DXAIR INDOOR POOL DESIGN GUIDELINES

RADIANT FLOOR HEAT IN INDOOR POOLS

Many clients install radiant floor heating to heat pool rooms and keep the deck area around the pool warmer. However, the pool alone and proper insulation will keep the deck area warmer; therefore radiant floor is not necessarily required for an indoor pool if thinking in terms of making the floor area warmer or heating the space.

Radiant Floor heating will **NOT** provide the total heating requirements for the space due to the fact that **radiant floor heating heats OBJECTS not air**. It may serve to keep the deck area around the pool warmer, but is not recommended to try to meet the total heating requirements of the pool room. There are not enough BTU's in radiant floor heating to cover the total heat requirements of the room.

If the concern is for a warm deck area, then we recommend the following:

- DO NOT INSULATE AROUND THE SWIMMING POOL. Insulate 2" Rigid Styrofoam or better around the outside perimeter to the footings. Heat in a pool does not travel downward—it travels through the walls of the pool into the deck area. As it does, it will warm the deck area; with heat loss stopped at the outside walls where it's been insulated. Add to that where you set your temperature in your indoor pool—the room is generally set for 82-86 degrees—this heat also warms the structure.

- Also note Radiant floor heat does not provide the proper number of air turnovers across the glass and other surfaces to keep them free of condensation. Remember, the duct work and air delivery system must be designed and able to move a flow of warm air to any and all surfaces that are prone to condensation. That "warm air" comes from the heat source supplied with your dehumidification system to move air to the pool room.

- The client can and will experience condensation on surfaces if using only radiant floor is installed as the primary method of heating the space.