

ALLIED ENERGY SYSTEMS

The Total Concept Energy Conservation Company

Allied *Thermal~Flow* Systems - Residential Product Line

Allied has developed a product with unparalleled performance designed specifically for the hot Sunbelt of the Southwest. Utilizing technology normally associated with the industrial sector (evaporative condensers). Allied has perfected the ultimate in energy efficient water-cooled air conditioning. Allied combined the superior water-cooled condenser with the newest Scroll compressor technology, the most efficient fans and pumps available. The hotter and dryer the climate, the better the system will perform. The Allied system utilizes two refrigerants, and nature's own water is used through evaporation to cool the Freon up to 60 degrees cooler than what is possible with an air-cooled system. By reducing the heat in the refrigerant circuit, the operating efficiency of a water-cooled unit is dramatically enhanced, providing an unparalleled efficiency advantage over conventional air-cooled units.

It should be noted that conventional air-cooled units are rated at 83 degrees. The operating efficiency is lowered by two points for each ten-degree rise in the ambient temperature above the 83-degree test standard. A 12 SEER air-cooled unit will operate at an 8 to 9 SEER on a 105-degree day. An Allied Thermal~Flow water cooled system will operate in the 17 to 19 EER range, providing an operational savings in excess of 60%! The hotter it gets the better a water-cooled unit works!

The Allied Thermal~Flow system is designed and built to the highest standards, utilizing durable industrial grade components. The unique design combines function and form in a very attractive and compact unit only 54 inches tall. The system is designed to be compatible with all conventional systems. The desert systems are all fitted with a variable speed fan controller to conserve water. This also provides a quieter operation and lowers the fan energy required. An auto purge self-cleaning feature is included to handle the hard water in some regions. All of the components are available in all metropolitan areas, through the W.W. Granger parts network. Allied warrants the cooling tower for fifteen years, the compressors for ten years, and the cooling tower fan and pump for three years.



Equipment Options for the *Thermal~Flow* product line:

Pool Interface Option: System can be designed to interface with a swimming pool to provide free pool heat to extend the swimming season.

Heat Pump Pool Option: This system utilizes a heat pump design where the pool acts as a thermal heat sink. Our heat pump system utilizes the heat energy in the pool to heat the home in the winter, and provides free pool heating in the swimming season. The earth contact plus the solar gain replenish any heat removed to heat the home.

The Remote Loop Option: Allows the cooling tower to be installed any distance from the house, for example behind a garage, pool house thus providing an “invisible” noiseless mechanical system. Great for large homes with heavy landscaping, gardens etc.

Future Residential Designs: Multi-Zone Chilled Water Design
Duel Fuel Chiller: Electric and Natural Gas Powered, go off grid with a flick of a switch. System to be available in 2003. Also a chilled water Thermal~Storage design for time of day metering.

Water Source Heat Pumps/ Geothermal Heat Pump Systems: Existing Line. Geothermal, Lake-water/pond closed loop systems.



Hydronic Air Handlers
With UV lights

Allied Thermal~Flow System
Swimming Pool Interface
Free Pool Heating
Hydronic Heating
94% Efficient Polaris Water Heater
Allied Energy 443-3938



Polaris 94% Stainless
Steel Water Heater



Thermal~Flow System
with swimming Pool Interface



Remote Compressor
Module 3 Zone System