Heatsavr

MAXIMISING THE BENEFITS FROM THE USE OF HEATSAVR ON INDOOR SWIMMING POOLS

IMPORTANT NOTES ON AIR HANDLING

The main benefit realisable from the use of Heatsavr, or indeed any pool cover, relates to the ability to reduce air temperature to a lower set back when the pool is closed. The potential energy savings from this can be particularly noticeable when the outside temperature becomes colder and the air heating requirement is at its greatest.

Even if the current programming allows for a small air temperature set back at night, the lower limit can generally be reduced even further with the use of Heatsavr. The actual minimum acceptable temperature will vary from building to building dependant on the particular heat loss characteristics but a typical set back would be around 6 deg C below the normal operating level.

Furthermore by suppressing evaporation when the pool is closed the use of Heatsavr should enable the fresh air ventilation requirement to be reduced at appropriate times. When a pool is closed the minimum fresh air requirement is not linked to occupancy but to the amount necessary to control humidity. If the system incorporates a humidity control, whereby the ventilation rate is automatically reduced when conditions allow, either by increasing recirculation of by reducing fan speed, then the cost of air heating will be reduced even further.

Where the fresh air ventilation rate can be reduced by fan speed control, then savings in electrical consumption will also be achieved. Most AHU fans are of significant power and reducing fan speed by 50 % will result in a 75% reduction in electrical consumption.

IT IS IMPORTANT THAT CONTROLS ARE SET OR THE BMS RE-PROGRAMMED TO TAKE ADVANTAGE OF THESE BENEFITS.

In cases where the system does not allow for a reduction in fresh air ventilation rate by either of the above methods then this can often be achieved by arranging for a time clock to switch off one or more fans. With such an arrangement it may be necessary to incorporate a simple temperature/humidity control to override this should conditions require.