

# ProTEC™ NATURAL HUMIDITY PROTECTION PANEL vs. ELECTRIC DEHUMIDIFIER

## PURPOSE:

Does the HumiTEC Corporation's ProTEC™ Natural Humidity Protection Panel reduce room humidity as well as an electric dehumidifier ?

HumiTEC Corporation provides a 100% natural desiccant panel proven to reduce humidity within buildings. Since many homes and condominiums in the Florida Gulf Coast region are currently using electric dehumidifiers, a comparison test was conducted to determine how well the ProTEC™ panel would perform against the dehumidifier.

## PROCEDURE:

An unoccupied condo unit with an electric dehumidifier installed and operating was selected. Outside and inside temperature, dew point and relative humidity readings were taken to determine the effectiveness of the dehumidifier. The device was unplugged and one ProTEC™ panel was then placed prior to the A/C system's return air flow. The unit was then rented to guests.

## CONCLUSION:

After just 23 days of testing, the data proved the ProTEC™ panel to be much more effective!

On follow-up, the **outside** temperature was 25° hotter, the dew point was 29° higher, and the relative humidity was 21% wetter than on the day of the electric dehumidifier reading.

**Inside**, it was discovered that the condo unit's thermostat had actually now been raised 5° yet the relative humidity inside had dropped 10 points! The Maintenance worker assisting with the readings said the air in the unit was much more comfortable now.

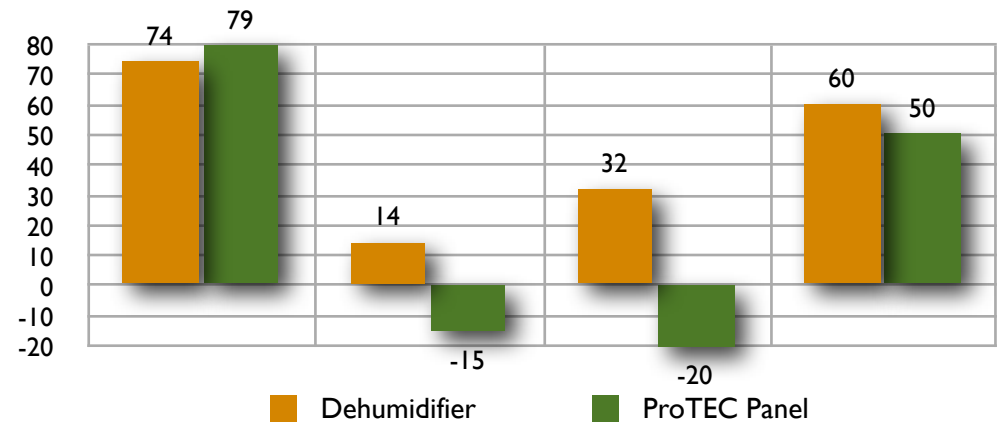
With the electric dehumidifier, the unit's A/C system was not efficiently removing moisture because the dew point inside the unit was actually HIGHER than the outside. However, the ProTEC™ panel actually lowered the inside dew point. In fact, the panel was 52% better!



ProTEC™

## 23 DAY RESULTS SUMMARY

DEVICE	THERMOSTAT SETTING	DEW POINT REDUCTION *	% DEW POINT REDUCTION *	RH% REDUCTION **
DEHUMIDIFIER	74.1	14.4	32.0	60.1
PROTEC PANEL	79.3	-14.8	-20.0	50.1



\* Outside DP minus Inside DP = approximate A/C moisture removal ability

\*\* Actual humidity readings taken in the unit

**NOTE:** ProTEC uses NO electricity...it helps REDUCE energy. ProTEC also produces NO waste-water! ProTEC has NO moving parts and makes NO noise. Lasts 5 times longer than dehumidifiers.

# PROTEC™ NATURAL HUMIDITY PROTECTION PANEL vs. ELECTRIC DEHUMIDIFIER

**TEST FACILITY:** Waterscape Condominiums

**LOCATION:** Ft. Walton Beach, FL

**UNIT:** 3418

**SQ FT:** 829

## DATA COLLECTION

ITEM	ELECTRIC DEHUMIDIFIER IN USE	PROTEC PANEL INSTALLED (DEHUMIDIFIER OFF)	TEST PERIOD VARIANCES
DATE OF READING	5/12/08	6/4/08	23 days
OUTSIDE TEMP (F)	62.0	87.0	25 degrees higher
OUTSIDE DEW POINT (F)	45.0	73.9	28.9 degrees higher
OUTSIDE RELATIVE HUMIDITY	53.6%	75.0%	21.4% higher
INSIDE TEMP (F)	74.1	79.3	5.2 degrees increased
INSIDE DEW POINT (F)	59.4	59.1	-.03 degrees lower
INSIDE RELATIVE HUMIDITY	60.10%	50.10%	-10% lower
DEW POINT REDUCTION (F)	-14.4 (increased)	14.8 (decreased)	29.2 degree improvement
A/C MOISTURE REMOVAL EFFICIENCY	-32% (inefficiency)	20% (efficiency)	52% improvement

Performed by: HumiTEC Corporation 800-218-8507

Verified by: Waterscape Maintenance Department 850-226-8711