



Test Specification	Property	Results
ASTM E84 (extended to 30 minutes)	Flame Spread	FSI=5, SDI=40, Maximum Progressive Advance (30 min) = 7.5 ft for DFPW < 10.5 ft
APA F-4	Adhesion Shield	Pass
MIL-L 19140 E	Corrosion	No Contribution to metal corrosion, 0.069-0.138 mils/year for brass, 0.00 mils/yr for both steel and aluminum
ASTM G-53	Weathering (1,000 hrs.)	No deterioration
ASTM D-2247	Weathering (500 hrs.)	No deterioration
ASTM D-1037	Accelerated Aging – Bending Test	No deterioration of strength after 56 days in 170° F, 65% RH Chamber.
ASTM D-2794	Impact Resistance	Pass – slight indent @ 160 lbs
ASTM D-790	Bending Strength	MOR (psi x 1,000): Pyrotite® (MD) = 6.97, Pyrotite® (XD) = 5.98 MOE (psi x 1,000,000): Pyrotite® (MD) = 1.27, Pyrotite® (XD) = 1.25
Special Protocol	Nail Penetration	No wood exposed
Special Protocol	Microbial/Fungal Growth	Pyrotite® appears to be more resistant to microbial/fungal attacks than untreated wood products
Combustion Toxicity Test	Pittsburgh Smoke Toxic Potency	The toxic potency is equal to or less than untreated plywood, LC50 = 17.7 & 67.3 grams
ASTM D-2898	Weathering Exterior (1,680 hrs.)	After D-2898 procedure, ASTM RE-84 extended for 30 minutes resulted in FSI=5, SDI=20, and maximum flames advance < 10.5 feet.
Freeze/Thaw	Soak 48 hrs., Freeze at -40°F for 8 hrs., then subject to ASTM D-1037 impact test	No brittleness effect at cold temperatures or failure due to freezing
Outdoor Storage	Warp and Swell over 90 days	Incremental warp less than 3/8", no swell compared to unlaminated controls
ASTM D-2898 Modified	Accelerated Weathering of product on Trusses	No measurable warping after 96 hours of rain followed by drying (one cycle) for 12 cycles (2,304 hrs.). Suitable for exterior applications
ASTM E-96	Permeability	Passes Vapor, > 3 perms
ASTM E-119	One-Hour Fire Resistance Assembly (Structural)	Multiple listed assemblies
ASTM E-119	Two-Hour Fire Resistance Assembly (Structural)	Listed assembly using fire-rated structural sheathing
ASTM E-119/UBC 17-3 and UBC 17-5	15-Minute Thermal Barrier	Listed as a thermal barrier. Pyrotite® coating on 7/16" OSB substrate achieved a 20-minute rating.
ASTM E-108	Relative Fire Characteristics of Roof Covering Materials	Class A and C systems including fully adhered single-ply membranes.
ASTM E-136-82	Verification of Non-Combustibility	Pass
Special Protocol	Respirable Dust & Silica	Silica and respirable dust exposure levels below OSHA PEL

*LP® FlameBlock™ can be substituted where Blazeguard is referenced in the tests and test reports above.

