

# DEHUMIDIFY WITH THE EXPERTS!



THE WILDERNESS HOTEL - WISCONSIN DELLS, WI

Desert Aire specializes in manufacturing refrigeration-based dehumidifiers.

We offer a complete set of application-specific dehumidifier product lines. We also help you successfully integrate dehumidifiers into HVAC systems. When you face excess humidity problems, count on Desert Aire for expert solutions.

DEHUMIDIFY WITH THE EXPERTS ...



# THE RIGHT SOLUTIONS FOR TODAY'S

## BENEFITS OF DEHUMIDIFICATION

A correctly sized and installed dehumidifier brings significant benefits:

- ◆ Structural Integrity
- ◆ Comfort
- ◆ Improved Indoor Air Quality
- ◆ Process Improvement
- ◆ Energy Savings

## EXPERT ASSISTANCE TO DESIGNERS

Desert Aire's experienced representatives and factory dehumidifier experts comprise an outstanding resource for the HVAC system designer, providing a host of services:

- ◆ Application review and recommendations
- ◆ Application Notes
- ◆ Technical Bulletins
- ◆ PC-based moisture load analysis
- ◆ PC-based dehumidifier sizing
- ◆ Mechanical and controls integration support

## UNDERSTANDING YOUR APPLICATION

Desert Aire's extensive application experience is the foundation for our standard product designs, tailored for common applications. Each line has a full range of appropriate sizes, features, and options.

## INDOOR SWIMMING POOLS AND SPAS

Water evaporated into the air of an enclosed pool room makes swimmers uncomfortable, fogs windows, and condenses on and within walls causing structural damage.

Desert Aire has a full range of dehumidifiers that remove moisture from the air. This provides a comfortable environment, minimizes rapid deterioration of walls due to condensation, and lowers humidity levels which drastically reduces mold growth.

The cost-effective design of our residential pool units maximizes moisture removal by returning energy to the space or removing it to provide cooling. Our large single-phase dehumidifiers also simplify installation.

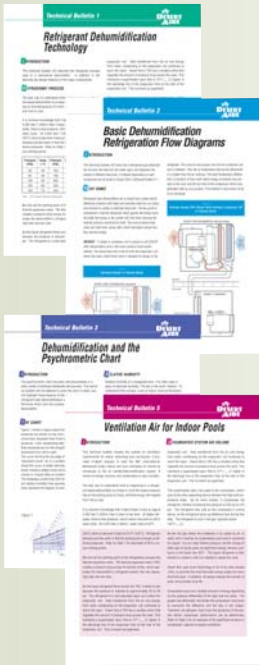
Our commercial pool units optimize moisture removal, use recovered energy to heat pool water, introduce ventilation as required by code, and run in occupied or unoccupied modes with automatic air balancing.

Desert Aire's natatorium units include flexible dual circuit designs for high moisture removal and low energy consumption. Our patented Select Aire heat recovery methodology uses the heat pump principle to significantly lower energy consumption while meeting ventilation air requirements.

## INDUSTRIAL

Powders coagulate, papers curl, metals rust, chilled process lines sweat, and inventory deteriorates as moisture migrates through walls and ceilings into a factory or warehouse. Air conditioning cools the air but fails to remove sufficient moisture, leaving workers in a "cold swamp."

Desert Aire provides a specially designed industrial system for around-the-clock operation, minimal maintenance, and high energy efficiency.



HPR Portable Unit

TotalAire™ Unit

ExpertAire™ Unit

# DEHUMIDIFICATION APPLICATIONS

## INDOOR AIR QUALITY

To meet stringent IAQ requirements, facilities significantly increase their supply of outdoor ventilation air. Conventional air handlers are unable to control the much larger moisture loads that result.

Desert Aire builds horizontal and vertical dehumidifiers that specifically meet ASHRAE standards 62 and 90.1. When preheating outdoor air before feeding it to a traditional air handler, the dehumidifier adjusts moisture content and air temperature to meet typical return air requirements. When directly feeding the space, our patented "free" reheat system controls leaving air temperature to an exact and controllable level.

