SPECIFICATION GUIDELINES
Corian® Solid Surface • Corian® Solid Surface with Resilience Technology™ • Corian® Quartz
UPDATED 2018

Hallmark Building Supplies, Inc. is a marketer and distributor of Corian® Design.
SOLID SURFACE FABRICATIONS

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes: Provide solid surface fabrications including but not limited to following:

1. window sills.
2. lavatory or laboratory tops with seamed bowls.
3. lavatory or laboratory tops with undermount bowls.
4. lavatory or laboratory tops with integral bowls.
5. counter tops for nurses stations - reception areas.
6. vanity tops.
7. cafeteria surfaces hot and cold.
8. millwork counter tops with sinks and cove backsplashes.
9. wireless charging unit.

B. Related Sections: Following description of work is included for reference only and shall not be presumed complete:

1. Provision of general LEED® requirements: Section 01 33 29, General LEED® Requirements.
2. Provision of general LEED® Product requirements: Section 01 60 13, LEED® Product Requirements.
3. Waste management and disposal requirements: Section 01 74 19, Waste Management and Disposal.
4. Provision of indoor air quality requirements: Section 01 81 19, Indoor Air Quality Requirements.
5. Provision of finish carpentry and architectural woodwork: Section 06 40 00, Architectural Woodwork.
6. Provision of elastomeric joint sealants: Section 07 92 00, Joint Sealants.
7. Provision of tile work: Section 09 30 00, Tiling.
8. Provision of wall coverings: Section 09 72 00, Wall Coverings.
9. Provision of plumbing and plumbing fixtures: [Division 22, Plumbing] [Mechanical].

1.02 REFERENCES

A. Abbreviations and Acronyms:

2. MDF: Medium Density Fiberboard.
3. SCAQMD: South Coast Air Quality Management District; www.aqmd.gov.

B. Definitions:

1. Solid Surface: Nonporous, homogeneous material maintaining the same composition throughout the part with a composition of acrylic polymer, aluminum trihydrate filler and pigment.

C. Reference Standards:

1. ANSI/NPA A208.2-09 - Medium Density Fiberboard (MDF) For Interior Applications
2. ASTM C920-14a - Standard Specification for Elastomeric Joint Sealants
4. ASTM D785-08 - Standard Test Method for Rockwell Hardness of Plastics and Electrical Insulating Materials
10. ASTM G22-76(96) - Standard Practice for Determining Resistance of Plastics to Bacteria
12. CSA B45.5-11/ IAPMO Z124-2011 - Plastic Plumbing Fixtures
13. NFPA 255-06 - Standard Method of Test of Surface Burning Characteristics of Building Materials
14. NSF/ANSI 51-07 - Food Equipment Materials
15. SCAQMD Rule 1168 - Adhesive and Sealant Applications (amended January 2005)
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17. UL Environment/GREENGUARD – UL 2818 – Standard for Chemical Emissions for Building Materials, Finishes and Furnishings, Section 7.1
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19. UL 2824 – GREENGUARD Certification Program, Method for Measuring Microbial Resistance from Various Sources Using Static Environmental Chambers
1.03 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meetings: Arrange preinstallation meeting 1 week prior to commencing work with all parties associated with trade as designated in Contract Documents or as requested by Architect. Presided over by Contractor, include Architect who may attend, Subcontractor performing work of this trade, Owner’s representative, testing company’s representative and consultants of applicable discipline. Review Contract Documents for work included under this trade and determine complete understanding of requirements and responsibilities relative to work included, storage and handling of materials, materials to be used, installation of materials, sequence and quality control, Project staffing, restrictions on areas of work and other matters affecting construction, to permit compliance with intent of work of this Section.

1.04 SUBMITTALS

A. Product Data: Indicate Product description including solid surface sheets, sinks, bowls and illustrating full range of standard colors, fabrication information and compliance with specified performance requirements. Submit Product data with resistance to list of chemicals.

B. Shop Drawings: Submit Shop Drawings for work of this Section in accordance with Section 01 30 00. Indicate plans, sections, dimensions, component sizes, edge details, thermosetting requirements, fabrication details, attachment provisions, sizes of furring, blocking, including concealed blocking and coordination requirements with adjacent work. Show locations and sizes of cutouts and holes for plumbing fixtures, faucets, soap dispensers, waste receptacles and other items installed in solid surface.

C. Coordination Drawings: Submit coordination drawings indicating plumbing and miscellaneous steel work indicating locations of wall rated or non-rated, blocking requirements, locations and recessed wall items and similar items.

D. Samples: Submit samples in accordance with Section 01 30 00. Submit minimum 150 mm x 150 mm (6” x 6”) samples. Cut sample and seam together for representation of inconspicuous seam. Indicate full range of color and pattern variation. Approved samples will be retained as standards for work.

**SPEC NOTE:** NSF/ANSI 51, FOOD ZONE, SPLASH ZONE AND NON-FOOD ZONE, APPLICATION WHERE FOOD MAY BE DROPPED ONTO SERVING SURFACES. DELETE FOLLOWING IF NO FOOD CONTACT IS REQUIRED FOR PROJECT. DELETE FOLLOWING ON FLAMMABILITY IF THERE IS NO REQUIREMENT FOR FIRE PERFORMANCE.

E. Test and Evaluation Reports: Submit flammability test reports [and food preparation zone certifications/listing confirming compliance with NSF/ANSI 51. Refer to www.nsf.org for the latest compliance to NSF/ANSI 51 for Food Zone — all food types.]

1.05 CLOSEOUT SUBMITTALS

A. Operational and Maintenance Data:

1. Submit manufacturer's care and maintenance data, including repair and cleaning instructions. Include in Project closeout documents.

1.06 QUALITY ASSURANCE

A. Qualifications:

1. Installers: Provide work of this Section executed by competent installers with minimum 5 years experience in the application of Products, systems and assemblies specified and with approval and training of the Product manufacturers.
B. Mock-Ups:
   1. Prior to final approval of Shop Drawings, erect 1 full size mock-up of each component at Project site demonstrating quality of materials and execution for Architect review.
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1.07 DELIVERY, STORAGE AND HANDLING

A. Delivery and Acceptance Requirements: Deliver no components to Project site until areas are ready for installation.

B. Storage and Handling Requirements:
   1. Store components indoors prior to installation.
   2. Handle materials to prevent damage to finished surfaces.

1.08 WARRANTY

A. Manufacturer Warranty: Provide manufacturer’s standard warranty for material only for period of 10 years against defects and/or deficiencies in accordance with General Conditions of the Contract. Promptly correct any defects or deficiencies which become apparent within warranty period, to satisfaction of Architect and at no expense to Owner.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Manufacturer List: Products of following manufacturers are acceptable subject to conformance to requirements of Drawings, Schedules and Specifications:

   1. Corian® Solid Surface by DuPont; www.corian.com
   2. Samsung Chemical USA; www.staron.com, 100% acrylic material only
   3. Wilsonart Contract; www.wilsonartcontract.com, 100% acrylic material only

B. Substitution Limitations: This Specification is based on DuPont Products. Comparable Products from manufacturers listed herein will be accepted provided they meet requirements of this Specification.

2.02 MATERIALS

A. Description:

B. Sustainability Characteristics: Provide Products meeting following LEED® performance criteria:

SPEC NOTE: USE FOLLOWING IN CONNECTION WITH LEED® CREDIT MR 4. IT MAY BE NECESSARY TO SPLIT FOLLOWING PARAGRAPH DUE TO DIFFERENT PRODUCTS WITHIN A PARTICULAR SECTION HAVING DIFFERENT RECYCLING AMOUNTS (IE. IN SECTION 09 21 16, GYPSUM BOARD IS 40% AND STEEL IS 25%). EDIT ACCORDINGLY.

