

# TOSHIBA

Leading Innovation >>>

## Toshiba Solutions

R22 systems replaced by R410A VRF SHRM

### Equipment:

Toshiba VRF SHRM  
Ducted ceiling units  
Integrated fresh air units  
Interactive Intelligence



*The refurbishment of the building has made it very flexible to use*

### Application details

Many office developments were created during the 'eighties and 'nineties around the M25. Many were not air conditioned and over time rental values have suffered because of it. However, those buildings that did have air conditioning now need it to be replaced, as in many cases it used R22, which will be phased out from July 2007. Increasingly, these buildings need to be reconfigured and have new air conditioning systems installed.

The Greenwell building in Hook was formerly a single HQ building with its own canteen and other facilities. Toshiba has supplied nine heat recovery VRF systems to enable the building to be split into three lettable floors that can be subdivided still further.

# TOSHIBA

## Leading Innovation >>>

### Solution

Three Toshiba SHRM VRF systems per floor, using R410A, provide 661 kW of heating and 588 kW of cooling for the building, removing any need for a perimeter wet heating system and freeing up even more lettable space.

The overall installation uses twenty-two modular condensing units in total, and operates using a control system that allows the building to be split into different occupation zones. The Toshiba system interfaces with an existing Trend control system and has a timer fitted.

The air is distributed via ducted ceiling units throughout the building and the system also provides tempered fresh air to current occupation standards via the new Toshiba integrated fresh air units. Swirl diffusers were used to ensure that air distribution is even and draught-free.

The canteen area originally screened the external condenser farm and masked any noise from the old units. The canteen has gone and internally the space is required for letting. The site of the old plant is the only possible area for the new Toshiba SHRM systems but, fortunately, they operate so quietly that no occupants could possibly know that they are there. Despite providing considerably more cooling and heating capacity they take up no more space than the previous installation.

[www.toshiba-aircon.co.uk](http://www.toshiba-aircon.co.uk) Telephone: 0870 843 0333 Email: [general.enquiries@toshiba-ac.com](mailto:general.enquiries@toshiba-ac.com)



*The condenser farm fits the same footprint as the previous equipment*



*Inside, the system is unobtrusive*

TOSHIBA AIRCONDITIONING

Advancing the **eco**-evolution