of traditional laminates. A new range of our popular neutral colorthrough designs are also available in thick Solicor™ Compact laminate.



TRACELESS™

Wilsonart® Traceless™ Laminate is a high-tech, fingerprint-resistant surface that refuses smears, smudges and streaks. Accompanied by a velvety texture, your senses will swoon over this soft-to-the-touch, super matte finish.



Where Function + Form Really Add Up.

When you need to specify a surface that is resistant to the harshest of acids, bases and solvents – but not at the expense of design and style – Wilsonart® Chemsurf® Chemical-Resistant Laminate answers the challenge. Specifically designed for highly corrosive environments, Chemsurf provides exceptional chemical resistance in most Wilsonart® Laminate standard designs. This versatile laminate is not only lighter in weight, but is often less expensive upfront and over its life cycle than slate, stainless steel or epoxy. It is ideal also for applications where harsh cleaning agents may be over-used and damage other decorative surfaces.

Key Features

- Type 390 is intended for horizontal, vertical and postformed work surfaces, including those featuring a simple radiused edge. Such postforming eliminates seams which are otherwise vulnerable to chemical attack. Type 390 may be applied to any horizontal or vertical surface where a functional, durable, decorative material should also be chemical-resistant.
- Postformable for no-drip edges
- Available in 4' and 5' widths, and 8', 10' and 12' lengths
- #60 Matte finish texture
- Available in most Wilsonart® Laminate standard designs. See availability at Wilsonart.com.

Certification Compliance

- UL GREENGUARD Gold Certification for Low Chemical Emissions
- Scientific Equipment & Furniture Association No. 8.1 approved
- MEA 262-95-M, New York City Materials and Equipment Acceptance
- FSC Solutions available on request
- ANSI/NEMA LD3-2005 for HGP Postforming Laminate
- ISO 4586 Standards

Recommended Applications

- Cabinets, case work, counters and countertops in chemistry, biology and pharmaceutical laboratories
- Hospitals, medical/dental examination rooms
- Dialysis centers
- Nurses' stations and pathologists' work rooms
- School labs
- Photography labs and darkrooms
- Beauty salons
- Product testing facilities

Specify Wilsonart Chemsurf Laminate

Pattern #: _____ Finish: #60

Pattern Name: _____ Product Type: 390





High Pressure Laminates



A Panolam Surface Systems Brand.



Technical Specifications

Technical information listed below applies to high pressure decorative laminates. For additional technical data, specification sheets, and three-part CSI, visit pionite.com.

STANDARD LAMINATE

Pionite Standard Laminate is designed for either horizontal, vertical, or postforming applications. Typical uses include countertops, tables, vanities, interior doors, cabinets, contract furniture, and retail store fixtures. Three standard grades of Pionite® laminate are suitable for most applications.

G48 General Purpose Grade

Nominal Thickness 0.048"/1.2 mm (NEMA HGS). Most often used in horizontal applications where high-impact resistance and a durable, decorative surface is required.

F39 Postforming Grade

Nominal Thickness 0.039"/1.0 mm (NEMA HGP). Designed for manufacturing countertops and other horizontal surfaces where the laminate may be heated and rolled over the substrate edge to eliminate seams.

F28 Postforming Grade

Nominal Thickness 0.028"/0.7 mm (NEMA VGP). Designed for surfaces where impact resistance is less critical.

SPECIALTY PRODUCTS

ThruColor™ HPL Laminate

ThruColor HPL is intended for use in applications where the edge of laminate contributes to the aesthetics of the final product. Pionite's elegant manufacturing process provides a second generation color-through laminate that is more flexible and much less likely to chip than other color-through laminates. ThruColor HPL colors and their corresponding colors in standard Pionite are not exact matches. Sample evaluation is recommended. Ideal for high-wear horizontal and vertical applications such as high-end furniture.

ChemGuard: Chemical Resistant Laminate

Available in thicknesses up to 1" (25.4 mm).

Pionite ChemGuard incorporates the decorative features of high pressure laminate into a durable, chemical resistant surfacing material. The unique manufacturing process of Pionite ChemGuard results in a product with excellent chemical resistant properties. This feature ensures that the ChemGuard surface is more chemical resistant than competitive laminate. Pionite ChemGuard's superior chemical resistant surface cannot be softened with heat for postforming. ChemGuard is ideal for education labs, culinary testing facilities, photographic darkrooms, nurses stations, medical, dental, and veterinary work areas and mortuaries. Thicker ChemGuard laminate can be used as structural components in laboratory bench tops precluding the use of a substrate.



ONE CORPORATE DRIVE, SUITE 725
SHELTON, CT 06484 | 877.726.6526
WWW.PANOLAM.COM



PRODUCT DATA SHEET

APRIL 2014

GENERAL PURPOSE HIGH-PRESSURE DECORATIVE LAMINATE

PRODUCT DESCRIPTION

Lamin-Art® brand general purpose high-pressure decorative laminate. It is suitable for both horizontal and vertical surfaces requiring superior wear, impact, and stain resistance.