Corian® Solid Surface
1. **MRc4**: Provide Product with a combined minimum pre-consumer and post-consumer recycled content of [xx%].

**SPEC NOTE**: USE FOLLOWING PARAGRAPH IF AMOUNT OF RECYCLED CONTENT IS UNKNOWN, BUT DESIRED FOR LEED® CREDIT.

2. **MRc4**: Provide Product with maximum pre-consumer and post-consumer recycled content available.

**SPEC NOTE**: USE FOLLOWING IN CONNECTION WITH LEED® CREDIT MR 5.

3. **MRc5**: Provide Product with regional content.

**SPEC NOTE**: USE FOLLOWING IN CONNECTION WITH LEED® CREDIT EQ 4.1.

4. **EQc4.1**: Provide adhesives and sealants with VOC quantities lower than stated in SCAQMD Rule 1168. Ensure VOC quantities for sealants do not exceed 250 g/l under any circumstances.

C. **Performance/Design Criteria**:

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement min or max</th>
<th>Test Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Solid Surface Based Products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Tensile Strength</td>
<td>6000 psi min</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>b. Tensile Modulus</td>
<td>1.5 x 10^6 psi min</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>c. Tensile Elongation</td>
<td>0.4% min.</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>d. Flexural Strength</td>
<td>10000 psi min</td>
<td>ASTM D790</td>
</tr>
<tr>
<td>e. Flexural Modulus</td>
<td>1.2 x 10^6 psi min</td>
<td>ASTM D790</td>
</tr>
<tr>
<td>f. Hardness</td>
<td>&gt;85 Rockwell &quot;M&quot; scale</td>
<td>ASTM D785</td>
</tr>
<tr>
<td>g. Thermal Expansion</td>
<td>2.2 x 10^{-5} in./in./°F</td>
<td>ASTM E228</td>
</tr>
<tr>
<td>h. Fungi and Bacteria</td>
<td>Does not support microbial growth</td>
<td>ASTM G21 &amp; G22</td>
</tr>
<tr>
<td>i. Microbial Resistance</td>
<td>Highly resistant to mold</td>
<td>UL 2824</td>
</tr>
<tr>
<td>j. Ball Impact</td>
<td>No fracture - 1/2 lb. Ball:</td>
<td>NEMA LD 3, Method 3.8</td>
</tr>
<tr>
<td></td>
<td>6mm slab - 36&quot; drop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12mm slab - 144&quot; drop</td>
<td></td>
</tr>
<tr>
<td>k. Weatherability</td>
<td>ΔE*94 &lt;5 in 1,000 hrs</td>
<td>ASTM G155</td>
</tr>
<tr>
<td>l. Flammability</td>
<td></td>
<td>ASTER E84, NFPA 255 &amp; UL 723</td>
</tr>
</tbody>
</table>
## All Colors

<table>
<thead>
<tr>
<th></th>
<th>6 mm</th>
<th>12 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>m. Flame Spread</td>
<td>&lt;25</td>
<td>&lt;25</td>
</tr>
<tr>
<td>n. Smoke Developed</td>
<td>&lt;25</td>
<td>&lt;25</td>
</tr>
<tr>
<td>o. Class</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>


**SPEC NOTE:** Industry standard is to use 12mm thick Products. 6mm thick Product is used vertically only. Contact manufacturer’s rep. for 19mm thick Product and Product data and panel size limitations.

### D. Solid Surface Material:

1. Nonporous, homogeneous material maintaining the same composition throughout the part with a composition of acrylic polymer, aluminum trihydrate filler and pigment; not coated, laminated or of composite construction; meeting following criteria:

### E. Flammability: Class A when tested to ASTM E84, NFPA 255 & UL 723.

**SPEC NOTE:** VERIFY COMPLIANCE WITH THIS REQUIREMENT WHEN USED IN FOOD PREPARATION AND LOCAL AUTHORITY REQUIREMENT.

### F. Food Equipment Material Compliance: Food Zone to NSF/ANSI 51.

1. Ensure material has minimum physical and performance properties specified under “Performance/Design Criteria”.
2. Ensure superficial damage to a depth of 0.25mm (0.010”) is repairable by sanding and polishing.

### G. Adhesive for Bonding to Other Products: One component silicone to ASTM C920.

### H. Sealant: A standard mildew-resistant, FDA/UL® [and NSF/ANSI 51 compliant in Food Zone area,] recognized silicone color matched sealant or clear silicone sealants.

**SPEC NOTE:** RETAIN FOLLOWING PARAGRAPH FOR UNDERMOUNT SINKS AND BOWLS.

### I. Sink/Bowl Mounting Hardware: Manufacturer's approved bowl clips, brass inserts and fasteners for attachment of undermount sinks/bowls.

**SPEC NOTE:** CHECK WHETHER CUT OUTS ARE NEAR A HEAT SOURCE; IF NOT DELETE FOLLOWING 2 PARAGRAPHS.
J. Heat Reflecting Tape: Manufacturer’s standard aluminum foil tape, with required
thickness, for use with cutouts near heat sources.

K. Insulating Nomex® fabric: Manufacturer’s standard for use with conductive tape in
insulating solid surface material from adjacent heat source.

2.03 COMPONENTS

**SPEC NOTE:** REFER TO TECHNICAL BULLETIN K-25291 – STRUCTURAL SUPPORT.

A. Window Sills: 12 mm thick solid surface material, adhesively joined with inconspicuous
seams, edge details as indicated on Drawings. Color selected later by Architect from
manufacturer’s full color range.

B. Counter Perimeter Frame: Ensure 13 mm (1/2”) [19 mm (3/4”)] thick, moisture resistant
[cores for counter tops in wet areas having sinks or lavatories are 19 mm (3/4”) thick
exterior grade plywood with waterproof adhesive, Fir or Poplar plywood, veneer core
only.] [MDF core conforming to ANSI/NPA A208.2 balanced design, manufactured from
recycled materials, meeting ANSI Standards for emissions, of minimum density of
48 lb/cu ft and surface character to match sample approved by Architect. Ensure fire
retardant Product contains fire-retardant chemicals injected with raw materials during
manufacturing and achieves a maximum flame-spread rating of 25 with a maximum
smoke development of 200 when tested to ASTM E84.]

**SPEC NOTE:** REFER TO TECHNICAL BULLETINS K-25296 – SINKS AND LAVATORIES, K-27499 –
DUPONT™ CORIAN® LAVATORY POSITIONING FOR ADA COMPLIANCE AND K-25294 - BACKSPLASHES

**SPEC NOTE:** SELECT DESIRED COLOR FROM MANUFACTURER’S LATEST CATALOGUE OR
INDICATE COLOR(S) WILL BE SELECTED LATER BY ARCHITECT (VERIFY IF ANY COST
IMPLICATION DUE TO VARIATION IN COLORS).

A. Countertops with Hard Seamed Bowls:
   1. 12mm (1/2”) thick countertop of solid surfacing material with a bowl made
   from solid surface material
   2. Conforms to CSA B45.5/IAPMO Z124
   3. Provide countertops complete with backsplashes of size shown on Drawings.
   Ensure countertop and backsplash is [ ] colour; [non-coved][coved] as selected
   by Consultant. Select desired colour from manufacturer's latest catalogue or
   indicate colour(s) will be selected later by Consultant (verify if any cost
   implication due to various in colours)
   4. Ensure bowls are [ ] model.

**SPEC NOTE:** REFER TO TECHNICAL BULLETIN K-28310 DUPONT™ CORIAN® CHARGING UNIT –
INDIVIDUAL: CORIAN® INSTALLATION.
C. Wireless Charging Unit: A complete, self-contained system with a dual-mode transmitter that is compliant with PMA and WPC Qi standards.


