



To Whom It May Concern:

Avonite Surfaces Submittal Statement

Avonite Surfaces has supplied solid polymer products for numerous military for over twenty years. We offer two types of sheet goods that include the Foundations Advanced 100% Acrylic products and our acrylic-modified Studio Collection. Both product lines are manufactured exclusively in the United States. These products meet and even exceed many of the specified performance requirements for solid polymer, joint adhesive and sealants as stated by the United Facility Guideline Specifications from the Department of Defense.

Innovative leadership throughout our history has directly contributed and influenced the industry as a whole. Among these innovations is our creation of the first recycled solid surface products in 1996. This is perhaps why Avonite is the only solid surface listed in Division 6 on the preferred product list of Section 03140 Affirmative and Green Procurement.

The following pages include our product data and description of some operations in place that support efficient use of natural resources and production techniques supporting sustainable design and products.

Regards,

Wayne Rutledge

Marketing Manager

Avonite Surfaces

Technical Data

Product Specification

FOUNDATIONS™

Custom sheet dimensions available for Foundations.® See www.avonitesurfaces.com/customsheets for details.

Standard Sheet Thickness:	1/2" (13mm), 1/4" (6mm), 1/8" (3mm)	
Standard Sheet Dimensions:	1/2" (13mm)	30" X 144" (762mm x 3,658mm)
Standard Sheet Dimensions:	1/4" (6mm)	36" x 96" (914mm x 2,438mm)
		60" x 72" (1,524mm x 1,829mm)
Standard Sheet Dimensions:	1/8" (3mm)	30" x 144" (762mm x 3,658mm)

STUDIO COLLECTION™

Standard Sheet Thickness:	1/2" (13mm)	
Standard Sheet Dimensions:	1/2" (13mm)	36" x 120" (914mm x 3,048mm)

NEMA LD 3 2000 Staining Reagent	Foundations Class I		Studio Class I		Studio Class III	
	Cleanability Rating	Stain Rating	Cleanability Rating	Stain Rating	Cleanability Rating	Stain Rating
Distilled Water	0	●	0	●	0	●
Tap Water	0	●	0	●	0	●
Ethyl Alcohol, 50% Solution	0	●	0	●	0	●
Isopropyl Alcohol, 70% Solution	0	●	0	●	0	●
VM&P Naphtha/Ethyl Alcohol, 50/50 Solution	0	●	0	●	0	●
Nail Polish Remover	0	●	0	●	0	●
Acetone	0	●	0	●	0	●
Bar Soap Solution, 5% In Water	0	●	0	●	0	●
Household Detergent, 5% In Water	0	●	0	●	0	●
Household Ammonia	0	●	0	●	0	●
Tomato Catsup	0	●	0	●	0	●
Vegetable Oil	0	●	0	●	0	●
Trisodium Phosphate, 1% Solution	0	●	0	●	0	●
Coffee	0	●	0	●	0	●
Tea	0	●	0	●	0	●
Whole Milk	0	●	0	●	0	●
Citric Acid, 10% Solution	0	●	0	●	0	●
Yellow Mustard	0	●	0	●	0	●
10% Povidone Iodine	3	●	1	●	0	●
Distilled Vinegar	0	●	0	●	0	●
Lipstick (Red)	1	●	1	●	2	●
Washable Ink (blue)	1	●	1	●	2	●
Grape Juice	0	●	0	●	0	●
Red Food Dye	1	●	1	●	2	●
Beet Juice	0	●	0	●	0	●
Merthiolate	1	●	1	●	2	●
Wax Crayon	1	●	1	●	2	●
Shoe Polish (Black Paste)	3	●	1	●	2	●
Ball Pen Ink	3	●	1	●	3	●
Felt Pen Ink	3	●	1	●	2	●
Black Permanent Marker	3	●	1	●	3	●
#2 Pencil	3	●	1	●	2	●
Supermarket Stamp Ink (Purple)	1	●	1	●	2	●