The Pearlescence®, Burlap, and Abacá high-pressure decorative laminates have different product specifications than general purpose high-pressure decorative laminate. Please refer to the specific product data sheets for Pearlescence, Burlap, and Abacá high-pressure decorative laminates available online at www.laminart.com.

RECOMMENDED APPLICATIONS

Lamin-Art® general purpose decorative laminate is suitable for both horizontal and vertical interior applications in commercial interiors where the surface must be both functional and durable. Typical horizontal applications include counter and table tops, contract furniture and casework, as well as store fixtures. Typical vertical applications can include wall paneling, interior doors, elevator cab interiors, cabinetry, casino slot bases, and bar fronts. **Lamin-Art brand high-pressure decorative laminate is for interior use only and is not recommended for direct application to plywood, steel, aluminum, fiber reinforced plastic, plaster, gypsum board or concrete. Do not use in areas exposed to temperatures in excess of 275°F (135°C) or high humidity.**

PRODUCT COMPOSITION

Lamin-Art® general purpose high-pressure decorative laminate is manufactured by laminating phenolic resin-impregnated kraft sheets with melamine resin-impregnated decorative and overlay sheets. The lamination is performed under a minimum pressure of 1,000 psi (2,068 kPa) at a temperature of approximately 300°F (149°C).

CONDITIONING

Lamin-Art® general purpose laminate panels may be sensitive to changes in temperature and humidity conditions. If adhered with excess moisture present, there is a risk of cracking and open seams due to shrinkage, particularly in winter conditions or when relative humidity is low. Prior to adhesive application to a suitable substrate, Lamin-Art panels should be carefully conditioned. (The recommended method of conditioning is to store panels and substrates together in the same room for a period of at least 72 hours with adequate air movement, under stable temperature and humidity conditions as close as possible to actual conditions at the installation site.) **Recommended conditioning for all panels is at approximately 75° F (24° C), with 45-55% relative humidity.**

STORAGE AND HANDLING

Lamin-Art® general purpose high-pressure decorative laminate sheets should be stored horizontally, back-to-back and face-to-face, with the top sheet turned face down and a caul board placed on top to preserve the material. Storing the panels in an atmospherically stabilized room is recommended to avoid extreme fluctuations of moisture.

Lamin-Art recommends that full-sized sheets be carried by two people with the decorative facing upward whenever possible.

INSTALLATION

All surfaces to be laminated should be inspected prior to installation to ensure that they are clean and free of surface defects. The protective coating (peel coat) should be removed prior to inspection. All defects should be corrected before application. Material, equipment, and workmanship should conform to industry-standard practices, conditions, procedures, and recommendations specified by National Electrical Manufacturers Association (NEMA) LD3-2005 Annex A, Architectural Woodworking Institute (AWI) Quality Standards, and the American National Standards Institute (ANSI) 161.2-1979 standards.

SUBSTRATES

Lamin-Art® general purpose high-pressure laminate should be adhesively bonded to a substrate, or to a sheet substrate forming a new composite component which will be used in other assemblies. Suitable substrates may include but are not limited to particleboard (minimum density 45 pounds/cubic foot), medium-density fiberboard (MDF) or high density fiberboard (HDF). Materials with insufficient dimensional stability or internal bond strength such as plywood, steel, aluminum, fiber reinforced plastic, plaster, gypsum board, and similar materials are not recommended for use as substrates. Concrete is not a recommended substrate.

ADHESIVES

Surfaces to be adhered must be sound, thoroughly dry, clean, free of dust, wood chips, oil and other types of surface contamination. When a laminating press is not available, such as an on-site installation, contact adhesives may be used, however this method should be restricted to small areas only. Ensure full adhesive coverage of both surfaces to be bonded and apply a pressure of at least 50-75 pounds per square inch until full bonding is achieved. Spot bonding should never be used. In all cases with all types of adhesives comply with the adhesive manufacturer's usage recommendations.

BACKING SHEETS

To avoid warping of a panel assembly faced with Lamin-Art® general purpose high-pressure laminates, stresses resulting from thermal and hygroscopic forces on both sides of the assembly must be balanced. The best results are obtained when a backing sheet, with characteristics comparable to the face sheet, is laminated to it. Alternatively, balance may be achieved using an ordinary high pressure laminate of the same thickness on the back side of the assembly. Narrow panels for wall applications, held rigidly in place by a securing system can have just a face side if the back side is protected from excess humidity and covered with a suitable sealant such as paint, lacquer, or a vapor-retarding varnish.

MAINTENANCE

Lamin-Art® general purpose high-pressure decorative laminate may be cleaned with a damp cloth, warm water, and a mild soap or household cleaning products. Cleansers that contain abrasives, acids, or alkalis may damage the decorative surface and are not recommended. Stubborn stains may require the use of hypochlorite bleach followed by a clean water rinse.

