

# Bulletin # 9

## 8 ROW EVAPORATOR COIL STUDY

### DXair answers a commonly asked question

**Q: Why don't you build your indoor swimming pool dehumidifiers with 8 row evaporator coils like other manufacturers?**

**A:** Industry professionals for years have said it is impossible to thoroughly clean a dirty 8 row coil. DXair coils are 4 rows deep but much larger with more surface area per ton. They are not only cleanable but use 35% less fan horsepower to pull the air thru them making the overall system more energy efficient.

**Q: What resource refers to this?**

**A:** At Southern California Edison's (SCE's) Technology Test Center, a state-of-the-art facility where the utility conducts research into energy efficiency and evaluates new technologies -- at their April 15th, gathering this year in Providence, Rhode Island, the group reviewed what research revealed about the effects of neglected or ignored maintenance practices on HVAC performance and costs. The results should open some eyes. The SCE studies centered around, among other things, poorly maintained and cleaned evaporator and condenser coils. Here's a quick summary of the negative impact each failing is responsible for.

#### **Dirty evaporator coils:**

- \* Reduced cooling capacity by up to 40%,
- \* Reduced compressor power by up to 7%
- \* Reduced evaporator fan power by up to 40% and supply air CFM rates by up to 75%
- \* Dropped energy efficiency up to 35%
- \* Increased supply air temperatures up to 2 degrees F

#### **Dirty Condenser Coils:**

- \* Degraded cooling capacity by up to 40%
- \* Increased discharge pressure up to 60%, cutting refrigeration effect by 30%
- \* Reduced compressor power up to 70%
- \* Reduced energy efficiency by about 60%
- \* Increased supply air temperature by close to 5 degrees F

## The Perfect Balance of Water and Air

DXair Dehumidifiers are designed exclusively for use in all indoor swimming pool applications: from lap pools, schools, large hotel/resort indoor swimming pools, where humidity needs to be controlled with dehumidification to prevent deterioration of the pool enclosure.

For more information, contact  
DXair. 800/514-7051 [www.dxair.com](http://www.dxair.com)