E. Fabrication:
   1. Fabricate components in shop to greatest extent practical to sizes and shapes indicated, in accordance with approved Shop Drawings and solid surface manufacturer requirements. Form joints between components to create inconspicuous seams, using manufacturer’s standard joint adhesive. Provide factory cutouts for plumbing fittings and bath accessories as indicated on Drawings.
   2. Thermoform corners and edges to shapes and sizes indicated on Drawings, prior to seaming and joining. Cut components larger than finished dimensions and sand edges to remove nicks and scratches. Heat entire component uniformly prior to forming.
   3. Ensure no blistering, whitening and cracking of components during forming.
   4. Form backsplashes from solid surfacing material with radius cove where counter and backsplashes meet as indicated on Drawings. Refer to Technical Bulletin K-28235 Thermoformed Backsplash.
   5. Fabricate joints between components using manufacturer's standard joint adhesive. Ensure joints are inconspicuous in appearance and without voids. Attach 50 mm (2") wide reinforcing strip of solid surface material under each joint.
   6. Provide holes and cutouts for plumbing and bath accessories as indicated on Drawings.
   7. Rout and finish component edges to a smooth, uniform finish. Rout cutouts, then sand edges smooth. Repair or reject defective or inaccurate work.

**SPEC NOTE:** SELECT DESIRED FINISH OR WHERE MORE THAN 1 FINISH IS REQUIRED, ENSURE LOCATIONS OF DIFFERENT FINISHES ARE IDENTIFIED ON DRAWINGS.

8. Finish: Ensure surfaces have uniform finish:

**SPEC NOTE:** FOLLOWING IS STANDARD FINISH AND IS LOWEST MAINTENANCE FINISH.

   a. Matte, with a 60° gloss rating of 5 - 20.

**SPEC NOTE:** FOLLOWING ADDS AN UP-CHARGE. SELECT SEMI-GLOSS TO BRING OUT THE DEPTH OF COLORS IN THE DARKER SIERRA AND JEWEL TONES. WILL REQUIRE MORE MAINTENANCE.

   b. Semi-gloss, with a 60° gloss rating of 25 - 50.

**SPEC NOTE:** FOLLOWING IS A HIGH GLOSS FINISH, IDEAL FOR APPLICATIONS THAT REQUIRE MAXIMUM SMOOTHNESS AND REFLECTANCE. RECOMMENDED FOR LIGHT DUTY ONLY. WILL REQUIRE MORE MAINTENANCE.
9. Fabrication Tolerances:

a. Variation in Component Size: +/-3 mm (+/-1/8”).
b. Location of Openings: +/-3 mm (+/-1/8”) from indicated location.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verification of Conditions:

1. Examine substrates and conditions, with fabricator present for compliance with requirements for installation tolerances and other conditions affecting performance of work. Proceed with installation only after unsatisfactory conditions have been corrected.
2. Verify actual site dimensions and location of adjacent materials prior to commencing work.
3. Examine cabinets upon which counter tops are to be installed. Verify cabinets are level to within 3 mm in 3 m (1/8” in 10’).
4. Notify Architect in writing of any conditions which would be detrimental to installation.

B. Evaluation and Assessment: Commencement of work implies acceptance of previously completed work.

3.02 INSTALLATION

A. Install components plumb, level, rigid, scribed to adjacent finishes in accordance with reviewed Shop Drawings and Product installation details.

B. Form field joints using manufacturer's recommended adhesive, with joints being inconspicuous in finished work. Exposed joints/seams are not permitted. Keep components and hands clean when making joints. Reinforce field joints as specified herein. Cut and finish component edges with clean, sharp returns.

C. Route radii and contours to template. Anchor securely to base component or other supports. Align adjacent components and form seams to comply with manufacturer’s
written recommendations using adhesive in color to match work. Carefully dress joints smooth, remove surface scratches and clean entire surface.

D. Install countertops with no more than 3 mm (1/8") sag over a 3 m (10') span, bow or other variation from a straight line.

E. Adhere undermount/submount/bevel mount sinks/bowls to countertops using manufacturer's recommended adhesive and mounting hardware.

F. Adhere topmount sinks/bowls to countertops using manufacturer recommended adhesives and color-matched silicone sealant. [Secure seam mount bowls and sinks to countertops using color matched joint adhesive.]

G. Seal between wall and components with joint sealant as specified herein and in Section 07 92 00, as applicable.

H. Provide backsplashes and endsplashes as indicated on Drawings. Adhere to countertops using a standard color-matched silicone sealant. Adhere applied sidesplashes to countertops using a standard color-matched silicone sealant. Provide coved backsplashes and sidesplashes at walls and adjacent millwork. Fabricate radius cove at intersection of
counters with backsplashes to dimensions shown on reviewed Shop Drawings. Adhere to
countertops using manufacturer’s standard color-matched joint adhesive.

Keep components and hands clean during installation. Remove adhesives, sealants and other
stains. Ensure components are clean on date of Substantial Completion of the Work.

I. Coordinate connections of plumbing fixtures with [Division 22] [Mechanical]. Make
plumbing connections to sinks in accordance with [Division 22] [Mechanical].

J. REPAIR

K. Repair minor imperfections and cracked seams and replace areas of severely damaged
surfaces in accordance with manufacturer’s “Technical Bulletins”.

L. SITE QUALITY CONTROL

M. Non-Conforming Work: Replace damaged work which cannot be satisfactorily repaired,
restored or cleaned, to satisfaction of Architect at no cost to Owner.

N. CLEANING

O. Remove excess adhesive and sealant from visible surfaces.

P. Clean surfaces in accordance with manufacturer’s “Care and Maintenance Instructions”.

Q. PROTECTION

R. Provide protective coverings to prevent physical damage or staining following
installation for duration of Project.

S. Protect surfaces from damage until date of Substantial Completion of the Work.

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**SPEC NOTE:** USE FOLLOWING IN CONNECTION WITH LEED® CREDIT MR 5.

3. MRc5: Provide Product with regional content.

**SPEC NOTE:** USE FOLLOWING IN CONNECTION WITH LEED® CREDIT EQ 4.1.

4. EQc4.1: Provide adhesives and sealants with VOC quantities lower than stated in SCAQMD Rule 1168. Ensure VOC quantities for sealants do not exceed 250 g/l under any circumstances.

C. Performance/Design Criteria:

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement min or max</th>
<th>Test Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Solid Surface Based Products:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Tensile Strength</td>
<td>6000 psi min</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>b. Tensile Modulus</td>
<td>1.5 x 10^6 psi min</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>c. Tensile Elongation</td>
<td>0.4% min.</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>d. Flexural Strength</td>
<td>10000 psi min</td>
<td>ASTM D790</td>
</tr>
<tr>
<td>e. Flexural Modulus</td>
<td>1.2 x 10^6 psi min</td>
<td>ASTM D790</td>
</tr>
<tr>
<td>f. Hardness</td>
<td>&gt;85 Rockwell &quot;M&quot; scale</td>
<td>ASTM D785</td>
</tr>
<tr>
<td>g. Thermal Expansion</td>
<td>2.2 x 10^-5 in./in./°F</td>
<td>ASTM E228</td>
</tr>
<tr>
<td>h. Fungi and Bacteria</td>
<td>Does not support microbial growth</td>
<td>ASTM G21 &amp; G22</td>
</tr>
<tr>
<td>i. Microbial Resistance</td>
<td>Highly resistant to mold</td>
<td>UL 2824</td>
</tr>
<tr>
<td>j. Ball Impact</td>
<td>No fracture - 1/2 lb. Ball:</td>
<td>NEMA LD 3,</td>
</tr>
<tr>
<td></td>
<td>6mm slab - 36&quot; drop</td>
<td>Method 3.8</td>
</tr>
<tr>
<td></td>
<td>12mm slab - 144” drop</td>
<td></td>
</tr>
<tr>
<td>k. Weatherability</td>
<td>ΔE*94 &lt;5 in 1,000 hrs</td>
<td>ASTM G155</td>
</tr>
<tr>
<td>l. Flammability</td>
<td></td>
<td>ASTM E84,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NFPA 255 &amp; UL 723</td>
</tr>
</tbody>
</table>
Corian® Solid Surface with Resilience Technology™

