



ALPHA

engineered composites

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VR-R HD			
DESCRIPTION	Reinforced Polypropylene Film-Metallized Polyester Film Laminate		
APPLICATIONS	Metal Building Insulation Facing		
CERTIFICATIONS	Meets all criteria for ASTM C1136 TYPES I, II, III, & IV UL 723/ASTM E84, ULC-S102M fire testing		
COMPOSITION			
COMPONENT	DESCRIPTION	ENGLISH	VALUES* METRIC
White Film	Polypropylene	0.0011 inch	28.0 micron
Adhesive	Flame Resistant		
Reinforcement	Tri-directional	5/inch (MD)	20/100 mm (MD)
	Fiberglass	4/inch (CD)	16/100 mm (MD)
Film	Metallized Polyester	0.0005 inch	12.7 mciron
TYPICAL PHYSICAL PROPERTIES			
CHARACTERISTIC	METHOD	ENGLISH	VALUES* METRIC
BASIS WEIGHT	Scale	17.0 lbs./1000 sq ft ± 10%	83.0 g/m² ± 10%
THICKNESS	ASTM-D-1777	.008" nominal	0.203 mm nominal
PERMEABILITY (WVTR)	ASTM-E-96	0.02 Perms	1.15 ng/N's
BURST STRENGTH	ASTM-D-774	100 psi	7.0 kg/cm²
TENSILE STRENGTH	ASTM-C-1136	55 lbs/inch MD	9.6 kN/m
		40 lbs/inch CD	7.0 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-C-665	No Growth	No Growth
LIGHT REFLECTIVITY	ASTM C-523	85%	85%
Physical properties are based upon nominal values. Weight/Thickness ± 10%			
FIRE TESTING		UL 723/ASTM E84/CAN ULC-S102M	
		Composite	
	FLAME SPREAD	25	
	SMOKE DEVELOPED	50	

DATA SHEET: 13449 REV: J DATE: 11/10/16 *All values are nominal unless otherwise specified.

Specializing in marine, aerospace, automotive and commercial fabrics for thermal and industrial applications

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