

PHYSICAL PROPERTIES TESTING

<u>Properties</u>	<u>Specifications</u>	<u>Test Method</u>
1. UV Protection	1412 hours QUV	ASTM G 154-00a
2. Water Absorption	0.14%	ASTM D570
3. Heat Deflection Temperature	185 degrees	ASTM D648
4. Specific Gravity	1.16 grams	ASTM D792
5. Burning Resistance	94HB	UL 94
6. Fire Rating	Class 1/A Fire Rated	ASTM E84-10
7. Specular Gloss Level	88 Gloss Units	ASTM 523 & ASTM D2457
8. Abrasion Resistance	2.5	ASTM D4060-07
9. Diamond Scratch	Rating 1	ANSI/NEMA LD 3-2005 3.7.3
10. Ball Impact Resistance	4,680 mm	ANSI/NEMA LD 3-2005 3.8
11. Dart Impact Resistance	125 mm to 725 mm	ANSI/NEMA LD 3-2005 3.9

1. The UV protection is excellent. The time period the UV protection will withstand varies based on the strength of the sun in that geographical location, the direction of the sun and the amount of daily exposure.
2. The water absorption means the product was submerged in water for 24 hours and only absorbed 0.14% of water which is virtually no water absorption.
3. The heat deflection temperature means the product will not start to sustain any damage until the temperature reaches 185 degrees Fahrenheit.
4. The specific gravity is the weight of the product. The 1.16 grams means that the standard 21 mil veneer sheet (52"x108") weighs 5 pounds per sheet.
5. The burning resistance test result 94HB passes the requirements for UL 94HB testing which means there were no visible signs of combustion after the flame is removed.
6. The ASTM E84 "tunnel test" is used to determine the surface burning characteristics of building materials when a Class 1/A Fire Rating are required for the building materials to be used.
7. The Specular Gloss Level was measured at a 60 degree angle with a sheen meter to determine the gloss unit level of our high gloss finish. The 88 Gloss Unit Level reading on the Envirawood high gloss finish is exceptionally close to the maximum achievable high gloss finish.
8. The abrading wheel chosen is the most aggressive wheel the test lab has for abrading this type of material. Using this C-17 wheel and 500 gram weight the product demonstrated a wear index of 2.5. The lower number the better on a scale of 0 to 200.
9. The diamond scratch resistance rating 1 means that no visible scratch marks were found at 1 Newton weight with a gloss loss only.
10. The ball impact resistance test was done with a 1/2 pound, 1-1/2 inch diameter steel ball from 15 feet with no visible damage or fractures.
11. The dart impact resistance test was done with a one (1) ounce standard dart with no fractures from five (5) to twenty-nine (29) inches.