



# ALPHA

engineered composites

145 Lehigh Avenue, Lakewood, NJ 08701  
T: 732.634.5700 F: 732.634.1430 alphainc.com

## VR 2.0

<b>DESCRIPTION</b>	Reinforced Natural Kraft-Polypropylene Film Laminate
<b>APPLICATIONS</b>	Metal Building Insulation and Ceiling Board Insulation Facings
<b>CERTIFICATIONS</b>	Meets all criteria for ASTM C1136 Types IV - UL 723/ASTM E84, ULC-S102M fire testing

### COMPOSITION

<u>COMPONENT</u>	<u>DESCRIPTION</u>	<u>VALUES*</u>	
		<u>English</u>	<u>Metric</u>
White Film	Polypropylene	0.0011 inch	28.0 micron
Adhesive	Flame Resistant		
Reinforcement	Tri-directional Fiberglass	5/inch (MD)	20/100 mm (MD)
		4/inch (CD)	16/100 mm (MD)
Kraft	Natural	11 lb./3000 SF	18.5 g/SM

### TYPICAL PHYSICAL PROPERTIES

<u>CHARACTERISTIC</u>	<u>METHOD</u>	<u>VALUES*</u>	
		<u>ENGLISH</u>	<u>METRIC</u>
BASIS WEIGHT	Scale	15.5 lbs/1000 SF	69.1 g/SM
THICKNESS	ASTM D1777	0.008"	203 microns
PERMEABILITY (WVTR)	ASTM E96	0.09 Perms	5.17 ng/N's
BURST STRENGTH	ASTM D774	60 psi	4.2 kg/cm <sup>2</sup>
TENSILE STRENGTH	ASTM C1136	40 lbs/inch MD	7.0 kN/m
		30 lbs/inch CD	5.25 kN/m
ACCELERATED AGING	30 days @	No Corrosion	No Corrosion
	95% RH, 120 °F (49°C)	No Delamination	No Delamination
TEMPERATURE RESISTANCE		-40 °F to 220 °F	-40 °C to 104 °C
WATER IMMERSION	24 hours @ 73°F (23°C)	No Delamination	No Delamination
MOLD RESISTANCE	ASTM C1338	No Growth	No Growth
LIGHT REFLECTIVITY	ASTM C523	85%	85%

Physical properties are based upon nominal values. Weight / Thickness +/- 10%

### FIRE TESTING

#### UL723/ASTM E84

	<u>Composite</u>	<u>Film</u>	<u>Kraft</u>
FLAME SPREAD	25	5	0
SMOKE DEVELOPED	50	20	15

DATA SHEET # 14078 REV. C DATE: 10/07/13 \*All values are nominal unless otherwise specified.

Note: Alpha's metal building insulation facings are produced with plastic films containing ultraviolet (UV) inhibitors, however, intense exposure to UV sources such as direct or indirect sunlight and/or high-output UV lighting is not recommended as these will degrade the plastic film facing.