Our other proven technology such as our enthalpy wheel and patented 100% outdoor air water source heat pump provide incredible cost saving options that are not always available on competitors' IAQ units.

## ICE RINKS

Year-round use of these popular sports facilities leaves operators battling condensation on ceilings, fog over the ice surface and soft ice. Requirements for code ventilation air only add to the problem. Low temperature operation causes traditional dehumidifiers to falter as evaporator coils ice up.

Desert Aire's ice rink units consistently keep space humidity low enough to avoid problems. Our innovative automatic hot gas "defrost-on-demand" technology ensures proper performance at the low temperatures required by ice rinks.

## WATER & WASTEWATER TREATMENT

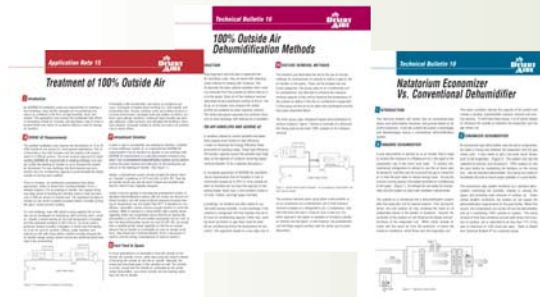
Water and wastewater districts continue building elaborate treatment plants and pumping systems, facilities that require moisture protection for millions of dollars in instrumentation and process control equipment.

Desert Aire provides reliable, high efficiency dehumidifiers to preserve expensive equipment in areas ranging from pumping stations to filtration buildings to sludge dewatering facilities.

## TEMPORARY HUMIDITY PROBLEMS

Fire and flood restorations, carpet cleaning, and tent rentals present temporary problems with excess moisture and a need for flexible but durable solutions.

Desert Aire addresses temporary humidity problems with a complete line of portable, small capacity dehumidifiers. Mobility and ruggedness are combined in a unit featuring large wheels, optional condensate pump and a solid frame.



## THE RIGHT PRODUCTS

Desert Aire packaged dehumidification systems, supplemented by a wide variety of options, provide effective, efficient solutions to moisture problems. We can meet your individual needs by customizing standard products or constructing full custom units.

## DESIGNED RIGHT

Desert Aire dehumidifiers use components carefully chosen for reliability, sized for maximum moisture removal capacity and combined in logically arranged systems. Each design reflects our concern for maximizing dehumidifier energy efficiency by using the latest in proven technology.

## BUILT RIGHT

Our skilled manufacturing personnel translate excellent designs into high quality products with superior fit and finish. Each unit is tested to our demanding specifications before shipment.

## SUPPORTED RIGHT

Desert Aire's knowledgeable service personnel, plus a network of factory-trained refrigeration contractors, ensure excellent installation and service support. The most comprehensive warranty in the industry protects our dehumidifiers, remote condensers and controls.

Expert design assistance.

Extensive application experience.

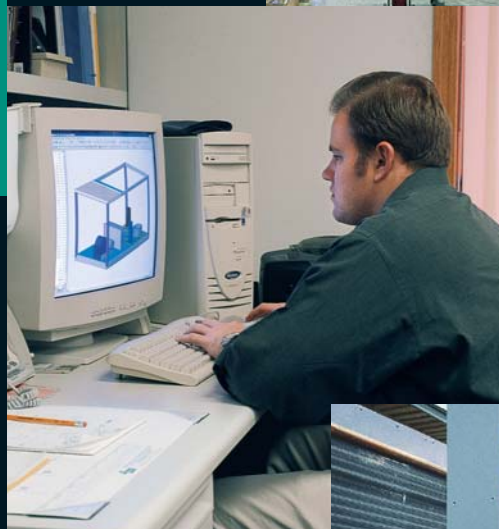
Excellent dehumidifiers.

Three great reasons to make Desert Aire your partner when solving excess humidity problems.



# DEHUMIDIFY WITH THE EXPERTS!

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N120 W18485 Freistadt Road, Germantown, WI 53022

**PH: (262) 946-7400**

**FAX: (262) 946-7401**

[www.desert-aire.com](http://www.desert-aire.com) E-mail: [info@desert-aire.com](mailto:info@desert-aire.com)

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