WARRANTY

Lamin-Art®, Inc. expressly warrants that its products are free of defects in material and workmanship, are of merchantable quality, and meet or exceed performance standards for high-pressure decorative laminates as established by NEMA, LD 3-2005. Please note that some of our products contain special pearlescent inks and do not meet NEMA standards for abrasion/scratch resistance in all finishes. Inasmuch as Lamin-Art has no control over the end products fabricated with the materials sold, no warranty or guarantee is expressed or implied, other than those set forth above, and is limited to the replacement cost of the material alone.

Questions? Call Customer Service at 800.323.7624.

SPECIFICATIONS

SIZES	
48" X 96"	THESE ARE THE NOMINAL DIMENSIONS OF REGULARLY STOCKED ITEMS.
48" X 120"	OTHER SIZES MAY BE AVAILABLE UPON REQUEST.
FINISHES	
CATALYST™ (B)	A GENTLY-ETCHED DIMENSIONAL FINISH CHARACTERIZED BY RANDOM SPIRALS REMINISCENT OF BURNISHED METAL (LRV 18.0).
CHRYSALIS® (A)	A GENTLY-ETCHED PATTERN WHICH CREATES A BRILLIANCE AND TEXTURE SIMILAR TO THAT OF BRUSHED METAL (LRV 10.0). RECOMMENDED FOR VERTICAL / LOW-WEAR APPLICATIONS ONLY.
CORRUGATED (C)	A DIMENSIONAL SURFACE OF ALTERNATING FURROWS AND RIDGES RUNNING LENGTHWISE ALONG THE SHEET, FEATURING A SOFT FINISH WITH LOW REFLECTIVE PROPERTIES (LRV 3.0). RECOMMENDED FOR VERTICAL / LIGHT-DUTY APPLICATIONS ONLY.
CRISSCROSS (L)	A SUBTLE TACTILE GRID OF FINE INTERSECTING LINES RUNNING LENGTHWISE AND WIDTHWISE ALONG THE SHEET (LRV15.0). RECOMMENDED FOR VERTICAL / LOW-WEAR APPLICATIONS ONLY.
FINE GRAIN (I)	THIS SUBDUED WOOD FINISH WITH LOW REFLECTIVE PROPERTIES ACHIEVES ITS UNIQUE EFFECT BY BLENDING A MORE REALISTIC, VERTICAL GRAINING WITH A SUBTLE PORE STRUCTURE (LRV 9.0).
GLOSS (G)	A SMOOTH MIRROR-LIKE FINISH SUITABLE FOR APPLICATIONS WHERE HIGH REFLECTIVITY IS DESIRED (LRV 100.00).
SUPERMATTE (SM)	A SOFT TEXTURED SURFACE WITH LOW REFLECTIVE PROPERTIES (LRV 2.0).
RELIEF (FU)	THE TACTILE RELIEF OF THE ACTUAL MATERIALS EMBEDDED IN THE LAMINATE SHEET (ABACA LRV 10.0, BURLAP LRV 6.0).
TEXTURED (T)	A NON-DIRECTIONAL MATTE FINISH WITH MODERATE REFLECTIVE QUALITIES (LRV 10.0).
VELVA-TEX (VT)	A SOFT FINISH SIMILAR TO HAND-RUBBED OILED HARDWOOD (LRV 16.0).
GRADES	
STANDARD GRADE GP48 HSG (.048"/1.2 MM)	THE MOST COMMONLY USED. RECOMMENDED FOR HORIZONTAL AND VERTICAL APPLICATIONS WHERE MAXIMUM IMPACT-RESISTANCE AND DURABILITY ARE REQUIRED. STANDARD GRADE GP48 MATERIAL CAN BE COLD BENT TO A RADIUS NO SMALLER THAN 12" (304.8 MM). WE DO NOT RECOMMEND USING HEAT TO FORM PEARLESCENCE® ITEMS TO A SMALLER RADIUS.
VERTICAL GRADE GP28 VSG (.028"/0.7 MM)	SUITABLE FOR APPLICATIONS WHERE THE ECONOMIES OF A THINNER MATERIAL ARE DESIRABLE AND IMPACT-RESISTANCE IS NOT CRITICAL. OFFERS THE SAME SURFACE DURABILITY AS THICKER GRADES. VERTICAL GRADE GP28 MATERIAL CAN BE COLD BENT TO A RADIUS NO SMALLER THAN 7" (177.8 MM). WE DO NOT RECOMMEND USING HEAT TO FORM PEARLESCENCE® ITEMS TO A SMALLER RADIUS.
POSTFORM GRADE (.028"/0.7MM)	THIS SPECIALIZED GRADE IS MANUFACTURED SPECIALLY FOR THOSE APPLICATIONS THAT REQUIRE THE MATERIAL TO BEND TO A RADIUS SMALLER THAN 5/8" WITH THE APPLICATION OF HEAT.

PERFORMANCE

Lamin-Art® products have been subjected to trials by independent, nationally recognized laboratories in accordance with National Electrical Manufacturers Association (NEMA) standardized testing procedures (Pub. LD 3-2005, Section 2). The following test results were obtained.

