



THE BUILDING OWNER'S SOLUTION

HEALTHY AND ENERGY-EFFICIENT INDOOR POOL SPACES

Innovent pool dehumidification systems deliver healthier, more comfortable pool environments while meeting building owners' energy efficiency and cost-saving needs.

HEALTHY

IMPROVED INDOOR AIR QUALITY (IAQ)

Innovent has experience designing and constructing diverse pool systems for various facilities, such as community recreation centers, competition pools, and waterparks. **Innovent's approach focuses on improving indoor air quality and creating a healthy environment through optimized outdoor airflow rates.**

This ensures that the air inside remains fresh and clean. Using mechanical dehumidification systems with minimal outdoor airflow can lead to increased levels of chloramines, strong odors, uncomfortable red-eye conditions, swimmer cough, and poor water quality. However, proper distribution of the supply air throughout the space guarantees that outdoor air naturally delivers IAQ, preventing harmful chemicals from lingering above the water surface.



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EFFICIENT

MINIMIZE ENERGY CONSUMPTION

Indoor pool spaces have unique ventilation needs due to the significant amount of evaporation from pools, spas, and water features as well as the relatively warm temperatures required for occupant comfort. The resulting dehumidification and heating loads of these spaces are not only significant, but consistent throughout the year. **Innovent addresses these needs by dehumidifying with large amounts of outdoor air—considerably drier than the space throughout most of the year—run through an air-to-air energy recovery system to recapture much of the heat typically exhausted from the building.** In the small window each year where outdoor air cannot be used to dehumidify (hot, humid days of summer), mechanical cooling is used to control space humidity. However, the amount of time these refrigeration systems operate is a fraction of the operating characteristics of a traditional mechanical dehumidifier, which relies on compressor operation for the entire year.



SIMPLE

SIMPLIFIED SYSTEM INTEGRATION

The use of naturally dry outdoor air for dehumidification has an additional benefit for building owners—**it results in a much simpler unit to install into a building and maintain over time.** For example, because the refrigeration system only runs for a fraction of the year, there is little payback in integrating into a pool water heat exchanger as with a traditional mechanical dehumidifier. This results in less piping and complication when operating the equipment. Additionally, **Innovent equipment comes with a full suite of controls to intelligently manage space humidity, space temperature, and space pressure.** This controls system is also capable of self-balancing the unit on demand, always ensuring that the right amount of outdoor air is brought into the space to maintain the desired space conditions.

INNOVENT: A LONG-LASTING SOLUTION

TOTAL COST OF OWNERSHIP

You can trust that Innovent equipment will stand the test of time—an adequately maintained **Innovent pool dehumidification unit can last 20 years or more.** To ensure that the equipment can withstand harsh pool environments, Innovent uses aluminum casing and corrosion-resistant components as standard. The casing construction, optimized outdoor airflow, and low compressor run hours ensure the equipment runs effectively and efficiently for decades.

LEARN MORE

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