

# Toshiba Solutions

## Keeping cashmere soft at prestigious London showroom

### Case Study: Johnstons of Elgin

Toshiba's reliable VRF heat recovery air conditioning is keeping exclusive Scottish cashmere knitwear collections in prime condition, and customers in perfect comfort, in a historic Westminster town house.



### Application

Air conditioning is an essential part of a stylish refurbishment by specialist retail interior designers Robert Workman of Muirhouses at the London showroom of prestigious Scottish textile manufacturers Johnstons of Elgin.

The project posed three major problems for specialist installer Air Options. Firstly, there was little room in the historic building for an air conditioning system. Secondly, there is a continuous firebreak all the way up the building, and access to the ceiling units had to be from below. Thirdly, outdoor units had to meet the toughest possible sound regulations imposed in residential areas by Westminster City Council.



## The solution

The problems were solved by two of the latest dedicated R407C Toshiba Super Multi Systems, with Artificial Intelligence and a mix of nine indoor units, including hidden chassis units, cassettes and hi-walls. Air conditioning with sophisticated control was needed to provide simultaneous heating and cooling in different parts of the building. Radiators could not be used because of the damaging effect of dry heat on the fibres of the delicate fabrics. Fresh air intake via the Toshiba air conditioning system ensures optimised air quality.

The first difficulty was overcome by the use of VRF air conditioning, needing only refrigerant and electrical runs. The Toshiba chassis units were floor-mounted and hidden in period radiator cabinets in the board room and upper-floor apartments. Two concealed ducted systems were installed in the two salesrooms on the middle floors. Here the units fit perfectly into the suspended ceiling of the adjoining stock rooms.

The second issue was resolved by creating capsules around all the ceiling units to maintain the integrity of the firebreaks. Flexible service access to the Toshiba units allows them to be serviced from below.

Sound level requirements were met by the advanced specification of the Super Multi equipment, but a special acoustic housing was still required by the Building Control authorities, and this was designed and installed to the satisfaction of all parties. A sound level of just 47 dBA was achieved.

Toshiba four-way cassettes were installed in the ground-floor office and in the penthouse-suite bedrooms. No sound is audible from the condensing units just outside the windows. A permanent Johnstons' sales team and some of the company's designers occupy the offices. The building is visited daily by customers from many of the world's renowned fashion brands and couture houses, as well as members of the sales team from Scotland, agents from around the globe and directors of the company.

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