

SECTION 12 36 61
SOLID SURFACE COUNTERTOPS

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1.01 REFERENCE STANDARDS

- A. ASTM D256 - Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics; 2024.
- B. ASTM D570 - Standard Test Method for Water Absorption of Plastics; 2022.
- C. ASTM D638 - Standard Test Method for Tensile Properties of Plastics; 2022.
- D. ASTM D696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30°C and 30°C with a Vitreous Silica Dilatometer; 2016.
- E. ASTM D785 - Standard Test Method for Rockwell Hardness of Plastics and Electrical Insulating Materials; 2023.
- F. ASTM D790 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials; 2017.
- G. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2023d.
- H. ASTM G21 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi; 2015, with Editorial Revision (2021).
- I. ASTM G155 - Standard Practice for Operating Xenon Arc Lamp Apparatus for Exposure of Materials; 2025.
- J. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.
- K. NSF 51 - Food Equipment Materials; 2023.
- L. UL 723 - Standard for Test for Surface Burning Characteristics of Building Materials; Current Edition, Including All Revisions.

PART 1 - GENERAL

1.01 GENERAL REQUIREMENTS

- A. The Contractor is referred to the Instructions to Bidders and General Conditions, NYCHA Contracts; the Special Notice to Contractors; the Form of Proposal; the Form of Bid Bond; Division 01 - General Requirements of the Contract Specifications; the Contract Drawings and all Amendments and Addenda thereto; all of which govern the Work of this Section.

1.02 SCOPE OF WORK

- A. Work of this Section includes all labor, materials, equipment and services necessary to complete the Solid Surfacing Countertops work as shown on the drawings and specified herein, including but not limited to, the following:
- B. Provide solid surface counters for Women's and Men's Toilet Rooms.

1.03 RELATED WORK

- A. The following Sections/Divisions contain requirements that relate to the Work of this Section:
 - 1. Section 06 20 00 – Carpentry
 - 2. Section 07 90 00 – Sealants and Joint Fillers
 - 3. Division 22 – Plumbing

1.04 SUBMITTALS

- A. Product data: Indicate product description for each type of product indicated.

1.05 SHOP DRAWINGS:

- A. Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices and other components.

- B. Show full-size details, edge details, thermoforming requirements, attachments, etc.
- C. Show locations and sizes of furring, blocking, including concealed blocking and reinforcement specified in other Sections.
- D. Show locations and sizes of cutouts and holes for plumbing fixtures, faucets, soap dispensers, waste receptacle and other items installed in solid surface.

1.06 PRODUCT DATA:

- A. Fabrication information and compliance with specified performance requirements.
- B. 10 year manufacturer warranty.

1.07 QUALITY ASSURANCE

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

1.08 FABRICATOR/INSTALLER QUALIFICATIONS:

- A. Work of this section shall be by a certified fabricator/installer, certified in writing by the manufacturer.

1.09 APPLICABLE STANDARDS:

- A. Standards of the following, as referenced herein:
 - 1. American National Standards Institute (ANSI).
 - 2. American Society for Testing and Materials (ASTM).
 - 3. National Electrical Manufacturers Association (NEMA).
 - 4. NSF International.

1.10 FIRE TEST RESPONSE CHARACTERISTICS:

- A. Provide with the following Class A (Class I) surface burning characteristics as determined by testing identical products per UL 723 ((ASTM E84))) or another testing and inspecting agency acceptable to authorities having jurisdiction:
 - 1. Flame Spread Index: 25 or less.
 - 2. Smoke Developed Index: 450 or less.

1.11 DELIVERY, STORAGE AND HANDLING

- A. Deliver no components to project site until areas are ready for installation.
- B. Store components indoors prior to installation.
- C. Handle materials to prevent damage to finished surfaces.
- D. Provide protective coverings to prevent physical damage or staining following installation for duration of project.

1.12 WARRANTY

- A. Provide manufacturer's warranty against defects in materials.
- B. Warranty shall provide material and labor to repair or replace defective materials.
- C. Damage caused by physical or chemical abuse or damage from excessive heat will not be warranted.
- D. Manufacturer's warranty period:
- E. Ten years from date of substantial completion.

1.13 MAINTENANCE

- A. Provide maintenance requirements as specified by the manufacturer.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturers:

2.02 SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY THE FOLLOWING OR EQUAL:

- A. Corian surfaces from the DuPont Company, or equal.
- B. Swanstone, or equal.

2.03 MATERIALS

- A. Solid polymer components
- B. Cast, nonporous, filled polymer, not coated, laminated or of composite construction with through body colors meeting ANSI Z124.3 or ANSI Z124.6, having minimum physical and performance properties specified.
- C. Superficial damage to a depth of 0.010 inch shall be repairable by sanding and/or polishing.
- D. Thickness: 1-1/2 inch.