NEMA TEST	TEST RESULTS FOR LAMIN-ART	NEMA STANDARD FOR GENERAL PURPOSE HPL
THICKNESS STANDARD GRADE VERTICAL GRADE	0.048" (1.2 MM) 0.028" (0.7 MM)	0.048" +/- 0.005" (1.2 MM +/- 0.13 MM) 0.028" +/- 0.004" (0.7 MM +/- 0.10 MM)
APPEARANCE	NO ABC DEFECTS	NO ABC DEFECTS
LIGHT RESISTANCE	SLIGHT EFFECT	SLIGHT EFFECT
CLEANABILITY (CYCLES)	7	20 MAX.
STAIN RESISTANCE REAGENTS 1-10 REAGENTS 11-15	NO EFFECT NO EFFECT	NO EFFECT SLIGHT EFFECT
BOILING WATER RESISTANCE	NO EFFECT	NO EFFECT
HIGH TEMPERATURE RESISTANCE	NO EFFECT	SLIGHT EFFECT
BALL IMPACT RESISTANCE STANDARD GRADE VERTICAL GRADE	50" (1270 MM) 20" (500 MM)	50" (1270 MM) 20" (500 MM)
DART IMPACT RESISTANCE STANDARD GRADE VERTICAL GRADE	20" (500 MM) 8" (200 MM)	20" (500 MM) 8" (200 MM)
DIMENSIONAL STABILITY STANDARD GRADE MACHINE DIRECTION CROSS DIRECTION VERTICAL GRADE MACHINE DIRECTION CROSS DIRECTION	.33% .9% .7% 1.2%	.5% MAX. .9% MAX. .7% MAX. 1.2% MAX.
SURFACE WEAR RESISTANCE (CYCLES)	GREATER THAN 400 CYCLES *PLEASE SEE EXCEPTIONS.	400 CYCLES MIN.

DUPONT™ CORIAN® PRODUCT OVERVIEW

PRODUCT NAME

DuPont™ Corian® Solid Surface

MANUFACTURER

DuPont Building Innovations
Chestnut Run Plaza 735/2175-1
974 Centre Road
PO Box 2915
Wilmington, DE 19805
Toll free 1-800-4-CORIAN (1-800-426-7426)
corian.na.dupont.com

PRODUCT DESCRIPTION

Basic use

DuPont™ Corian® solid surface is an advanced composite product used as an architectural and design material in a variety of residential and commercial applications. Corian® solid surface offers design versatility, functionality and durability. Supplied in sheets and shapes, it can be fabricated with conventional woodworking tools into virtually any design. It is the original solid surface material made only by DuPont. It is widely accepted as a material for countertops, vanity tops, tub/shower walls, kitchen sinks, vanity basins and laboratory bench tops in numerous markets including lodging, healthcare, banks, boutiques, restaurants.

Composition

DuPont™ Corian® solid surface is a solid, nonporous, homogeneous surfacing material, composed of $\approx 1/3$ acrylic resin (also known as polymethyl methacrylate or PMMA), and $\approx 2/3$ natural minerals. These minerals are composed of aluminum trihydrate (ATH) derived from bauxite, an ore from which aluminum is extracted. For more information on the composition of the material, please consult the Corian® solid surface Material Safety Data Sheets (MSDS) available via the msds.dupont.com website or via your local supplier.

STANDARD PRODUCTS

DuPont™ Corian® Sheets

Available in various standard thicknesses, easily cut to size by professional fabricators.

All colors in the standard color palette are available in $1/2$ " x 30" x 144" (12 x 760 x 3658 mm) sheets. Selected colors may include additional dimensional options: 36.6" (930 mm) width; 72", 98", or 120" (1829 mm, 2490 mm, or 3050 mm) length; $1/4$ " and $3/4$ " (6 and 19 mm) thickness. Please consult the DuPont™ Corian® website, corian.na.dupont.com, for more details.

DuPont™ Corian® Sinks and Lavatories

A wide range of DuPont™ Corian® sinks and lavatories is available in 5 solid colors for custom integration with Corian® sheets to create a continuous surface. This includes vanity basins in solid colors for bathrooms, and single and double sinks for kitchens, bars and small wash-up areas, hospitals and laboratories. Seamed undermounting eliminates rims that trap dirt and water, minimizing cleaning and maintenance and providing improved hygiene. Care, maintenance and installation instructions are included in the packaging. Appropriate accessory products, including installation hardware, are available and recommended for residential kitchens only.

The Colors of Corian® Solid Surface

A broad palette of colors allows for an almost unlimited working palette. You can choose a single color; a neutral basis for design; or experiment with eye-catching harmonies. DuPont™ Corian® solid surface can also be used as inlays, accents, or as a versatile complement to other materials like metal, wood, stone, etc.

