

TECHNICAL DATA SHEET

Avonite® sheet products in attractive granite colors provide exceptionally weatherable, strong, non-porous, scratch and stain resistant material for architectural and utilitarian work surfaces.

PROPERTY	Solid surface	Studio Collection classe I	Studio Collection classe III	TEST METHODS
General				
Thickness Tested	0.500"	0.500"	0.500"	
Specific Gravity	1,6	1,6	1,3	ASTM D-792
Water Absorption (24 hrs.)	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	8,000 psi	6,500 psi	4,100 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 (½ lb. ball)	>150"	>150"	>150"	NEMA LD3-3.8
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 Index	< 25	< 25	>75	ASTM E 84
Smoke Generation Index	<25	<25	>450	ASTM E 84
Combustion Toxicity	Solid Colors - 98 Patterns - 67	Patterns - 62	Patterns - 19	Pittsburgh Protocol (LC ₅₀ Test)
Surface				
Consistency Of Color (Same Sheet)	Passes	Passes	Passes	ISSFA SST 2.1-00
Light Resistance	No Effect	No Effect	No Effect	ISSFA SST 7.1-00
Cleanability/Stain Resistance	13 / No Effect	5 / No Effect	9 / No Effect	NEMA LD3-3.4
Stain Resistance	Passes	Passes	Passes	ANSI Z-124.3
Fungi Resistance	No Growth	No Growth	No Growth	ASTM G 21
Food Zone Use	NSF 51 Approved	NSF 51 Approved	NSF 51 Approved	NSF