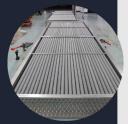


ENERGY RECOVERY SOLUTIONS







HEAT PIPE HEAT EXCHANGERS

NEW CONSTRUCTION | RETROFIT | FACTORY INSTALL

TYPICAL PAYBACK PAYBACK PAYBACK

INNOVATIVE COMMERCIAL HVAC SOLUTIONS



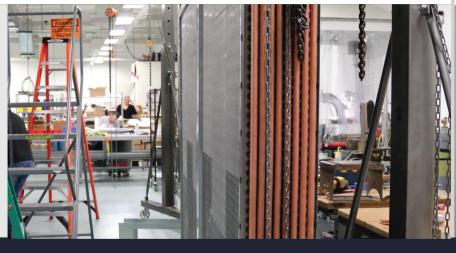
AIR-TO-AIR HEAT PIPE HEAT EXCHANGER

SPLIT AIRSTREAM SOLUTIONS
HORIZONTAL OR VERTICAL INSTALLATION



WRAP-AROUND HEAT PIPE HEAT EXCHANGER

DEDICATED OUTDOOR AIR SYSTEM





IDEAL APPLICATIONS FOR HEAT PIPE HX

ASHRAE 90.1 installation recommendations

- Hospitals & Healthcare Facilities
- Government Facilities & Labs
- Theaters
- Fitness Centers / Natatoriums
- K-12 & Universities
- Resorts, Hotels & Condos
- · Food & Restaurant Facilities

ADDITIONAL BENEFITS FOR WAHX

- Passive dehumidification (Passive re-heating of supply air)
- Reduction in required cooling tonnage



Great customer service support from top down, from inside applications engineer to regional sales manager, and great product offerings.

- Norman S. Wright, Hawaii

AIR-TO-AIR HEAT PIPE HEAT EXCHANGERS

SPLIT AIRSTREAM SOLLITIONS





TYPICAL INSTALLATIONS

- Between two airstreams for precooling or preheating
- Flexible installation configurations from adjacent airstreams to non-adjacent airstreams with vertical separation
- Where outside air enters and the building's air exhausts

YPE	DUCT ORIENTATION & CONFIGURATION	OPERATION		
PIPE-TO-PIPE	Horizontal, adjacent airstreams	1 season passive2 season passive		
PIPE-T	Vertical, adjacent airstreams	1 season passive1 season passive, 1 season pumped		
	Non-adjacent airstreams no vertical separation	 1 season passive 2 season passive 1 season passive, 1 season pumped* 2 season pumped* 		
	Non-adjacent airstreams with vertical separation	 1 season passive 1 season pumped 1 season passive, 1 season pumped 2 season pumped* 		





*Pump requirement dependent on horizontal and vertical separation and amount of energy transfer required



ENERGY SAVINGS

COMPANY INTRO

CUSTOM INNOVATIVE COMMERCIAL HVAC SOLUTIONS

Thinking beyond the wheel to create innovative HVAC systems that solve the air quality issues of today with practical energy-saving HVAC systems for tomorrow.



The same skilled engineering techniques that ACT engineers apply to specialized heat pipes for space are used to craft energy recovery heat pipes for ACT's HVAC line of heat pipe heat exchangers.

CUSTOMIZABLE GEOMETRIES

WHAT IS ENERGY RECOVERY?

Reducing energy consumption and cost by using passive or low energy consuming methods to precondition air.

WRAP AROUND HEAT PIPE HEAT EXCHANGERS

DEDICATED OUTDOOR AIR SYSTEMS





TYPICAL INSTALLATION

- Installed inside of an air handler around the cooling coil of a DOAS or DX system

WAHX TYPE	ORIENTATION	OPERATING SEASON
Pipe to Pipe	Horizontal series airflow installation	Reheat not controllablePassive operation only
Split Loop Thermosyphon	Horizontal series airflow installation	PassiveFull reheat controlON/OFF or Analog 0-10VDC





ACT'S ENERGY RECOVERY SOLUTIONS OFFER

ZERO CROSS-AIR CONTAMINATION

RESOURCES

HVAC HOME PAGE www.1-ACT.com/Thermal-Solutions/HVAC/





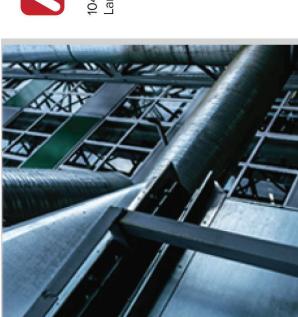


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