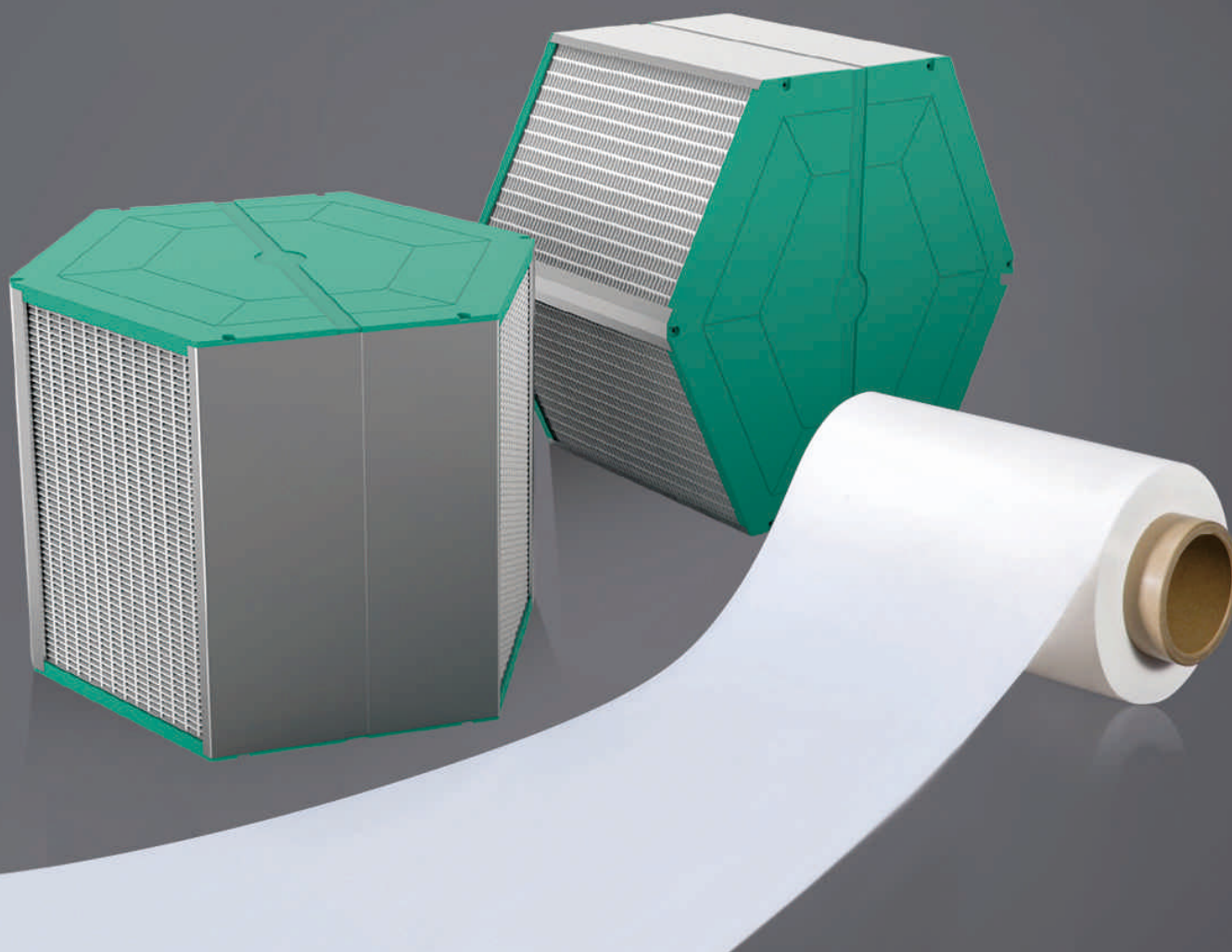




Enthalpy exchangers

Counterflow heat exchangers
Mair Polymer membrane technology



www.menred.com



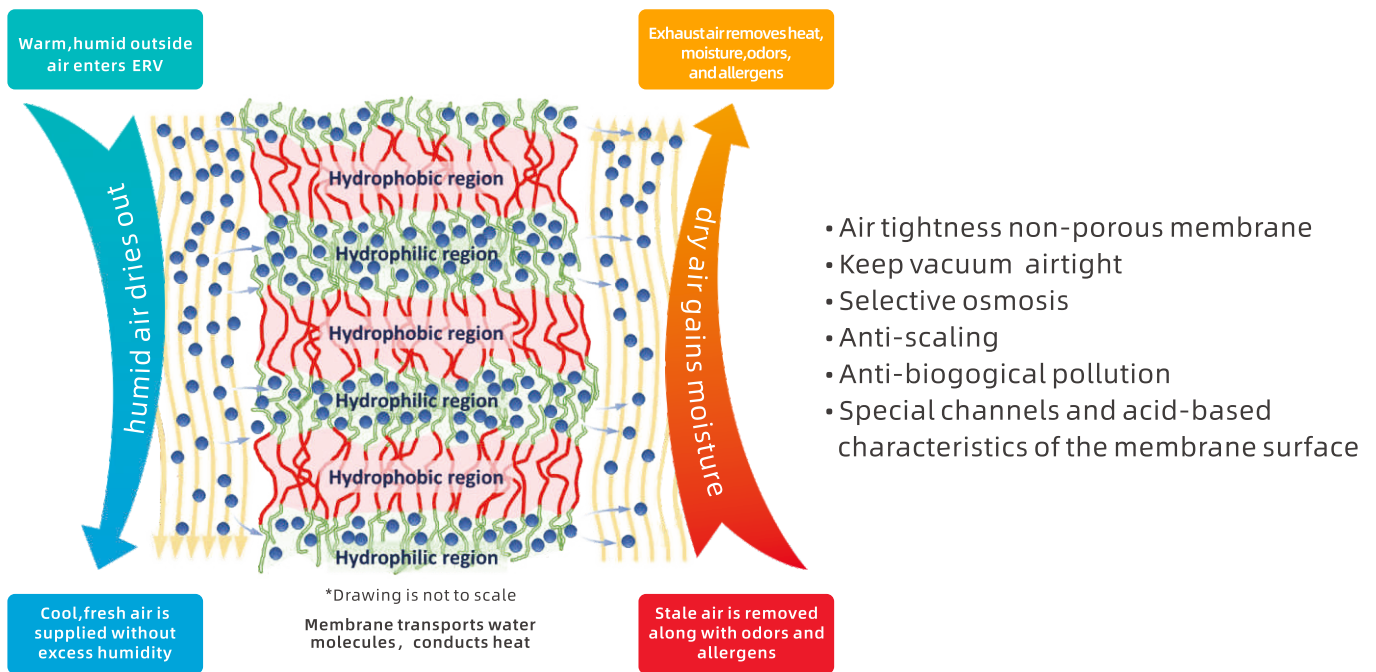
sales@menred.com

Polymer Membrane

Energy Saving for ERV

>> Specifications

Items	Items	Unit	Typical value	Test method
Appearance	-	-	Creamy white	visual measurement
Odor	-	-	Odorless	-
Thickness	-	μm	27±1 17±1	Micrometer
Width	-	mm	1000	Tape measure
Working temperature	-	-	-30°C~60°C	-
Anti-mold level	-	-	Grade 0	ASTM G21-15
Antibacterial level	-	-	>99.999%	JIS Z 2801:2010
Acid and alkali resistance	-	-	0-14	GB/T11547-2008
Moisture permeability	-	g/(m ² .24h)	2526.22	GB/T 1037 38°C/90%RH
		g/(m ² .24h)	2455.4	JIS Z 0208, 25°C/90%RH, test area=2.826x10 ⁻³ m ²
Air permeability	-	s/(in ² .100cc.1.22kPa)	1450.04	GB/T 1037 38°C/90%RH
		cm ³ /(m ² .24h·atm)	2.53x10 ⁴	JIS K 7126-1 Co2, latm, 23±2°C
Heat shrinkage rate	MD	%	≤5	-
(90°C-1h)	TD	%	≤5	-
Tensile Strength	MD	Mpa	≥100	GB/T 1040.3-2006
	TD	Mpa	≥100	-
Elongation at break	MD	%	≥40%	GB/T 1040.3-2006
	TD	%	≥40%	-