For complete information on colors, refer to the latest Corian® colors leaflet or to corian.na.dupont.com. Hues, patterns and textures are related by style and character. Dark, heavily pigmented Corian® colors will show scratches, dust and ordinary wear and tear more readily than lighter, textured colors. As a result, these colors are recommended for applications where surface contact is light or for use as inlays and accent colors. However, the DeepColor™ series incorporates an innovative, proprietary technology that delivers greater depth of color and increased durability compared to other dark Corian® colors.



DUPONT™ CORIAN® PRODUCT OVERVIEW

Custom Sheets

DuPont can manufacture Corian® sheets in custom colors, patterns and dimensions, within manufacturing capability limits and based on a minimum order quantity.

Limitations

Although DuPont™ Corian® solid surface can withstand high temperatures, it should be protected against direct heat with hot pads or heat shields.

Use of 1/4" (6 mm) sheets should be restricted to vertical applications or certain furniture applications only. The choice between 1/2" and 3/4" (12 mm and 19 mm) is generally based on performance and cost considerations.

Due to the complex blending of natural minerals and man-made acrylics, slight color variations may be found within a sheet or from sheet to sheet of same color. Therefore, checking for color matching is an essential element of sheet inspection before starting fabrication.

DuPont™ Corian® solid surface is nonporous so spills and stains remain on the surface. However, some chemicals can stain, discolor or damage the surface of Corian® solid surface. These chemicals include strong acids (like concentrated sulfuric acid), ketones (like acetone), chlorinated solvents (like chloroform) or strong solvent combinations (like paint remover). The extent of the damage will depend on the length of contact. Except for strong solvents such as paint remover, short periods of contact will not usually cause severe damage to Corian® solid surface. Acid drain cleaners should not be used as they can damage both Corian® solid surface and any plastic plumbing beneath. Corian® solid surface is not recommended for use in photographic processing laboratories. More information can be found in [DuPont™ Corian® Chemical Resistance](#) (K-27406). In some hospitals and laboratories where strong disinfectants come in contact with DuPont™ Corian® applications, the recommendation is to use solid colors and avoid extended contact.

PERFORMANCE PROPERTIES AND CHARACTERISTICS

Since its introduction in 1967, DuPont™ Corian® solid surface has proven itself to be remarkably durable, versatile and easy to live with in both the home and commercial environments.

Typical performance properties of DuPont™ Corian® products are shown in [DuPont™ Corian® Performance Properties](#) (K-26829). The performance of Corian® sheets may vary according to the thickness of the material, its aesthetics and surface finish.

Colors and patterns run through the entire thickness of the material and cannot wear away or delaminate. Joints can be glued inconspicuously, making virtually unlimited surfaces possible.

Corian® surfaces are restorable, meaning they can be fully restored with ordinary mild abrasive cleansers and a scouring pad. Cigarette burns, for example, can be easily removed in this way. Damage caused by abuse can usually be repaired on site without having to completely replace the material.

Corian® solid surface is nonporous with a smooth, seamless appearance. With proper cleaning, the material does not promote the growth of mold, mildew and bacteria.

Corian® solid surface is nontoxic and nonallergenic to humans. Corian® solid surface meets or exceeds emissions guidelines for volatile organic compounds (VOCs), hazardous air pollutants (HAPs) and has achieved GREENGUARD GOLD Certification.

When burned, it releases mainly carbon oxides and the smoke generated is optically light and does not contain toxic halogenated gases. Because of these properties, Corian® solid surface is used in public spaces and delicate applications such as airport check-in counters, wall and work surfaces in hospitals and hotels.

DuPont™ Corian® sheets can be thermoformed in wooden or metal molds at controlled temperatures in order to create various 2D and 3D design objects. Embossing effects can also be created.

The translucency of DuPont™ Corian® sheet is especially striking in the lighter colors as well as in thinner sheets. As a result, many designers are using it to create lamps or lighting effects in various applications.

Inlaying DuPont™ Corian® with different materials or with different colors of Corian® is possible and can enhance the inherent beauty of the material. Inlays and logos can also be created on Corian® using dye sublimation or direct printing techniques.

DUPONT™ CORIAN® PRODUCT OVERVIEW

FABRICATION AND INSTALLATION

DuPont trains and certifies fabricators and installers who are provided detailed information regarding proper procedures; the following is a general overview, not a comprehensive guide to proper use.

Seams

To minimize material usage and facilitate installation, a corner block of Corian® should be made square (butt) rather than mitered. The edges to be joined should be straight, smooth and clean. Some seams need to be reinforced (see fabrication manual for details). Joints should only be made with DuPont™ Joint Adhesive. Cutouts should be made with a router equipped with a sharp carbide bit, with a minimum diameter of $\frac{3}{8}$ " (10 mm). All corners of a cutout must be rounded to 5 mm radius and the edges smoothed, both on top and bottom, all around a cutout. "L" and "U" shaped corners need smooth, $\frac{3}{16}$ " (5 mm) radius inside corners. For hob cutouts, corners should be reinforced with a Corian® corner block. See fabrication manual for more details.

Some Corian® colors that feature random veins and irregular patterns require special considerations regarding the seams. Please refer to the related technical bulletin for best practices in fabrication of these colors.

