



<b>VR-R HD</b>				
<b>DESCRIPTION</b>	Reinforced Polypropylene Film-Metallized Polyester Film Laminate			
<b>APPLICATIONS</b>	Metal Building Insulation Facing			
<b>CERTIFICATIONS</b>	Meets all criteria for ASTM C1136 TYPES I, II, III, & IV UL 723/ASTM E84, ULC-S102M fire testing			
<b>COMPOSITION</b>				
<b>COMPONENT</b>	<b>DESCRIPTION</b>	<b>ENGLISH</b>	<b>VALUES*</b>	
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	
<b>TYPICAL PHYSICAL PROPERTIES</b>				
<b>CHARACTERISTIC</b>	<b>METHOD</b>	<b>ENGLISH</b>	<b>VALUES*</b>	
BASIS WEIGHT	Scale	17.0 lbs./1000 sq ft ± 10%	83.0 g/m <sup>2</sup> ± 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/cm <sup>2</sup>	
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 (95% RH,120 °F)(49 °C)	No Corrosion	No Corrosion	
		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%				
<b>FIRE TESTING</b>	<b>UL 723/ASTM E84/CAN ULC-S102M</b>			
		<u>Composite</u>		
	FLAME SPREAD	25		
	SMOKE DEVELOPED	50		

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

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