All Colors

<table>
<thead>
<tr>
<th></th>
<th>6 mm</th>
<th>12 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>m. Flame Spread</td>
<td>&lt;25</td>
<td>&lt;25</td>
</tr>
<tr>
<td>n. Smoke Developed</td>
<td>&lt;25</td>
<td>&lt;25</td>
</tr>
<tr>
<td>o. Class</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>


Advanced Properties

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>p. Stain Removal</td>
<td>15-20% improvement over standard Modified ANSI Z124.6</td>
</tr>
<tr>
<td>q. Scratch Hardness</td>
<td>0.33GPa ASTM G171</td>
</tr>
<tr>
<td>r. Finish Durability</td>
<td>50% reduction in light scratching Profilometer</td>
</tr>
</tbody>
</table>

SPEC NOTE: Industry standard is to use 12mm thick Products. 6mm thick Product is used vertically only. Contact manufacturer’s rep. for 19mm thick Product and Product data and panel size limitations.

D. Solid Surface Material: Nonporous, homogeneous material maintaining the same composition throughout the part with a composition of acrylic polymer, aluminum trihydrate filler and pigment; not coated, laminated or of composite construction; meeting following criteria:

i. Flammability: Class A when tested to ASTM E84, NFPA 255 & UL 723.

ii. Simple stain removal: Stains remove with water and an abrasive pad

SPEC NOTE: VERIFY COMPLIANCE WITH THIS REQUIREMENT WHEN USED IN FOOD PREPARATION AND LOCAL AUTHORITY REQUIREMENT.

E. Food Equipment Material Compliance: Food Zone to NSF/ANSI 51.

1. Ensure material has minimum physical and performance properties specified under “Performance/Design Criteria”.
2. Ensure superficial damage to a depth of 0.25mm (0.010”) is repairable by sanding and polishing.

F. Adhesive for Bonding to Other Products: One component silicone to ASTM C920.

G. Sealant: A standard mildew-resistant, FDA/UL® [and NSF/ANSI 51 compliant in Food Zone area,] recognized silicone color matched sealant or clear silicone sealants.

SPEC NOTE: RETAIN FOLLOWING PARAGRAPH FOR UNDERMOUNT SINKS AND BOWLS.
H. Sink/Bowl Mounting Hardware: Manufacturer's approved bowl clips, brass inserts and fasteners for attachment of undermount sinks/bowls.

**SPEC NOTE:** CHECK WHETHER CUT OUTS ARE NEAR A HEAT SOURCE; IF NOT DELETE FOLLOWING 2 PARAGRAPHS.

I. Heat Reflecting Tape: Manufacturer’s standard aluminum foil tape, with required thickness, for use with cutouts near heat sources.

J. Insulating Nomex® fabric: Manufacturer’s standard for use with conductive tape in insulating solid surface material from adjacent heat source.

### 2.03 COMPONENTS

**SPEC NOTE:** REFER TO TECHNICAL BULLETIN K-25291 – STRUCTURAL SUPPORT.

A. Window Sills: 12 mm thick solid surface material, adhesively joined with inconspicuous seams, edge details as indicated on Drawings. Color selected later by Architect from manufacturer’s full color range.

B. Counter Perimeter Frame: Ensure 13 mm (1/2") [19 mm (3/4")] thick, moisture resistant [cores for counter tops in wet areas having sinks or lavatories are 19 mm (3/4") thick exterior grade plywood with waterproof adhesive, Fir or Poplar plywood, veneer core only.] [MDF core conforming to ANSI/NPA A208.2 balanced design, manufactured from recycled materials, meeting ANSI Standards for emissions, of minimum density of 48 lb/cu ft and surface character to match sample approved by Architect. Ensure fire retardant Product contains fire-retardant chemicals injected with raw materials during manufacturing and achieves a maximum flame-spread rating of 25 with a maximum smoke development of 200 when tested to ASTM E84.]

**SPEC NOTE:** REFER TO TECHNICAL BULLETINS K-25296 – SINKS AND LAVATORIES, K-27499 – DUPONT™ CORIAN® LAVATORY POSITIONING FOR ADA COMPLIANCE AND K-25294 - BACKSPLASHES

**SPEC NOTE:** SELECT DESIRED COLOR FROM MANUFACTURER’S LATEST CATALOGUE OR INDICATE COLOR(S) WILL BE SELECTED LATER BY ARCHITECT (VERIFY IF ANY COST IMPLICATION DUE TO VARIATION IN COLORS).

A. Countertops with Hard Seamed Bowls:
   1. 12mm (1/2") thick countertop of solid surfacing material with a bowl made from solid surface material
   2. Conforms to CSA B45.5/IAPMO Z124
   3. Provide countertops complete with backsplashes of size shown on Drawings. Ensure countertop and backsplash is [ ] color; [non-coved][coved] as selected by Consultant. Select desired color from manufacturer's latest catalogue or
indicate color(s) will be selected later by Consultant (verify if any cost implication due to various in colors)

4. Ensure bowls are [ ] model.

**SPEC NOTE:** REFER TO TECHNICAL BULLETIN K-28310 DUPONT™ CORIAN® CHARGING UNIT – INDIVIDUAL: CORIAN® INSTALLATION.

C. Wireless Charging Unit: A complete, self-contained system with a dual-mode transmitter that is compliant with PMA and WPC Qi standards.


E. Fabrication:

1. Fabricate components in shop to greatest extent practical to sizes and shapes indicated, in accordance with approved Shop Drawings and solid surface manufacturer requirements. Form joints between components to create inconspicuous seams, using manufacturer’s standard joint adhesive. Provide factory cutouts for plumbing fittings and bath accessories as indicated on Drawings.

2. Thermoform corners and edges to shapes and sizes indicated on Drawings, prior to seaming and joining. Cut components larger than finished dimensions and sand edges to remove nicks and scratches. Heat entire component uniformly prior to forming.

3. Ensure no blistering, whitening and cracking of components during forming.

4. Form backsplashes from solid surfacing material with radius cove where counter and backsplashes meet as indicated on Drawings. Refer to Technical Bulletin K-28235 Thermoformed Backsplash.

5. Fabricate joints between components using manufacturer's standard joint adhesive. Ensure joints are inconspicuous in appearance and without voids. Attach 50 mm (2") wide reinforcing strip of solid surface material under each joint.

6. Provide holes and cutouts for plumbing and bath accessories as indicated on Drawings.

7. Rout and finish component edges to a smooth, uniform finish. Rout cutouts, then sand edges smooth. Repair or reject defective or inaccurate work.

**SPEC NOTE:** SELECT DESIRED FINISH OR WHERE MORE THAN 1 FINISH IS REQUIRED, ENSURE LOCATIONS OF DIFFERENT FINISHES ARE IDENTIFIED ON DRAWINGS.

8. Finish: Ensure surfaces have uniform finish:

**SPEC NOTE:** FOLLOWING IS STANDARD FINISH AND IS LOWEST MAINTENANCE FINISH.
a. Matte, with a 60° gloss rating of 5 - 20.