COUNTERTOPS

**MEN'S AND WOMEN'S TOILET ROOMS COUNTERTOPS – "SEA GLASS" BY CORIAN OR EQUAL.
FINAL COLOR AS SELECTED BY ARCHITECT AND APPROVED BY COMMUNITY CENTER
OPERATING ORGANIZATION.**

PERFORMANCE CHARACTERISTICS

PROPERTY TYPICAL RESULT TEST

TENSILE STRENGTH 6,000 PSI ASTM D638

TENSILE MODULUS 1.5 X 10⁶ PSI ASTM D638

TENSILE ELONGATION 0.4% MIN. ASTM D638

FLEXURAL STRENGTH 10,000 PSI ASTM D790

FLEXURAL MODULUS 1.2 X 10⁶ PSI ASTM D790

HARDNESS >85 ROCKWELL "M" SCALE

ASTM D785, ASTM D 2583

THERMAL EXPANSION 3.02 X 10⁻⁵ INCH./IN./°C ASTM D696

(1.80 X 10⁻⁵ INCH./IN./°F)

GLOSS (60° GARDNER) 5–75 ANSI Z124

(MATTE - HIGHLY POLISHED)

LIGHT RESISTANCE (XENON ARC) NO EFFECT NEMA LD 3-2000 METHOD 3.3

WEAR AND CLEANABILITY PASSES ANSI Z124.3 & Z124.6

STAIN RESISTANCE: SHEETS PASSES ANSI Z124.3 & Z124.6

FUNGUS AND BACTERIA RESISTANCE DOES NOT SUPPORT ASTM G21&G22

MICROBIAL GROWTH

BOILING WATER RESISTANCE NO VISIBLE CHANGE NEMA LD 3-2000 METHOD 3.5

HIGH TEMPERATURE RESISTANCE NO CHANGE NEMA LD 3-2000 METHOD 3.6

IZOD IMPACT 0.28 FEET-LBS./IN. OF NOTCH ASTM D256

(NOTCHED SPECIMEN)

(METHOD A)

BALL IMPACT NO FRACTURE—1/2 LB. BALL NEMA LD 3-2000

RESISTANCE: SHEETS 1/4" SLAB—36" DROP METHOD 3.8 1/2" SLAB—

144" DROP

WEATHERABILITY ΔE*94<5 INCH 1,000 HRS. ASTM G155

SPECIFIC GRAVITY † 1.7

WATER ABSORPTION LONG-TERM ASTM D570

0.4% (3/4")

0.6% (1/2")

0.8% (1/4")

TOXICITY 99 (SOLID COLORS) PITTSBURGH PROTOCOL

66 (PATTERNED COLORS) TEST ("LC50"TEST)

FLAMMABILITY ALL COLORS ASTM E84

(CLASS I AND CLASS A)

NFPA 255 & UL 723

FLAME SPREAD INDEX <25

SMOKE DEVELOPED INDEX <25

† APPROXIMATE WEIGHT PER SQUARE FOOT: 1/4" 0.24 INCH 2.2 LBS., 1/2" (0.48 INCH) 4.4 LBS.

SHAPES MEET OR EXCEED THE ANSI Z124.3 AND ANSI Z124.6 STANDARDS FOR PLASTIC SINKS AND LAVATORIES.

NEMA RESULTS BASED ON THE NEMA LD 3-2000.

ACCESSORIES

JOINT ADHESIVE: MANUFACTURER'S STANDARD ONE- OR TWO-PART ADHESIVE KIT TO CREATE INCONSPICUOUS, NONPOROUS JOINTS.

SEALANT: MANUFACTURER'S STANDARD MILDEW-RESISTANT, FDA-COMPLIANT, NSF 51-COMPLIANT (FOOD ZONE — ANY TYPE), UL-LISTED SILICONE SEALANT IN COLORS MATCHING COMPONENTS.

CONDUCTIVE TAPE: MANUFACTURER'S STANDARD ALUMINUM FOIL TAPE, WITH REQUIRED THICKNESS, FOR USE WITH CUTOUTS NEAR HEAT SOURCES.

INSULATING FELT TAPE: MANUFACTURER'S STANDARD FOR USE WITH CONDUCTIVE TAPE IN INSULATING SOLID SURFACE MATERIAL FROM ADJACENT HEAT SOURCE.

FACTORY FABRICATION

SHOP ASSEMBLY

53.01 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.

