



ENVIREX® DIFFUSER PRODUCTS DIAMOND™ MEMBRANE DIFFUSER & MAJOR COMPETITOR COMPARISON

MEMBRANE EPDM MATERIAL PROPERTIES

Base Characteristics	Major Competitor	Diamond™ Diffuser	Diamond™ Diffuser Benefit
Tensile Strength	1200 - 1450 PSI	2100+ PSI	>Ultimate strength directly related to life expectancy
Elongation at Failure	400% min	800% min	2X >Tear resistance
Durometer	55 +/-5	56+/-2	superior material uniformity
Specific Gravity	1.08	1.05	Less fillers
Ozone Resistance	Pass	Pass	Same
After Heat Aging Per ASTM D573-99 70 Hours @ 70° C (158°F) Temperature			
Tensile (loss)	-25% max	-12%	50% less degradation in strength
Elongation (loss)	-25% max	-5%	Retains 95% of tear resistance
Durometer (increase)	+10 pts	+1 pt	10X less hardening results in less operating pressure

MEMBRANE PERFORMANCE FEATURES

Feature	Major Competitor	Diamond™ Diffuser	Diamond™ Diffuser Benefit
No. Air Discharge Aperatures	4850	5400+	Higher oxygen transfer at > SCFM Lower headloss
Membrane Thickness	0.080 - 0.100	0.080 - 0.165	Thick center reduces "ballooning" & more effective back flow prevention
Membrane seal ring	Round o-ring seats in square channel	Tapered square o-ring seals like a cork in square channel	Maintains seal in holder even if shrinkage results