0 Rating - Staining reagent removed with a cellulose sponge moistened with water.

1 Rating - Staining reagent removed with a cellulose sponge moistened with water and commercial cleanser.

2 Rating - Staining reagent removed with a stiff nylon bristle brush with a commercial cleanser and baking soda.

3 Rating - Staining reagent removed with a cotton ball saturated with acetone.

4 Rating - Staining reagent removed with a cotton ball saturated with hypochlorite bleach.

5 Rating - Stains remaining after the previous cleaning steps are rated 5.

● = No Effect

NOTE: Cleaning and rating performed by NEMA LD 3 2000 protocol

Technical Data

Product Specification

Property	Typical Results Foundations	Typical Results Studio Collection Class I	Typical Results Studio Collection Class III	Test Method
General				
Thickness Tested	0.500"	0.500"	0.500"	-
Specific Gravity	1.6	1.6	1.3	ASTM D-792
Water Absorption (24hrs.)	0.04%	0.03%	0.04%	ASTM D-570
Mechanical				
Tensile Strength	4,000 psi	3,700 psi	2,300 psi	ASTM D-638
Tensile Modulus	1,100,000 psi	1,200,000 psi	730,000 psi	ASTM D-638
Tensile Elongation	2.1%	0.38%	0.34%	ASTM D-638
Flexural Strength	8000 psi	6500 psi	4100 psi	ASTM D-790
Flexural Modulus	1,100,000 psi	1,200,000 psi	720,000 psi	ASTM D-790
Barcol Hardness	60	60	45	ASTM D-2583
Rockwell Hardness	86	99	105	ASTM D-785
Un-notched Izod Impact	1.40 ft.lbs./inch	0.67 ft.lbs./inch	0.42 ft.lbs./inch	ASTM D-4812
Notched Izod Impact	0.14 ft.lbs./inch	0.15 ft.lbs./inch	0.15 ft.lbs./inch	ASTM D-256
Ball Impact (1/2 lb. ball)	>150 Inches	>150 Inches	>150 Inches	NEMA LD3-3.8
Total Volatile Organic Compound	69.1 µg/m ² /hr	3.9 µg/m ² /hr	13.9 µg/m ² /hr	ASTM-D5116
Thermal				
DTUL @ 264 psi	200 °F	180 °F	175 °F	ASTM D-648
Coefficient of Thermal Expansion	2.3 X 10 ⁻⁵ in./in.°F	2.1 X 10 ⁻⁵ in./in.°F	2.9 X 10 ⁻⁵ in./in.°F	ASTM D-696
Boiling Water Resistance	No Effect	No Effect	No Effect	ISSFA SST 8.1-00
High Temperature Resistance	No Effect	No Effect	No Effect	ISSFA SST 9.1-00
Flame Spread	<25	<25	>75	ASTM E 84
Smoke Generation	<25	<25	>450	ASTM E 84
Combustion Toxicity	96 (solid colors) 67 (patterns)	62.25	19.33	Pittsburgh Protocol (LC ₅₀ Test)
New York City Adm. Code 27-131+				
Flame Spread	20	20	180	MEA 64-96-M
Smoke Density	155	155	>450	MEA-142-96-M
Surface				
Cleanability	Pass	Pass	Pass	NEMA LD3
Stain Resistance	No Effect	No Effect	No Effect	NEMA LD3-3.9
Stain Resistance	Pass	Pass	Pass	ANSI Z 124.3
Consistency of Color (same sheet)	Pass	Pass	Pass	ISSFA SST 2.1-00
Light Resistance	No Effect	No Effect	No Effect	ISSFA SST 7.1-00
Food Zone Use	NSF 50 & 51 Approved	NSF 50 Approved	NSF 50 Approved	NSF
Fungal/Bacterial Resistance	Does not support microbial growth	Does not support microbial growth	Does not support microbial growth	ASTM G-21
HIV-Resistance	Disinfected surface does not support HIV	Disinfected surface does not support HIV	Disinfected surface does not support HIV	Protocol 61-074-1
Aircraft: FAA Part 23 or 25	Acceptable	Acceptable	Acceptable	FAR 25.853
Federal Motor Vehicle Safety Stnd.	Pass	Pass	Pass	
Canadian Motor Vehicle Safety Stnd.	Pass	Pass	Pass	

* For specific part numbers, go to www.avonitesurfaces.com



Avonite Surfaces Environmental Policy

Avonite Surfaces will conduct its business in an environmentally responsible manner. We shall endeavor to employ relevant practices that reduce our environmental footprint while promoting an environmentally responsible culture with employees and suppliers. We are committed to the prevention of pollution and the protection of our natural resources through, but not limited to, compliance with applicable environmental legislation and regulations, waste reduction and other established programs in which we participate.

We will strive for continual improvement of our business processes, products and activities. Environmental objectives are established and monitored using targets that measure our progress toward minimizing potential significant environmental impacts.

- Today our sustainable practices include production of solid surface products with significant recycle content. These products, which have been available for over 15 years, are now recognized as preferred products by Affirmative Procurement. Our in-house product development team continues to look at opportunities to incorporate materials generated by customers and consumers that would otherwise be land filled.
- The preservation and protection of natural resources by using an industrial water filtering system in our processing that allows us to recycle our own water, and thermal oxidizing units with heat recovery that substantially eliminate VOC emissions.
- The adhesives used to install our products are Greenguard certified.
- Each manufacturing facility and administration complex is actively engaged in paper, plastic, and aluminum recycling as well.



AVONITE
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INNOVATIONS IN SURFACING

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