Sealants and Adhesives

Corian® solid surface is compatible with many commercially available caulks and sealants. 100% silicone products are recommended. Vertical panels of Corian® may be installed over suitable substrates, including water-resistant gypsum board, marine-grade plywood and ceramic tiles. In case a support is needed, apply perimeter frame or full support direct to Corian® using large beads of flexible adhesive leaving a space with a minimum thickness of $\frac{1}{16}$ " (1.5 mm).

For making seams in countertops, repairs and custom edges, color-coordinated DuPont™ Joint Adhesive should be used. When used in accordance with manufacturer's instructions, it provides a smooth and inconspicuous joint. DuPont™ Joint Adhesive is available from DuPont or its distributors.

Clearances

The minimum expansion clearance in inches for Corian® solid surface is 2.2×10^{-5} in./in.°F x (length of the piece of Corian® solid surface in inches) x (biggest temperature range expected in °F) In mm the minimum expansion clearance is 3.9×10^{-5} mm/mm °C x (length of the piece of

Corian® solid surface in mm) x (biggest temperature range expected in °C). Joints to be caulked should be a minimum of $\frac{1}{16}$ " (1.5 mm) wide to allow satisfactory sealant penetration and expansion.

Precautions

Product dimensions are nominal. If tolerances are critical, review your needs with a Corian® specialist.

AVAILABILITY AND COST

Availability

DuPont™ Corian® sheet, shape, and accessory products are readily available through a worldwide network of Distributors and certified Fabricators/Installers.

Cost

Cost varies with color, thickness, and width as well as custom fabrication and installation details.

WARRANTY

DuPont offers limited [commercial](#) and [residential](#) warranties.

MAINTENANCE

Preventing Damage to Corian® Solid Surface

Avoid prolonged exposure to strong chemicals such as acids, bases, and organic solvents. Spills should be cleaned up promptly. Refer to [DuPont™ Corian® Chemical Resistance](#) (K-27406) for additional details regarding chemical exposures, clean up, and general maintenance. In case of exposure outside the specifications listed in the Class I Reagents section, the 10-year limited product warranty will be void and handled as a case of abuse. While unaffected by minor impacts, Corian® solid surface can be damaged by heavy impacts, especially from pointed objects. It can also be damaged by excessive heat. A local Corian® specialist can help you include appropriate heat management into your designs.

Repairing Corian® Solid Surface

DuPont™ Corian® solid surface provides superior value by being inconspicuously repairable in most cases. Minor cuts, scratches, and stains can be removed by owners using fine sandpaper and Scotch-Brite™ pads. Deeper cuts or impact damage such as cracks may require an authorized Corian® fabricator/installer to make inconspicuous repairs.



The miracles of science

DUPONT™ CORIAN® PRODUCT OVERVIEW

ADDITIONAL INFORMATION

For additional information or support [please contact your local distributor](#), visit corian.na.dupont.com or call 1-800-4-CORIAN (800-426-7426).

REFERENCED DOCUMENTS

[DuPont™ Corian® Performance Properties \(K-26829\)](#)

[DuPont™ Corian® Chemical Resistance \(K-27406\)](#)

[DuPont™ Corian® Commercial \(Product Only\) 10-Year Limited Warranty For North America](#)

[DuPont™ Corian® 10-Year Limited Residential Warranty For North America](#)

This information is based on technical data that E.I. du Pont de Nemours and Company and its affiliates ("DuPont") believe to be reliable, and is intended for use by persons having technical skill and at their own discretion and risk. DuPont cannot and does not warrant that this information is absolutely current or accurate, although every effort is made to ensure that it is kept as current and accurate as possible. Because conditions of use are outside DuPont's control, DuPont makes no representations or warranties, express or implied, with respect to the information, or any part thereof, including any warranties of title, non-infringement of copyright or patent rights of others, merchantability, or fitness or suitability for any purpose and assumes no liability or responsibility for the accuracy, completeness, or usefulness of any information. This information should not be relied upon to create specifications, designs, or installation guidelines. The persons responsible for the use and handling of the product are responsible for ensuring the design, fabrication, or installation methods and process present no health or safety hazards. Do not attempt to perform specification, design, fabrication, or installation work without proper training or without the proper personal protection equipment. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents. DuPont shall have no liability for the use of or results obtained from such information, whether or not based on DuPont's negligence. DuPont shall not be liable for (i) any damages, including claims relating to the specification, design, fabrication, installation, or combination of this product with any other product(s), and (ii) special, direct, indirect or consequential damages. DuPont reserves the right to make changes to this information and to this disclaimer. DuPont encourages you to review this information and this disclaimer periodically for any updates or changes. Your continued access or use of this information shall be deemed your acceptance of this disclaimer and any changes and the reasonableness of these standards for notice of changes.

© E.I. du Pont de Nemours and Company 2014. All rights reserved.

