DXAIR INDOOR POOL DESIGN GUIDELINES HEATING THE POOL ROOM—PRIMARY SOURCE



All swimming pool dehumidifiers have some heating capabilities to heat the space. Although DXair dehumidifiers recover and return a great deal of heat to the pool, the room, or outside to the condenser, during winter months the heat loss of the building may be greater than the capacity of the unit to heat the room properly. Use of a radiant floor rarely maintains temperature settings nor provides air flow to all glass surfaces.

Many companies today sell dehumidifiers that will "heat the room" with an electric "strip heat" built into the unit because it is the lowest cost of all systems. Some companies claim their unit gives off enough heat to heat the room. Our experience shows that in cold climates, not installing a primary and/or secondary heat source may often mean falling short of heating requirements. In many cases, we have found clients who cannot get the room temperature to the required 82-86 degrees during winter months. A primary heat source is always required and packaged with your dehumidification system.

During colder times of the year, if you are finding condensation on surfaces within the pool room, these are the leading causes with an existing system:

- 1 Electric "strip heat" or other space heating devices are undersized and not meeting the heating requirements. Some companies do not provide a secondary heating method other than the dehumidifier, which in many cases, cannot maintain the temperature.
- 2 When air temperature falls below pool temperature, you are literally pulling the water out of the pool, creating a higher evaporation rate—subsequently you experience more condensation and higher humidity levels within the pool room environment.
- 3 Clients may have installed radiant floor—radiant floor heating heats objects NOT AIR. Generally, there are not enough BTU's in radiant floor heat to provide proper room heating, nor can radiant heat be moved as airflow across surfaces that are prone to condensation.
- 4 A forced air system of ductwork is required to move the proper air flow across all areas that may reach dew point temperature and provide the proper number of air turnovers per ASHRAE guidelines.

Choose a method to heat the room by reviewing your local utility costs and your geographics for warmer climate vs. colder climates. Is gas or propane less expensive? Are electric utility costs higher than gas? Would it be more efficient to use a high temperature boiler with a hot water coil? Is geothermal the best way to go? And lastly, using pool water to heat the pool room is definitely not recommended and will cause serious condensation problems for your pool room.

Call us today to explore utility costs and heating options for your pool room.