**SPEC NOTE:** FOLLOWING ADDS AN UP-CHARGE. SELECT SEMI-GLOSS TO BRING OUT THE DEPTH OF COLORS IN THE DARKER SIERRA AND JEWEL TONES. WILL REQUIRE MORE MAINTENANCE.

b. Semi-gloss, with a 60° gloss rating of 25 - 50.

**SPEC NOTE:** FOLLOWING IS A HIGH GLOSS FINISH, IDEAL FOR APPLICATIONS THAT REQUIRE MAXIMUM SMOOTHNESS AND REFLECTANCE. RECOMMENDED FOR LIGHT DUTY ONLY. WILL REQUIRE MORE MAINTENANCE.

c. Polished, with a 60° gloss rating of 55 - 80.

9. Fabrication Tolerances:

   a. Variation in Component Size: +/-3 mm (+/-1/8”).
   b. Location of Openings: +/-3 mm (+/-1/8”) from indicated location.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verification of Conditions:

1. Examine substrates and conditions, with fabricator present for compliance with requirements for installation tolerances and other conditions affecting performance of work. Proceed with installation only after unsatisfactory conditions have been corrected.
2. Verify actual site dimensions and location of adjacent materials prior to commencing work.
3. Examine cabinets upon which counter tops are to be installed. Verify cabinets are level to within 3 mm in 3 m (1/8” in 10’).
4. Notify Architect in writing of any conditions which would be detrimental to installation.

B. Evaluation and Assessment: Commencement of work implies acceptance of previously completed work.

3.02 INSTALLATION

A. Install components plumb, level, rigid, scribed to adjacent finishes in accordance with reviewed Shop Drawings and Product installation details.

B. Form field joints using manufacturer's recommended adhesive, with joints being inconspicuous in finished work. Exposed joints/seams are not permitted. Keep
components and hands clean when making joints. Reinforce field joints as specified herein. Cut and finish component edges with clean, sharp returns.

C. Route radii and contours to template. Anchor securely to base component or other supports. Align adjacent components and form seams to comply with manufacturer’s written recommendations using adhesive in color to match work. Carefully dress joints smooth, remove surface scratches and clean entire surface.

D. Install countertops with no more than 3 mm (1/8”) sag over a 3 m (10’) span, bow or other variation from a straight line.

E. Adhere undermount/submount/bevel mount sinks/bowls to countertops using manufacturer's recommended adhesive and mounting hardware.

F. Adhere topmount sinks/bowls to countertops using manufacturer recommended adhesives and color-matched silicone sealant. [Secure seam mount bowls and sinks to counter tops using color matched joint adhesive.]

G. Seal between wall and components with joint sealant as specified herein and in Section 07 92 00, as applicable.

H. Provide backsplashes and endsplashes as indicated on Drawings. Adhere to countertops using a standard color-matched silicone sealant. Adhere applied sidesplashes to countertops using a standard color-matched silicone sealant. Provide coved backsplashes and sidesplashes at walls and adjacent millwork. Fabricate radius cove at intersection of
counters with backsplashes to dimensions shown on reviewed Shop Drawings. Adhere to countertops using manufacturer’s standard color-matched joint adhesive.

Keep components and hands clean during installation. Remove adhesives, sealants and other stains. Ensure components are clean on date of Substantial Completion of the Work.

I. Coordinate connections of plumbing fixtures with [Division 22] [Mechanical]. Make plumbing connections to sinks in accordance with [Division 22] [Mechanical].

J. REPAIR

K. Repair minor imperfections and cracked seams and replace areas of severely damaged surfaces in accordance with manufacturer’s “Technical Bulletins”.

L. SITE QUALITY CONTROL

M. Non-Conforming Work: Replace damaged work which cannot be satisfactorily repaired, restored or cleaned, to satisfaction of Architect at no cost to Owner.

N. CLEANING

O. Remove excess adhesive and sealant from visible surfaces.

P. Clean surfaces in accordance with manufacturer’s “Care and Maintenance Instructions”.

Q. PROTECTION

R. Provide protective coverings to prevent physical damage or staining following installation for duration of Project.

S. Protect surfaces from damage until date of Substantial Completion of the Work.

The DuPont Oval, DuPont™, and Corian® are trademarks or registered trademarks of E. I. du Pont de Nemours and Company (“DuPont”) or its affiliates. All rights reserved.
SPECIFICATION GUIDELINES
Corian® Quartz (formerly known as Zodiaq®) manufactured by DuPont, (E. I. du Pont de Nemours and Company), Chestnut Run Plaza 735, 974 Centre Road, P.O. Box 2915, Wilmington, DE 19805, Toll-Free: (800) 426-7426, Web site: www.corianquartz.com; www.surfaces.dupont.com

Note: The purpose of this product guide specification is to assist theSpecifier in specifying Corian® Quartz (formerly known as DuPont™ Zodiaq® Quartz Surface). Refer to Corian® Design (800-426-7426) and/or Zodiaq® Technical Bulletins for additional information. Use this guide specification for interfacing with architectural millwork and/or trim components. Corian® Quartz is fabricated like granite.

Design Professionals or Architects need to review Sections and edit to fit the needs of the project and local building code(s). Throughout the guide specification, there are Specifier Notes in blue to assist in the editing of the file. User input areas are enclosed within brackets, [_______ ].

This product guide specification is written in accordance with the Construction Specifications Institute (CSI) current versions Masterformat®, SectionFormat™ and PageFormat™. References are in accordance with the 2014 Revision of Masterformat®. The Specifier needs to coordinate numbers and titles with sections included for the project.

PART 1 - GENERAL
1.01 SUMMARY

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
1.02 THIS SECTION INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING HORIZONTAL AND TRIM QUARTZ SURFACING PRODUCT TYPES:

1. Countertops
2. Countertops with integrated sinks and lavatory bowls
3. Countertops with undermount sinks and lavatory bowls
4. Countertops with drop-in sinks and lavatory bowls
5. Reception areas
6. Nurses stations
7. Vanity tops
8. Tabletops
9. Bar tops
10. Cold cafeteria surfaces
11. Hot cafeteria surfaces
12. [Other interior counter or surfacing applications as shown on drawings]
13. Other interior counter or surfacing applications as shown on drawings

1.03 RELATED REQUIREMENTS

A. Section 01 81 13 – Sustainable Design Requirements for additional LEED requirements
B. Section 06 10 00 – Rough Carpentry
C. Section 06 61 13 – Simulated Stone Fabrications
D. Section 06 61 16 – Solid Surfacing Fabrications
E. Section 07 92 00 – Joint Sealants
F. Section 11 42 16 – Food Preparation Surfaces
G. Section 12 30 00 – Casework
H. Section 12 36 61 – Simulated Stone Countertops
I. Section 12 36 61.16 – Solid Surfacing Countertops
J. Section 12 36 61.19 – Quartz Agglomerate Countertops
K. Section 22 00 00 – Plumbing
L. Section 26 27 26 – Wiring Devices

1.04 REFERENCES

A. CSA B45/IAPMO ANSI Z124 (previously ANSI Z124.6 – Plastic Sinks).
   1. CSA B45/IAPMO ANSI Z124 Section 5.7.1.3 – Point Impact tests.


P. NEMA LD 3 – High Pressure Decorative Laminates.

1. NEMA LD 3-3.3 – Light Resistance.
2. NEMA LD 3-3.5 – Boiling Water Resistance.
3. NEMA LD 3-3.6 – High Temperature Resistance.
4. NEMA LD 3-3.8 – Ball Impact Resistance.


