

CASE STUDY - HOSPITAL UNIT (High Humidity)

CS001

Client: Hospital - Queensland



Situation:

A hospital unit in Queensland, Australia, is located in an area that experiences almost 100% humidity at certain times of the year. This condition leads to a significant mould infestation on all indoor surfaces, including the air conditioning ducting.

To address the infestation, the hospital undertook expensive remediation on a regular basis. The air conditioner was also used in a manner to dehumidify the input air. To date, the remediation plan previously adopted had no longevity. The hospital was investigating alternative solutions.

Treatment:

The client decided to trial SAN-AIR and conduct a microbial study over a 4 month period. During this time, the humidity range was recorded between 60 - 74%, with temperature ranging between 29 - 36°C.

Test methodology:

1. As standard practice, a baseline reading was taken prior to introducing SAN-AIR into the system.
2. After taking microbial swab readings, SAN-AIR was placed in the Air Handler's Fan Box within the Hospital's Plant Room.
3. Due to the high temperature of the supply air and the velocity of the air handler, SAN-AIR was replaced every 3 weeks.
4. A return visit was organised 4 months later to take final readings.

Result:

- The hospital unit experienced a 63% reduction in mould counts after SAN-AIR was introduced
- Regular microbial readings measured over 4 months, showed that the reduced counts were maintained over that period
- After 4 months the usual mould growth issues arising from previous mould treatments, did not occur
- Equipment maintenance was easier as the coil fins were in a clean condition

Conclusion:

SAN-AIR was able to reduce the mould on the surfaces of the air conditioning system by 63%.

The effects of the remediation work undertaken by SAN-AIR continued after the 4 month period.

BEFORE SAN-AIR - December 2013



>300 mould/cm²



Coil showing build up of dirt / growth medium

AFTER SAN-AIR - April 2014



<100 mould/cm²



Coil is visibly cleaner



SAN-AIR™ A scientific breakthrough in natural organic chemistry



p: 042 4200 e: sales@sanair.com.au w: san-air.com.au