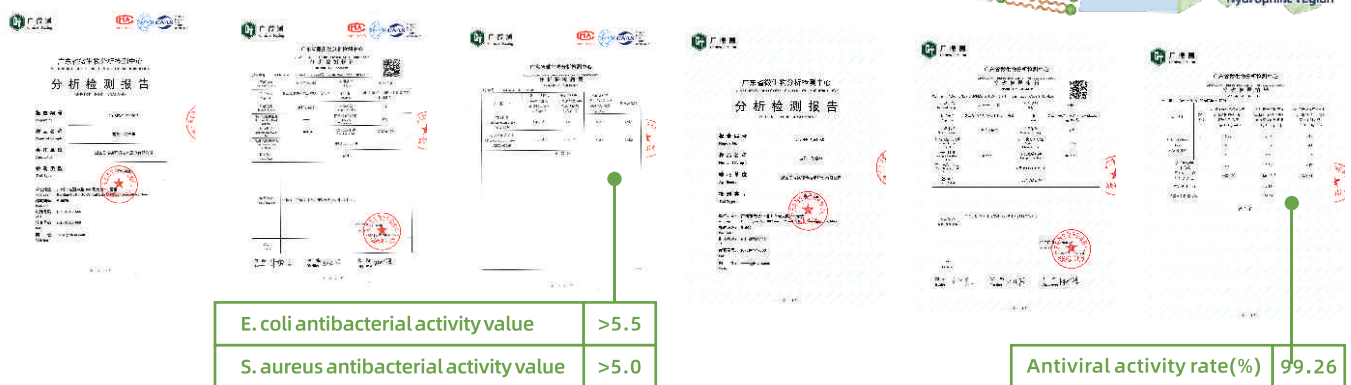
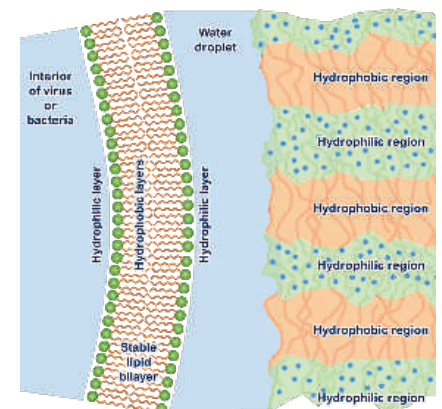


Mair Polymer membrane transfers humidity (if needed) into the Fresh Air (FA) stream (winter) and reduce moisture from the FA stream during periods of high outdoor humidity (summer). It allows heat and humidity to be transferred to the fresh supply air.

Pathogens Approach:

Most viruses and bacteria are protected by a cell membrane or envelope known as a lipid bilayer that regulates its internal and external environments.

Pathogen interactions with membrane



Membrane Production workshop



RTO Regenerative Oxidation Furnace

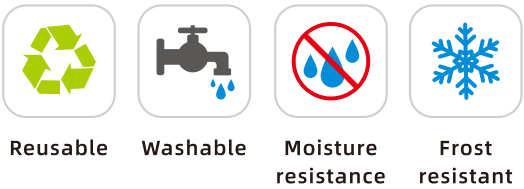


Fully automatic production line

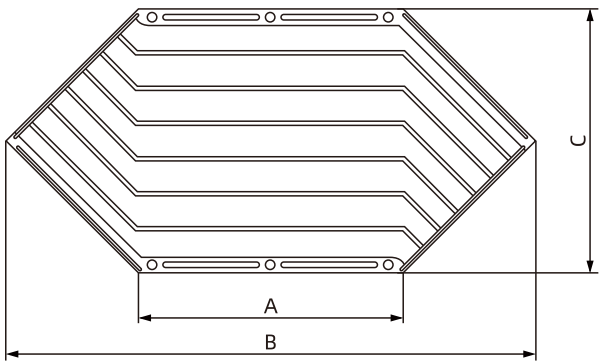
>> Mair core



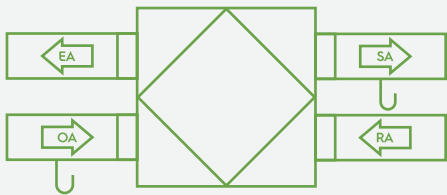
Virus particle diameter:70-200nm
Bacterial particle diameter:300-2000nm
No paper core | Antimicrobial
Nonporous membrane | No air leakage
No cross contamination



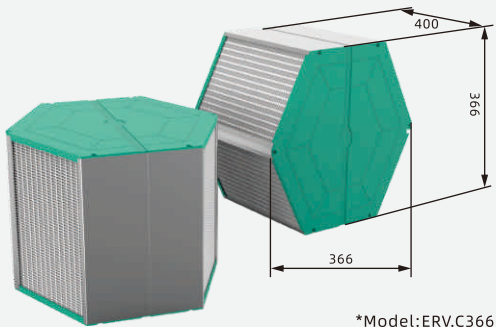
Model	Size(mm)	A	B	C
ERV.C1	380*185*100	100	380	185
ERV.C2	380*230*100	100	380	230
ERV.C3	400*185*200	200	400	185



>> Test method



*Note: GB/T 21087-2020



*Model:ERV.C366