W. New York City Construction Codes, Office of Technical Certification and Research, MEA (Materials and Equipment Acceptance), http://www1.nyc.gov/.


Z. UL 2824 – GREENGUARD Certification Program, Method For Measuring Microbial Resistance From Various Sources Using Static Environmental Chambers.

AA. SCAQMD (South Coast Air Quality Management District) VOC (Volatile Organic Content) Rule 1168 for Adhesive and Sealant Applications

BB. Star-K Kosher Certification (www.star-k.org).

1.05 SUBMITTALS

A. Submit product data for each type of product indicated.

1. Submit manufacturer’s product data on material characteristics, performance properties, fabrication instructions, installation instructions and maintenance instructions.
B. Shop drawings:
   1. Show location of each item; provide complete detailed and dimensioned plans and elevations, large-scale details, attachment devices and other components.
      a. Show the following:
         1) Full-size details, edge details, attachments, etc.
         2) Locations and sizes of furring, blocking, including concealed blocking and reinforcement specified in other Sections.
         3) Fabrication details for brackets.
         4) Locations and sizes of cutouts and holes for plumbing fixtures, faucets, soap dispensers, waste receptacle and other items installed in quartz surface.
         5) Locations and sizes of cutouts for sink installation and lavatory installation.
         6) Type of sealant.
         7) Type of adhesive.
         8) Seam locations.

C. Samples:
   1. For each type of product indicated:
      a. Submit minimum 2-inch-by-2-inch sample in specified color. For viewing pattern or veining, submit minimum 4-inch-by-4-inch samples.
      b. Cut sample and seam together for representation of seaming techniques.
      c. Indicate full range of color and pattern variation.
      d. Approved samples will be retained as a standard for work.

D. Product data:
   1. Indicate product description, fabrication information and compliance with specified performance requirements.

E. Sustainable Design Reporting:
   1. Provide documentation from manufacturer of the amounts of pre-consumer and/or post-consumer recycled content for products.
   2. Provide documentation from manufacturer showing manufacturing locations for products manufactured and sourced within 500 miles of project site.
   3. Provide documentation from manufacturer that products meet or exceed emissions guidelines for volatile organic compounds (VOCs).
   4. Provide documentation from manufacturer indicating that adhesives and sealants applied on project site meet or exceed emissions guidelines for volatile organic compounds (VOCs) and comply with SCAQMD Rule #1168.

F. LEED Submittals:
   1. LEED® 2009, Credits MR Credit 4 – Recycled Content.
      a. Provide documentation for cost of products having recycled content indicating percentages by weight of post-consumer plus 1/2 of pre-consumer content.
   2. LEED® 2009, Credits MR Credit 5 – Regional Materials.
      a. Provide documentation showing manufacturing locations and origins of materials for products manufactured and sourced within 500 miles of project location. The point of manufacture is place of final assembly of components. Provide documentation for cost of materials or products that have been extracted, harvested or recovered and regionally manufactured within 500 miles of the project site.
3. LEED® 2009, Credits MR Credit 4.1– Low-Emitting Materials – Adhesives and Sealants,
   a. Provide documentation from manufacturers indicating that adhesives and sealants applied
      on project site meet or exceed emissions guidelines for volatile organic compounds (VOCs)
      and comply with SCAQMD Rule #1168.
4. LEED® NC v4, EQ: Indoor Environmental Quality, EQ Credit: Low-Emitting Materials,
   a. Provide documentation from manufacturers that products meet or exceed emissions
      guidelines for volatile organic compounds (VOCs).
   b. Provide documentation from manufacturers that adhesives and sealants meet or exceed
      emissions guidelines for volatile organic compounds (VOCs) and comply with SCAQMD
      Rule #1168.
5. LEED® NC v4, MR Credit: Building Product Disclosure and Optimization - Material
   Ingredients.
      1) Provide manufacturer’s HPD (Health Product Declaration).
6. LEED® NC v4, MR Credit: Building Product Disclosure and Optimization - Sourcing of Raw
   Materials.
      1) Provide manufacturer’s CSR (Corporate Sustainability Report)
      1) Provide documentation from manufacturer of the amounts of pre-consumer and post-
         consumer recycled content for products specified.
7. LEED® NC v4, MR Credit: Building Product Disclosure and Optimization.
   a. Option 1. Environmental Product Declaration (EPD)
      1) Provide manufacturer’s EPD (Environmental Product Declaration)
G. Fabricator/installer qualifications:
   1. Provide copy of certification number.
H. Certificates: Certify that products meet or exceed requirements.
   1. UL Environment– GREENGUARD and GREENGUARD Gold, current low emitting VOC
      certification of quartz surface and solid surface products.
   2. UL Environment– GREENGUARD and GREENGUARD Gold, current low emitting VOC
      certification for manufacturer’s recommended adhesive and/or sealant.
   3. UL Environment – Mold Resistance Certification in accordance with UL 2824.
I. Fire test response characteristics:
   1. United States – Provide Class A surface burning characteristics as determined by testing
      products per UL 723 (ASTM E 84, NFPA 255) or another testing and inspecting agency
      acceptable to authorities having jurisdiction.
      a. Flame Spread Index: 25 or less.
      b. Smoke Developed Index: 450 or less.
   2. Canada – Provide with surface burning characteristics as determined by testing products by UL
      Canada per ULC S102 or another testing and inspecting agency acceptable to authorities having
      jurisdiction.
J. Maintenance data:
   1. Submit manufacturer’s care and maintenance data.
   2. Include in project closeout documents.
1.06 QUALITY ASSURANCE

A. Qualifications:
   a. Shop employs skilled workers who custom fabricate products similar to those required for this project and whose products have a record of successful in-service performance.

B. Fabricator/installer qualifications:
   1. Work of this section shall be by a certified fabricator/installer, certified in writing by the manufacturer or designated representative.

C. Allowable tolerances:
   1. Variation in component size: ±1/8 inch (3 mm) over a 10 foot length.
   2. Location of openings: ±1/8 inch (3 mm) from indicated location.
   3. Minimum of 1/16 inch and a maximum of 1/8 inch (3 mm) clearance between quartz surfaces and each wall.

D. Coordination drawings:
   1. Shall be prepared indicating:
      a. Plumbing work.
      b. Electrical work.
      c. Miscellaneous steel for the general work.
      d. Indicate location of all walls (rated and non-rated), blocking locations and recessed wall items, etc.
   2. Content:
      a. Project-specific information, drawn accurately to scale.
      b. Do not base coordination drawings on reproductions of the contract documents or standard printed data.
      c. Indicate dimensions shown on the contract drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements.
      d. Provide alternate sketches to designer for resolution of such conflicts.
         1) Minor dimension changes and difficult installations will not be considered changes to the contract.
   3. Drawings shall:
      a. Be produced in 1/2 inch scale for all fabricated items.
   4. Drawings must be complete and submitted to the architect within 60 days after award of contract for record only.
      a. No review or approval will be forthcoming.
      b. Coordination drawings are required for the benefit of contractor’s fabricators/installers as an aid to coordination of their work to eliminate or reduce conflicts that may arise during the installation of their work.

E. Job mock-up:
   1. Prior to fabrication of architectural millwork, erect sample unit to further verify selections made under sample submittals and to demonstrate the quality of materials and execution.
   2. Mock-up shall be [____________].
   3. Build the mock-up to comply with the contract documents and install in a location as directed by the architect.
4. Notify the architect two weeks in advance of the date of when the mock-up will be delivered.
5. Should mock-up not be approved, re-fabricate and reinstall until approval is secured.
6. Remove rejected units from project site.
7. Mock-up, once approved, may become a part of the project and serve as a standard for judging quality of all completed units of work.