The DuPont Oval, DuPont™, The miracles of science™, and Corian® are trademarks or registered trademarks of E.I. du Pont de Nemours and Company ("DuPont") or its affiliates. Scotch-Brite® is a trademark of 3M Company. USA, K-27478 1/13

2018 WILSONART® RESIDENTIAL LAMINATE DESIGN GUIDE

• DESIGN INSPIRATION •

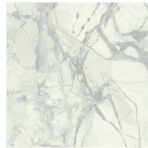
Wilsonart's 2018 Residential Collection includes two new designs perfect for bridging the gap between past and present trends. Each design features a blend of colors and transitional beauty that coordinates seamlessly with existing fixtures in any type of application.



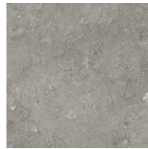
Praline Antico 5008K-07



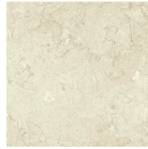
Marmo Bianco
1885K-21



Cote d'Azur
1886K-21



Benjamin Grey
1887K-21



Hebron White
1888K-21



Ribbon Marble
1889K-21



Serrania
1890K-21



Drama Marble 5010K-21

INNOVATION

Debuting with seven luxurious stone designs is Wilsonart's new Soft Silk (-21) laminate finish. This stunning ultra-matte finish draws the eye and invites visitors to touch its unbelievably smooth surface.

• MASTERFUL MIXOLOGY •

Breathe new life into a space by combining materials, colors, and styles in a way that speaks to your past and looks brightly toward your future. Warm bronzes inspire elegance and adds to the luxury of a sophisticated marble. For a space that is equally grounded and calms the senses, cool greys can offer a clean, soothing place for the eyes to rest while mid-tone woodgrains bring texture and warmth.



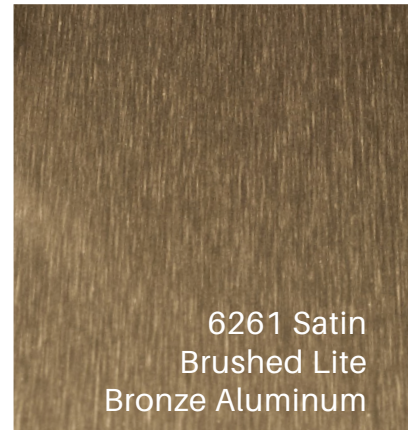
Praline Antico 5008K-07



Fisher Oak 17002



Grey Lake Q1009



6261 Satin
Brushed Lite
Bronze Aluminum



Manhattan
Q1016



Marmo Bianco 1885K-21



Bring your design dreams to the surface with Caesarstone

Your kitchen surface is the focal point of your home. You trust that it is of the highest quality craftsmanship and made with only the best materials available. Caesarstone consists of up to 93% quartz – one of nature's strongest minerals – and combines beauty with outstanding performance, allowing you to bring your design imagination to life.

Founded in 1987, Caesarstone is the pioneer of engineered quartz surfaces. Its leadership position in the market is achieved through a continuous focus on research and development and technical investments. For three decades, Caesarstone has set new standards for innovation and craftsmanship and continues to set trends in the industry.



Tracy Interiors, HC Studio
5141 Frosty Carrina

Surfaces that go beyond the kitchen

Caesarstone surfaces are not just for kitchen countertops. They are popular for use around the fireplace, on featured walls and in the dining room to add a touch of style and sophistication.

The surfaces are ideal for furniture pieces like coffee tables and entertainment units, and they are perfect for wet areas, like bathrooms and wet bars, due to the nonporous nature of the material.

