

Technical Data October 2010 Testing ³ for Solid Surface Products			
Property	Result	Testing Laboratory	Test Method
Specific Gravity ¹	1.75 - 1.91 g/cm ³	Intertek Plastics Technology Labs	ASTM D 792 Method A
Flexural Strength ¹	37.78 - 47.16 MPa		ASTM D 790
Flexural Modulus ¹	6288 - 12893 MPa		ASTM D 790
Coefficient of Linear Thermal Expansion ¹	(3.19 - 4.59)x 10 ⁻⁵ cm/cm/°C		ASTM D 696
Boiling Water Resistance	Slight (Gloss change)	Hodges Wood Products Laboratory	NEMA LD3 3.5
High Temperature Resistance	Pass (No Effect at 180° @ 20 minutes)		NEMA LD3 3.6
Impact Resistance- 1/2 pound ball	Pass (> 3000mm No Cracking)		NEMA LD3 3.8
Flame Spread ⁴	<15 (Pass Class A or 1 Requirements)	Hardwood Plywood Veneer Association	ASTM E 84
Smoke Developed	150 (Pass Class A or 1 Requirements)		ASTM E 84
Environmental Chamber (ASTMD 5116) 168 hr Greenguard Model Concentration ²	Formaldehyde < 0.001 ppm Total VOCs < 0.001 mg/m ³ Total aldehydes < 0.001 ppm	Air Quality Sciences	ASTM 5197
			ASTM 6196
			ASTM 5197
Wear and Cleanability	Pass (0.1% Loss of Reflectance)	NAHB Research Center	ANSI Z 124.6 5.3
Stain Resistance	Pass (26)		ANSI Z 124.6 5.2
Chemical Resistance	Pass (no effect)		ANSI Z 124.6 5.5
Tensile Strength ¹	28.68 - 32.20 MPa		ASTM D 638
Tensile Modulus ¹	6709 - 10190 MPa		ASTM D 638
Tensile Elongation ¹	0.45- 0.51%		ASTM D 638
Hardness (barcol) ¹	63-65		ASTM D 2583
Boiling Water Absorption ¹	0.24 - 0.27%		ASTM D 570
Water Absorption (24 Hr) ¹	0.03 - 0.06%		ASTM D 570
Water Absorption (Long Term)	0.375 - 0.885%		ASTM D 570
Fungal Resistance	Does not support Microbial Growth		ASTM G 21
Cigarette Burn Test	Pass (no effect after cleaning)		ANSI Z 124.6 5.4

Note 1- This range is the result of testing on multiple products and represents the typical minimum and maximum performance for the entire Product Line

Note 2- Results for Formaldehyde, Total VOC, And Total Aldehydes all below quantifiable level (limit of detection)

Note 3- Report available upon request

Note 4- The product containing the lowest amount of flame retardant was tested as a worst case. Flame Spread for the rest of the product line is equal to or better than 15.

- Testing protocol- Our factory makes Solid Surface products for the US market. We had the products tested using the most stringent US testing protocol for Decorative Surfacing commonly performed on materials marketed in the US by the leading brands.
- Testing protocol is as follows: NEMA (National Electrical Manufacturers Association), ASTM (American Society of Testing and Materials) ANSI (American National Standards Institute)
- Laboratories- All material was tested in the US by the leading laboratory for each particular test. All laboratories used were accredited by International Agencies under ISO 17025 as competent to perform the testing.

The following US Laboratories were used to Test the material:

- Hodges Wood Products Laboratory is the NEMA LD3 section US laboratory located at a major university that was instrumental in perfecting the NEMA LD3 laboratory testing to insure the reproducibility of the results.
- Hardwood Plywood Veneer Association- is recognized by The International Conference of Building Officials, Building Officials and Code Administration International, Southern Building Code Congress International, ICBO Evaluation Service and the Council of American Building Materials as a laboratory to perform the ASTM E 84 test, commonly used by UL to rate product flame characteristics.
- National Association of Homebuilders Research Center – tests and certifies products used in the construction of homes.
- Air Quality Sciences- tests products to insure they do not emit unsafe levels of VOC and certifies product conformance to Greenguard and Greenguard Children schools criteria.
- Intertek- tests products for the Aerospace industry, automobile industry, construction industry, petroleum industries and the US government