F. Pre-installation conference:
   1. Conduct conference at project site to comply with requirements in Division 1.

1.07 DELIVERY, STORAGE AND HANDLING
A. Deliver no components to project site until areas are ready for installation.
B. Store components indoors in clean and dry area prior to installation.
C. Handle materials to prevent damage to finished surfaces.
D. Follow manufacturer’s safe handling and storage recommendations.
E. Provide protective coverings to prevent physical damage or staining following installation for duration of project.

1.08 WARRANTY
A. Provide manufacturer’s 10-year warranty.
B. Damage caused by physical or chemical abuse or damage from excessive heat will not be warranted.

1.09 MAINTENANCE
A. Provide maintenance requirements as specified by the manufacturer.

PART 2 - PRODUCTS

2.01 MANUFACTURERS
A. Contract Documents are based on products manufactured by DuPont (E. I. du Pont de Nemours and Company). Provide Corian® Quartz, formerly known as Zodiaq® (basis of design) subject to compliance with the requirements.
   a. Address: Corian® Design, Corian® Quartz, Chestnut Run Plaza 735, 974 Centre Road, P.O. Box 2915, Wilmington, DE 19805.
   b. Phone: (800) 426-7426.
   d. Subject to compliance with the requirements, provide the following product: quartz surface from Corian® Design (basis of design).
B. Substitutions: Not permitted.

2.02 MATERIALS
A. Material:
   1. Corian® Quartz material composed of ~93 % natural quartz with pigments and resin.
   2. Corian®Quartz Terra Collection product composed of pre-consumer and/or post-consumer glass, natural quartz, pigments and resin.
   3. Material shall have minimum physical and performance properties as specified.
B. Thickness:
1. 2 cm (3/4 inch).
2. 3 cm (1-1/8 inch).

C. Edge treatment:
   1. Exposed Edge
      a. [_______]
      b. [_______]
      c. [_______]
      d. As indicated.
   2. Appliance Edge.
      a. Finished.
      b. Not Finished.

D. Seam width:
   1. 1/16 inch nominal unless otherwise specified.

E. Sink mounting:
   1. Integrated.
   2. Undermount.
   3. Drop in.

F. Backsplash:
   1. Applied.

G. Endsplash:
   1. Applied.

H. Corian® Quartz Performance Properties (TYPICAL RESULTS):
   1. Flexural Strength > 5,300 psi ASTM D790
   2. Flexural Modulus 5.3–5.7 X 106 psi ASTM D790
   3. Compression Strength (Dry) 27,300 psi ASTM C170
   4. Compression Strength (Wet) 24,400 psi ASTM C170
   5. Hardness 7 Mohs Hardness Scale
   6. Thermal Expansion 1.45 x 10-5 meter/meter deg C ASTM D696
   7. Thermal Expansion 2.61 x 10-5 inch/inch deg F ASTM D696
   8. Colorfastness Passes NEMA LD 3-3.3
   9. Gloss (60° Gardner) 45–50 ANSI Z124
   10. Wear and Cleanability Passes CSA B45.5-11/IAPMO Z124-2011
   11. Stain Resistance Passes CSA B45.5-11/IAPMO Z124-2011
   12. Fungal Resistance No observed growth on product ASTM G 21
   13. Bacterial Resistance No observed growth on product ASTM G 22
   14. High Temperature Resistance None to slight effect NEMA LD 3-3.6
      a. Temperature, 356 deg F
   15. Boiling Water Resistance None to slight effect NEMA LD 3-3.5
   16. Freeze-Thaw Cycling Unaffected ASTM C1026
   17. Point Impact Passes ANSI Z124.6.4.2
   18. Ball Impact Resistance No failure at 164 inches NEMA LD 3-3.8
      a. Slabs, No fracture, 1/2 lb. ball – 2cm and 3 cm
   19. Static Coefficient of Friction 0.89 (Dry), 0.61 (Wet) ASTM C1028
   20. Abrasion Resistance 139 ASTM C501

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Title [XX XX XX.] Page 8
21. Density 2.4 g/cm³  
22. Water Absorption, Long-term 0.12%  
23. Water Absorption, Short < 0.04%  
24. Moisture Expansion < 0.01% average  
26. Flame Spread Index FSI 0 for 3 cm UL 723  
27. Flame Spread Index FSI ≤ 5 for 2 cm UL 723  
28. Smoke Developed Index SDI ≤ 40 for 3 cm UL 723  
29. Smoke Developed Index SDI ≤ 75 for 2 cm UL 723  
30. Flame Spread Value 0 for 3 cm CAN/ULC-S102  
31. Flame Spread Value 5 for 2 cm CAN/ULC-S102  
32. Smoke Developed Value 10 for 3 cm CAN/ULC-S102  
33. Smoke Developed Value 50 for 2 cm CAN/ULC-S102  
34. Nominal Thickness 2 cm and 3 cm  
35. Nominal Weight per square foot for 2 cm thickness is 10 pounds  
36. Nominal Weight per square foot for 3 cm thickness is 15 pounds  

CORIAN® QUARTZ (ZODIAQ®) CERTIFICATIONS and APPROVALS:
1. New York City Material Equipment Acceptance Number for DuPont™ Zodiaq® is 431-00-M.  
2. NSF/ANSI Standard 51, Listed by NSF.  
3. UL Environment/GREENGUARD Certified.  
4. UL Environment/GREenguARD Gold Certified.  
5. UL 2824 - Mold Resistant.  
6. Kosher, Listed by Star-K.  

2.03 ACCESSORY PRODUCTS  
A. Mounting Adhesives:  
1. 100 percent Silicone Sealant.  
B. Seam Adhesive:  
1. Corian® Joint Adhesive to create color-coordinated seam.  
C. Sink/bowl mounting hardware:  
1. Manufacturer’s approved sink setters, bowl clips and fasteners for attachment of undermount sinks/bowls.  
D. Wireless Charging Unit: A complete, self-contained system with a dual-mode transmitter that is compliant with PMA and WPC Qi standards.  

2.04 FABRICATION  
A. Fabricate components to greatest extent practical to sizes and shapes indicated, in accordance with approved shop drawings and manufacturer’s printed instructions and technical bulletins.  
B. Form joints between components using manufacturer’s standard joint adhesive.  
   a. Reinforce as required.  
   2. Provide factory cutouts for plumbing fittings and bath accessories as indicated on the drawings.  
   3. Rout and finish component edges with clean, sharp returns.  
   4. Rout cutouts, radii and contours to template.
C. Smooth edges.

2.05 FINISHES
A. Select from the manufacturer’s standard color chart.
   1. Color:
      a. [___________]
      b. [___________]

PART 3 - EXECUTION
3.01 INSTALLATION
A. General
   1. Install countertop materials in accordance with manufacturer’s instructions.
   2. Additional weight from attached sink or lavatory will affect maneuverability of tops during transportation and installation.
   3. Carefully plan work to avoid damaging finished tops during transportation and installation.
B. Install components plumb and level, in accordance with approved shop drawings and product installation details.
   1. Tops:
      a. Flat and true to within 1/8 inch (3 mm) of a flat surface over a 10-foot length.
      b. Allow a minimum of 1/16 inch to a maximum of 1/8 inch (3 mm) clearance between surface and each wall.
      c. Form field joints using manufacturer’s recommended adhesive (Corian® Joint Adhesive), with joint widths no greater than 1/8 inch (3 mm) in finished work.
      d. Keep components and hands clean when making joints.
C. Sinks/Lavatory Bowls:
   1. Adhere undermount sinks/lavatory bowls to countertops using manufacturer’s recommended adhesive and mounting hardware.
   2. Adhere drop-in sinks/bowls to countertops using silicone sealant and manufacturer-recommended adhesives.
D. Provide backsplashes and endsplashes as indicated on the drawings.
   1. Adhere to countertops using silicone sealant.
      a. Keep components and hands clean when working with silicone sealant.