Additional Applications

Caesarstone Applications

Countertops and backsplashes

Shower and tub surrounds

Thresholds

Lavatories and sinks

Interior wall cladding

Table and desk tops

Food service areas

Bank teller stations

Wainscots and wall bases

Elevator cab walls

Service counters

Industries that use Caesarstone

Restaurants

Hospitality

Retail

Corporate

Multi-Unit Residential

Healthcare

Education

Public Buildings

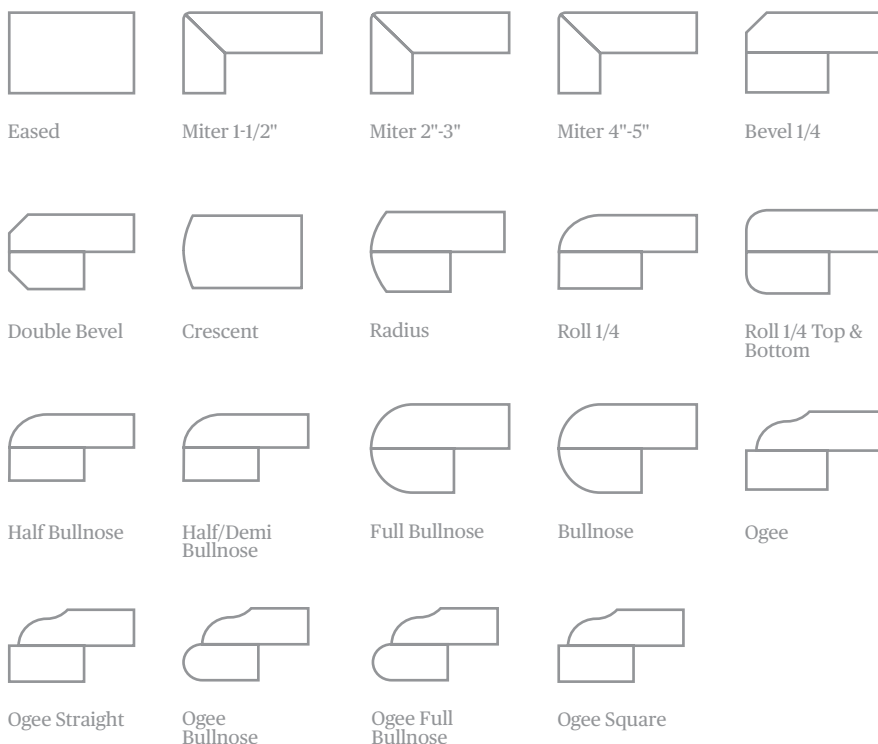
Banking

Transportation

Edge Profiles

Your surface is not complete without an edge profile to complement your slab selection and space. With Caesarstone, selecting the best fit is easy. The unique properties and durability of Caesarstone quartz surfaces allow for a wide range of edge profile design options.

Many edge profiles are possible, from a standard edge to laminated or mitered edges which create the appearance of a thicker slab. All edge details should have a minimum 1/8" radius on any profile, for both top and bottom edges. For high-traffic areas, 1/4" minimum radius is suggested.



Wall Applications

Caesarstone has specially selected a range of colors and designs in 13mm thickness for wall applications.

Because Caesarstone quartz surfaces are nonporous and mold and mildew resistant, they are ideal for kitchen backsplashes and bathroom wall panels. Large slab sizes provide a sleek and modern aesthetic, minimizing joints and maintenance.

Caesarstone Slab ID

The underside of every Caesarstone slab is uniquely stamped with identification information establishing authenticity.

Slab Sizes

Standard Slab Size
120" (144cm) x 56 1/2" (305cm)

Standard Size Weights

1.3cm	277-296 lbs (126-134kg)
2cm	436-455 lbs (198-206kg)
3cm	659-684 lbs (299-310kg)

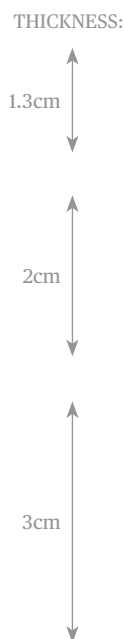
Jumbo Slab Size
131 1/2" (334cm) x 64 1/2" (163cm)

Jumbo Slab Weights

2cm	544-569 lbs (247-258kg)
3cm	822-851 lbs (373-386kg)

Weights per kg/m² and lb/sq. ft.

1.3cm	5-7 lb/sq. ft. (28-31kg/m ²)
2cm	9-10 lb/sq. ft. (45-47kg/m ²)
3cm	13-15 lb/sq. ft. (68-71kg/m ²)



Care and Maintenance

Honed, Concrete and Rough surfaces will require additional daily and weekly care. Due to the nature of the surface design, it is recommended that common household spills like liquid droplets and rings are dried immediately. As with any matte product, owners of Concrete, Honed and Rough finishes may experience an increase in smudges from everyday living.

Weekly, the surface should be cleaned with Soft Scrub Liquid Gel and thoroughly dried.

If you are considering Honed, Concrete or Rough surfaces, we encourage you to order a sample. When you receive your sample, try treating it to a few different scenarios that you may face in your kitchen; spill something on it, touch it with greasy fingers, clean it. This will help you understand how the surface responds to your daily life and how comfortable you feel with it.

Benefits

Caesarstone quartz surfaces are the ultimate combination of nature and technology. Nonporous, scratch resistant and highly resistant to stains, Caesarstone retains its beauty without sealants or waxes and is practically maintenance-free.

	Caesarstone Quartz Surfaces	Natural Stone	Laminate	Solid Surface
Scratch Resistant	●●●	●●●	●●	●
Stain Resistant	●●●	●●	●●●	●●●
Chip and Crack Resistant	●●●	●●	●●	●●●
Heat and Burn Resistant	●●	●●	●●	●●
Resistant to Household Chemicals, Acids and Solvents	●●●	●●	●●	●●●
Low Maintenance	●●●	●●	●●	●
Nonabsorbent and Nonporous	●●●	●●	●●	●●●
Mold and Mildew Resistant	●●●	●●	●●	●●●
Flexural Strength	●●●	●	●●	●●●
Color Consistency	●●●	●	●●	●●
Immunity to Freeze and Thaw	●●●	●	●●	●●

●●● = Excellent ●● = Good ● = Poor



Durable



Easy Care & Maintenance



Heat Resistant



Scratch Resistant



Stain Resistant



Lifetime Warranty