



**WARNER LEISURE HOTEL
GUNTON HALL**
AIR HANDLING UNIT MANUFACTURING



Building Ventilation Solutions

PROJECT OVERVIEW

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Warner Hotel Group are famous for their resort hotels located across the UK. Each is located in a beautiful setting & includes full leisure facilities for guests & usually with a full size indoor swimming pool.

To maintain a pool hall at the correct temperature & humidity requires an air-handling unit (AHU) specifically designed for the size of pool & its surroundings.

The existing AHU at Gunton Hall had come to the end of its useful life & needed replacing & so we were approached to investigate the existing set-up & then design, manufacture & install a new air handling unit complete with fitted controls



GUNTON HALL SWIMMING POOL



GUNTON HALL ENTRANCE

AHU DESIGN CRITERIA

In reviewing the existing AHU against our design criteria, it was felt that the air volumes need to be increased, particularly to cope with the fully glazed structure of the pool hall itself & reduce condensation on the glazing. So the new AHU was designed to provide additional air to meet this need

PROJECT HIGHLIGHTS

DESIGN PHASE

The new AHU incorporated a high-efficiency plate heat exchanger to recover the maximum energy possible from the exhausted & remove moisture at all times of the year.

To save additional energy during low occupancy periods, the unit includes both temperature & humidity sensors & also a recirculation damper so that air can be returned directly when the humidity is low, thus enhancing energy saving potential

MANUFACTURING

Because of the limited space requirements available in the existing plantroom, the new AHU had to be tailor-made so as to fit, particularly as it was larger than the original.

The unit also had to be manufactured to be highly resistant against corrosion & so was manufactured from plastic coated galvanised steel panels. All double-skinned & insulated within a 50mm aluminium frame



NEWLY INSTALLED AHU



THE PREVIOUS AHU

INSTALLATION

Because of the reduced access into the plantroom, the unit had to be provided in flatpack form. The new unit panels were moved into the plantroom where our engineers then re-built it. The connections onto the existing ductwork had to be modified & our engineers undertook this, as well as fitting new lagging. In addition the LPHW heating pipework had to be re-routed & re-connected with a new 3-port control valve by our engineers

COMMISSIONING

The unit was fitted & pre-wired with an on-board Trend control panel & following installation, our engineers then commissioned both the unit & controls, measured the air volumes & set to the increased volume & left the unit running to the clients satisfaction

If you have any swimming pool hall issues, please feel free to give us a call at [01256 518170](tel:01256518170) to discuss, or send us an email at info@bvs-ltd.co.uk



AHU MANUFACTURING
AIR-HANDLING UNIT SERVICES

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