3.02 CONNECTIONS:
A. Make plumbing connections in accordance with Division 22.
B. Make electrical connections in accordance with Division 26.

3.03 CLEANING AND PROTECTION
A. Keep components and hands clean during installation.
B. Remove adhesives, sealants and other stains in accordance with manufacturer’s instructions.
   1. Clean exposed surfaces in accordance with manufacturer’s instructions.
   2. Components shall be clean on date of substantial completion.
      a. Protect surfaces from damage until date of substantial completion.
3. Replace or repair damaged work in a satisfactory manner.

### 3.04 SCHEDULE

**A. Countertops:**
1. Location: [__________]
2. Quartz surface is adhesively joined with exposed seams.
   a. Color: [______________]
   b. Vertical Thickness [______________]
   c. Horizontal Thickness [______________]
   d. Edge Details [______________]
   e. Backsplash [______________]
   f. Sidesplash [______________]
   g. Sink [______________]

**A. Countertops with integrated Corian® Solid Surface sinks:**
1. Location: [__________]
2. Follow manufacturer’s recommendations to obtain a smooth transition between adhesively joined top and sink.
3. Quartz surface is adhesively joined with exposed seams.
   a. Color: [______________]
   b. Vertical Thickness [______________]
   c. Horizontal Thickness [______________]
   d. Edge Details [______________]
   e. Backsplash [______________]
   f. Sidesplash [______________]
   g. Sink [______________]

**B. Countertops with undermount sinks:**
1. Location: [__________]
2. Quartz surface is adhesively joined with exposed seams.
   a. Color: [______________]
   b. Vertical Thickness [______________]
   c. Horizontal Thickness [______________]
   d. Edge Details [______________]
   e. Backsplash [______________]
   f. Sidesplash [______________]
   g. Sink [______________]

**C. Countertops integrated undermount Corian® Solid Surface lavatory bowls:**
1. Location: [__________]
2. Follow manufacturer’s recommendations to obtain a smooth transition between adhesively joined top and lavatory bowl.
3. Quartz surface is adhesively joined with exposed seams.
   a. Color: [______________]
   b. Vertical Thickness [______________]
   c. Horizontal Thickness [______________]
   d. Edge Details [______________]
e. Backsplash [______________]
f. Sidesplash [______________]

D. Countertops with undermount lavatory bowls:
   1. Location: [__________]
   2. Quartz surface is adhesively joined with exposed seams.
      a. Color: [__________]
      b. Vertical Thickness [______________]
      c. Horizontal Thickness [______________]
      d. Edge Details [__________]
      e. Backsplash [______________]
      f. Sidesplash [______________]
      g. Sink [______________]

E. Reception areas:
   1. Location: [______________]
   2. Quartz surface is adhesively joined with exposed seams.
      a. Color: [__________]
      b. Vertical Thickness [______________]
      c. Horizontal Thickness [______________]
      d. Edge Details [__________]

F. Nurses station:
   1. Location: [______________]
   2. Quartz surface is adhesively joined with exposed seams.
      a. Color: [__________]
      b. Vertical Thickness [______________]
      c. Horizontal Thickness [______________]
      d. Edge Details [__________]
      e. Backsplash [______________]
      f. Sidesplash [______________]

A. Table tops:
   1. Location: [______________]
   2. Quartz surface is adhesively joined with exposed seams.
      a. Color: [__________]
      b. Vertical Thickness [______________]
      c. Horizontal Thickness [______________]
      d. Edge Details [__________]
      e. Backsplash [______________]
      f. Sidesplash [______________]

A. Bar tops:
   1. Location: [______________]
   2. Quartz surface is adhesively joined with exposed seams.
      a. Color: [______________]
      b. Vertical Thickness [______________]
      c. Horizontal Thickness [______________]
      d. Edge Details [______________]
e. Backsplash [______________]
f. Sidesplash [______________]
g. Sink [______________] add text for integrated undermount and send out

B. Cafeteria surfaces — hot:
1. Refer to Corian® Design fabrication and design recommendations.
   a. Quartz surface is intended to be a decorative material.
      1) All equipment should be independently supported by the substructure, not the quartz surface.
   b. Quartz surface is adhesively joined with exposed seams.
   c. Provide expansion joints in countertop as detailed on the drawings.
   d. Make cutouts to templates furnished by the equipment manufacturer.
   e. Reinforce edges and cutouts as recommended by Corian® Design.
   f. Provide insulation between material and adjacent hot water pans and food warmers.
   g. Thermally isolate hot applications from cold.
   h. Provide venting of cabinets as required.

2. Location: [______________]
3. Color: [________________]
4. Vertical Thickness [______________]
5. Horizontal Thickness [______________]
6. Edge Details [______________]
7. Backsplash [______________]
8. Sidesplash [______________]

C. Cafeteria surfaces — cold:
1. Refer to manufacturer’s food service design recommendations.
2. Quartz surface is intended to be a decorative material.
   a. All equipment should be independently supported by the substructure, not the quartz surface.
3. Quartz surface is adhesively joined with exposed seams.
4. Provide expansion joints in countertop as detailed on the drawings.
5. Make cutouts to templates furnished by the equipment manufacturer.
6. Reinforce edges and cutouts as recommended by the quartz surface manufacturer.
7. Provide insulation between material and adjacent cold surfaces.
8. Thermally isolate hot applications from cold.
9. Location: [______________]
   a. Color: [________________]
   b. Vertical Thickness [______________]
   c. Horizontal Thickness [______________]
   d. Edge Details [______________]
   e. Seam Width [______________]
   f. Backsplash [______________]
   g. Sidesplash [______________]

A. Vanity tops with integrated Corian® Solid Surface lavatory bowls:
1. Location: [______________]
2. Follow manufacturer’s recommendations to obtain a smooth transition between adhesively joined top and lavatory bowl.

3. Quartz surface is adhesively joined with exposed seams.
   a. Color: [__________]
   b. Vertical Thickness [______________]
   c. Horizontal Thickness [______________]
   d. Edge Details [______________]
   e. Backsplash [______________]
   f. Sidesplash [______________]
   g. Sink [______________]

B. Vanity tops and undermount lavatory bowls: insert hidden test insert top mount vanity bowls
   1. Location: [______________]
   2. Follow manufacturer’s recommendations to obtain a smooth transition between adhesively joined top and lavatory bowl.
   3. Quartz surface is adhesively joined with exposed seams.
      a. Color: [__________]
      b. Vertical Thickness [______________]
      c. Horizontal Thickness [______________]
      d. Edge Details [______________]
      e. Backsplash [______________]
      f. Sidesplash [______________]
      g. Sink [______________]

C. Vanity tops and undermount lavatory bowls:
   1. Location: [______________]
   2. Quartz surface is adhesively joined with exposed seams.
      a. Color: [__________]
      b. Vertical Thickness [______________]
      c. Horizontal Thickness [______________]
      d. Edge Details [______________]
      e. Backsplash [______________]
      f. Sidesplash [______________]
      g. Sink [______________]

3. Vanity tops and drop-in lavatory bowls:
   4. 1. Location: ____________ Location: [______________]

5. Quartz surface is adhesively joined with exposed seams.
   a. Color: [__________]
   b. Vertical Thickness [______________]
   c. Horizontal Thickness [______________]
   d. Edge Details [______________]
   e. Backsplash [______________]
   f. Sidesplash [______________]
   g. Sink [______________]
END OF SECTION