



Thermoplastic Single Ply and Multi-Ply Roofing Systems

2670 Leiscz's Bridge Road, Suite 400, Leesport, PA 19533 Phone (610) 916-9500 Fax (610) 916-9501

Test Results

Flex Membrane International MF/R PLUS 45, MF/R PLUS 60, MF/R PLUS 80

Physical Requirements per ASTM D4434-04

<u>Procedure</u>	<u>Method</u>	<u>MF/R PLUS 45</u>	<u>MF/R PLUS 60</u>	<u>MF/R PLUS 80</u>
Overall Thickness of PVC sheet, min, in.	D751	0.045	0.06	0.08
Breaking Strength, min, lbf/in.	D751			
Machine Direction		374	412	418
Cross Mach. Direction		407	538	563
Elongation at Break, min, %:	D751			
Machine Direction		29	29	32
Cross Mach. Direction		32	31	36
Seam Strength, min, % of Tensile or Breaking Strength	D751	100	100	100
Retention of Properties after Heat Aging:	D751 / D3045			
Breaking Strength (Machine Direction), min, % of original		92	91	100
Breaking Strength (Cross Machine Direction), min, % of original		97	94	97
Elongation (Machine Direction), min, % of original		100	97	100
Elongation (Cross Machine Direction), min, % of original		91	94	90
Tearing Strength, min, lbf	D751			
Machine Direction		88.6	111	81
Cross Mach. Direction		108.3	110.6	129.1
Low Temperature Bend	D2136	Pass @ -40°C	Pass @ -40°C	Pass @ -40°C
Accelerated Weathering test;	G53			
Cracking (7X magnification)		No Cracking	No Cracking	No Cracking
Crazing (7X magnification)		No Crazing	No Crazing	No Crazing
Linear Dimensional Change, max, %	D1204			
Machine Direction		0.4	0.5	0.4
Cross Mach. Direction		0.1	0.1	0.2
Change in Weight after Immersion in Water, max, %	D570 - modified	0.41	0.41	0.41
Static Puncture Resistance	D5602	Pass @ 33 lbs.	Pass @ 33 lbs.	Pass @ 33 lbs.
Dynamic Puncture Resistance	D5635	Pass @ 20 J	Pass @ 20 J	Pass @ 20 J