53.02 FORM JOINTS BETWEEN COMPONENTS USING MANUFACTURER'S STANDARD JOINT ADHESIVE WITHOUT CONSPICUOUS JOINTS.

A. Reinforce with strip of solid polymer material, 2" wide.

53.03 PROVIDE FACTORY CUTOUTS FOR PLUMBING FITTINGS AND BATH ACCESSORIES AS INDICATED ON THE DRAWINGS.

53.04 ROUT AND FINISH COMPONENT EDGES WITH CLEAN, SHARP RETURNS.

A. Rout cutouts, radii and contours to template.

B. Smooth edges.

C. Repair or reject defective and inaccurate work.

THERMOFORMING:

54.01 COMPLY WITH MANUFACTURER'S DATA.

54.02 HEAT ENTIRE COMPONENT.

54.03 MATERIAL SHALL BE UNIFORM, BETWEEN 275 AND 325 DEGREES FAHRENHEIT DURING FORMING.

54.04 FORM PIECES TO SHAPE PRIOR TO SEAMING AND JOINING.

54.05 CUT PIECES TO FINISHED DIMENSIONS.

54.06 SAND EDGES AND REMOVE NICKS AND SCRATCHES.

FINISHES

AS NOTED ABOVE.

FINISH: PROVIDE SURFACES WITH A UNIFORM FINISH.

PART 3 - EXECUTION

58.01 EXAMINATION

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.

INSTALLATION

THE CONTRACTOR IS TO PROVIDE AND INSTALL THE SOLID SURFACE SINKS (EACH COME WITH A 2" X 4" STUD LADDER SUPPORT). THE INSTALLATION OF THE SOLID SURFACE COUNTERTOPS, SINKS AND PLUMBING WILL HAVE TO BE COORDINATED.

INSTALL COMPONENTS PLUMB, LEVEL AND RIGID, SCRIBED TO ADJACENT FINISHES, IN ACCORDANCE WITH APPROVED SHOP DRAWINGS AND PRODUCT DATA.

63.01 PROVIDE PRODUCT IN THE LARGEST PIECES AVAILABLE.

63.02 FORM FIELD JOINTS USING MANUFACTURER'S RECOMMENDED ADHESIVE, WITH JOINTS INCONSPICUOUS IN FINISHED WORK.

63.03 EXPOSED JOINTS/SEAMS SHALL NOT BE ALLOWED.

63.04 REINFORCE FIELD JOINTS WITH SOLID SURFACE STRIPS EXTENDING A MINIMUM OF 1 INCH ON EITHER SIDE OF THE SEAM WITH THE STRIP BEING THE SAME THICKNESS AS THE TOP.

63.05 CUT AND FINISH COMPONENT EDGES WITH CLEAN, SHARP RETURNS.

63.06 ROUT RADII AND CONTOURS TO TEMPLATE.

63.07 ANCHOR SECURELY TO BASE CABINETS OR OTHER SUPPORTS.

63.08 ALIGN ADJACENT COUNTERTOPS AND FORM SEAMS TO COMPLY WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS USING ADHESIVE IN COLOR TO MATCH COUNTERTOP.

63.09 CAREFULLY DRESS JOINTS SMOOTH, REMOVE SURFACE SCRATCHES AND CLEAN ENTIRE SURFACE.

63.10 INSTALL COUNTERTOPS WITH NO MORE THAN 1/8-INCH 0.12 INCH SAG, BOW OR OTHER VARIATION FROM A STRAIGHT LINE.

COVERED APPLIED SIDESPLASHES:

64.01 INSTALL APPLIED SIDESPLASHES USING MANUFACTURER'S STANDARD COLOR-MATCHED SILICONE SEALANT.

64.02 ADHERE APPLIED SIDESPLASHES TO COUNTERTOPS USING MANUFACTURER'S STANDARD COLOR-MATCHED SILICONE SEALANT.

64.03 COVERED BACKSPLASHES AND SIDESPLASHES:

64.04 PROVIDE COVERED BACKSPLASHES AND SIDESPLASHES AT ALL WALLS AND ADJACENT MILLWORK.

64.05 FABRICATE RADIUS COVE AT INTERSECTION OF COUNTERS WITH BACKSPLASHES TO DIMENSIONS SHOWN ON THE DRAWINGS.

64.06 ADHERE TO COUNTERTOPS USING MANUFACTURER'S STANDARD COLOR-MATCHED JOINT ADHESIVE.

INTEGRAL SINKS/VANITIES:

65.01 SECURE SINKS AND LAVATORY BOWLS TO TOPS USING MANUFACTURER'S RECOMMENDED SEALANT, ADHESIVE AND MOUNTING HARDWARE TO MAINTAIN WARRANTY.

REPAIR

REPAIR OR REPLACE DAMAGED WORK PRIOR TO ACCEPTANCE.

CLEANING AND PROTECTION

KEEP COMPONENTS CLEAN DURING INSTALLATION.

REMOVE ADHESIVES, SEALANTS AND OTHER STAINS.

END OF SECTION 12 36 61