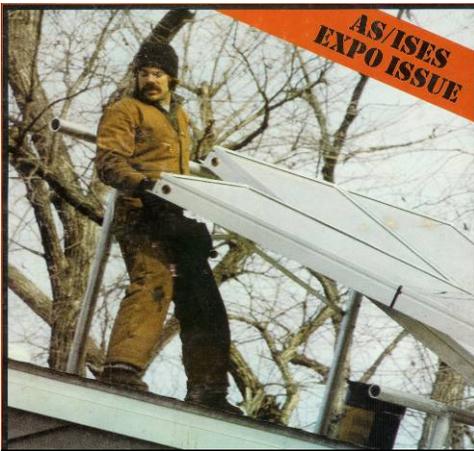


History of RenewAire LLC
Manufacturer of Energy Recovery Ventilators
4510 Helgesen Drive
Madison, WI 53718
608-221-4499
www.renewaire.com

In 1978, three employees of Warren Heating and Air Conditioning broke away to start Solar Specialists, a renewable energy and energy efficiency contracting business. Wisconsin Power and Light Company (WP&L) had contracted the installation of 12 residential solar water heaters, of various designs, from a number of contractors. Based on monitored energy savings and cost of a Solar Specialist system, WP&L awarded a contract to Solar Specialists for the installation of approximately 500 solar water heaters from Beloit to Oshkosh over the following five years. Solar Specialists also sold and installed active solar space heating and water heating systems of all sizes including installations in private homes, the Interstate Rest Stops in Wisconsin, the roof of the Edgewater Hotel, the Fisher-Taft Quaker Housing Apartments and Home Savings Bank's Stoughton Branch. Hundreds of these installations are still state-of-the-art and operational, saving owners energy, money and greenhouse gas emissions for over 25 years.



Chuck Gates installing a solar water heater

Solar Specialists also installed and serviced over 100 wind electric generators before wind farms existed. They were responsible for the first utility-interconnected photovoltaic solar electric installations in Wisconsin. These installations included three systems in Barneveld, an installation on a Goodwill Industries assisted living center funded by Madison Gas and Electric Company, and a system at the Aldo Leopold Nature Center that also included an innovative drain back solar thermal system tied into a radiant floor heating system.

Solar Specialists also provided energy modeling support for passive solar design. In 1978, Doug Steege (current V.P. of Marketing and Sales for RenewAire) was principle author of *A Passive Solar Design Handbook for Wisconsin*. Solar Specialists designed and installed passive solar systems including direct-gain glazing, trombe walls and indirect solar features like solar greenhouses and solar attics. They were among the first to recognize the value of and install glass with low emissivity coatings, inert gas and advanced edge-spacer technologies.

In 1980, Solar Specialists began selling air-to-air heat exchangers to provide energy efficient ventilation in “super-insulated” homes. The products that were handled included metal, plastic and enthalpic plate products, rotary wheel and heat pipe exchangers from US, Canadian, European and Japanese manufacturers. This experience convinced the company owners that plate technology which passively transfers both heat and humidity offered significant advantages for both residential and commercial energy recovery ventilators (ERVs). In 1983, Solar Specialists began manufacturing ERVs using cores manufactured by Mitsubishi Electric in Japan. This started a long business and technology association with Mitsubishi that continues today. Temperature Systems Incorporated, the Carrier Distributor in Madison, was one of the first distributors for the NewAire™ brand that Solar Specialists launched.

In 1985, Solar Specialists renamed the company Altech Energy to reflect their increasing sales of non-solar alternative energy products. The NewAire product line began to grow including a number of commercial ERV products. By 1995, ERV business had grown to the point where a decision was made to concentrate exclusively on ERV manufacturing and the solar and wind business was spun off to a number of the company’s employees who wanted to maintain that business focus.

By 1997, business growth created the need for a new facility. Mitsubishi Electric expressed an interest in helping with planning and investment. After initial discussions, Mitsubishi purchased Altech Energy and formed Mitsubishi Electric Airtech America (MELAIR), its tenth operating subsidiary in the United States. Investment in a factory and staff additions from Mitsubishi factories in Japan were made. Production and quality control practices were introduced so that the factory could produce products using Mitsubishi’s Lossnay brand name and the three diamond logo. Distribution and sales were expanded by the Mitsubishi sales company that sells their line of split unit air conditioners and other HVAC products.



Factory during 1997-2000 Mitsubishi Electric ownership

The late 1990s coincided with an Asian financial crisis that caused Japanese companies that had been investing around the world to re-consider international investments. Mitsubishi offered to sell the U.S. ERV operation back to the original owners, which occurred in 2000. The company and brand name became RenewAire, signifying a rebirth of the original NewAire brand.



Current RenewAire LEED Registered Facility

In 2005, continuing strong sales growth required the development of a new facility, the current one, at 4510 Helgesen Drive in Madison, Wisconsin. This building took an existing metal industrial building and updated it to meet LEED criteria. While LEED Certification is still pending, the building has already been recognized as one of the first “Green Globe” buildings in the United States.

The facility has also been recognized as an Energy Star Building by the U.S. Department of Energy. This signifies the RenewAire facility is in the top 25% of energy efficient buildings in the U.S.

RenewAire built its business on the widely recognized need to provide healthy, fresh air ventilation in an energy efficient manner. RenewAire is committed to U.S. manufacturing using “Quick Response Manufacturing” (QRM) principles. This allows a large number of product options to be selected based on the project requirements while insuring timely delivery and highest quality. Chuck Gates, RenewAire



RenewAire Production Floor

President, has been a featured speaker at International QRM Conferences along with representatives of other notable companies committed to U.S. manufacturing like John Deere and Trek Bicycles.

RenewAire ERVs are sold throughout the U.S. and Canada and exported to projects throughout Latin America and the Caribbean. Approximately 50 employees in Madison manufacture product and support sales through 25 Independent Sales Representatives and 200 Distributor customers.

RenewAire currently sells six models of residential ERVs from 70 to 300 CFM. RenewAire also private label manufactures three models sold by one of the largest HVAC companies. RenewAire residential products are among the highest performing products in the Home Ventilation Institute’s (HVI) Certification program for Heat and Energy Recovery Ventilators.



EV200 Energy Recovery Ventilator

RenewAire's commercial ERV offering includes seven sizes of indoor and rooftop packaged products providing 450 to 7,000 CFM of ventilation air. Options for blower/ motor packages, product and duct orientation and controls result in over 30,000 products combinations that may be ordered. RenewAire ERV cores are also available in sheet metal cabinets that may be applied to custom air handlers or built-up on the floor of a mechanical room. These "Applied Products" are completely modular to unlimited air flow capacities and have been used for a number of installations providing over 100,000 CFM of ventilation air. RenewAire commercial products are Certified through the ARI-1060 Certification program for ERV equipment. Matthew Friedlander, VP of Engineering, is a past Chairman of the ARI, Energy Recovery Ventilation Section and active on standards committees for ASHRAE and UL.



Indoor Energy Recovery Ventilator
Model HE1XINH



Applied PA Series
Model PA6X

RenewAire ERVs sold in 2006 had the capacity to provide over 4 million CFM of ventilation. This capacity will provide necessary ventilation for over 260,000 people while saving the building owners over \$5 million in fuel costs. On a global scale, these fuel savings will cut greenhouse gas emissions (primarily CO₂) by over 30,000 tons per year. This is the equivalent of taking 6,000 average cars off the road. RenewAire is proud to be making a successful HVAC business providing for a better indoor environment along with a better outdoor air environment.



West Ashley High School
Charleston, SC



Clyde's Restaurant
Alexandria, VA