



Stonewood Exterior Panels
Solid Core Phenolic Physical and Performance Test Values

NEMA Test Results

Description	Test ID	NEMA Requirements	Class A	Class B
Light Resistance	3.3	Slight Effect	Slight Effect	Slight Effect
Cleanability	3.4	Cleanability < 20	10	10
Stain Resistance		Unaffected by Reagents 1-10	No Effect	No Effect
		Moderate 11-15	Moderate Effect	Moderate Effect
Resistance to Boiling Water	3.5	No Effect	No Effect	No Effect
Resistance to High Temperature	3.6	Slight effect	No Effect	No Effect
Ball Impact Resistance:	3.8	75"	90"+	90"+
Dimensional Change: Length	3.11	0.3% Maximum	0.25%	0.25%
Dimensional Change: Width		0.7% Maximum	0.50%	0.50%
Wear Resistance:	3.13	400 Cycle Minimum	700 Cycle	700 Cycle

Mechanical Properties

Property	Direction	Class A	Class B
Flexural Strength ASTM D-790 (PSI)	Machine Direction	18,000	20,000
	Cross Direction	12,000	16,000
Flexural Modulus ASTM D-790 (PSI)	Machine Direction	1.5 x 10 ⁶	1.9 x 10 ⁶
	Cross Direction	1.1 x 10 ⁶	1.3 x 10 ⁶
Tensile Modulus ASTM D-638 (PSI)	Machine Direction	15,000	18,000
	Cross Direction	10,000	12,000

Fire Test Data

Property	Information	Class A	Class B
Flame Spread Index ASTM E-84 (BLDG)	Tests were performed on a 0.25" panel. Class B is considered to be the Standard Product.	0	60
Smoke Developed Values ASTM E-84 (BLDG)		10	200

Physical Characteristics

	Weight Per Unit Area		
	0.156"	0.250"	0.500"
Thickness	0.156"	0.250"	0.500"
Density (PCF)	86 ± 3	86 ± 3	86 ± 3
Lbs/ft ²	1.12 ± 0.04	1.79 ± .06	3.58 ± .13
Kg/m ²	5.47 ± 0.20	8.74 ± 0.29	17.47 ± 0.64

Weathering Resistance

Description	Test Method	Requirements (3000 Hr)
Grey Scale	DIN EN 438-2 29	3-4
Appearance	DIN EN 438-2 29	4

General Manufacturing Tolerances

Measurement	Tolerance (in)
Thickness (.156 to .375)	± .020
Thickness (above .375 to 1.000)	± .030
CNC Shaped size (Length -Width)	± .020
Drill Diameter	± .003
Drill Depth	± .020
CNC Hole to hole	± .020
CNC Hole to Edge (1 Oper)	± .020
CNC Hole to Edge (2 Oper)	± .030
Routing - (Slots Width and Length)	± .015
Routing - (Slots Depth)	± .020