May 2018

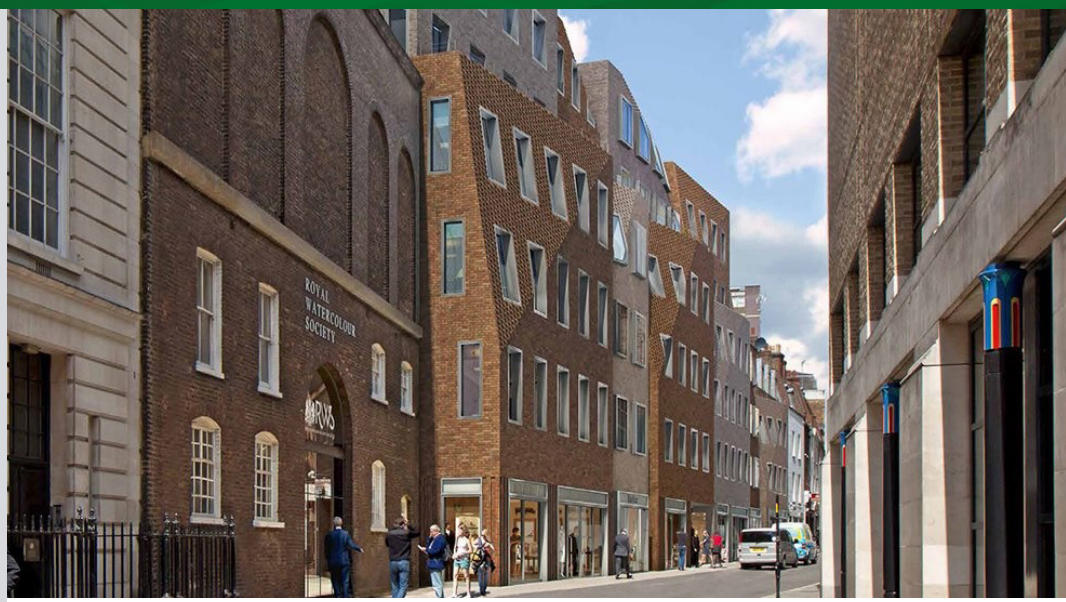
Hobhouse Court
Whitcomb Street, London

About Hobhouse Court

- Centrally located apartments, combining modern and historic elements
- Competitive, spacious retail space situated near tourist hotspot
- Professional, dynamic office space accessible by numerous transport links

The Challenge

Exhaust fumes from excavators working in the enclosed spaces of the site, along with dust unavoidably being generated, led to concerns about the air quality in which workers would be operating.



Hobhouse Court is a Grade II listed, mixed-use building just off Trafalgar Square in London. The building earned its name from Sir John Cam Hobhouse, who served as a Member of Parliament for various constituencies between 1820-1851 before being appointed to the House of Lords.

The building combines historical interest with premium location. Following the property's regeneration, the product of a design collaboration between Brisac Gonzalez and Arquitectonica, the new site now offers 20 modern, state-of-the-art apartments, one medium-sized office space and one large retail space. In addition to this, the building also welcomes back the Royal Watercolour Society to its original home, presenting the opportunity for guests to visit the historical vaults located in the building's basements.

Owing to the history surrounding the site, the redevelopment process required careful and considered restoration of the listed vaults situated under a portion of the building. The logistics of this element of the project meant excavators would be working within enclosed basement spaces, giving rise to potential health hazards from both exhaust fumes and dust.

Key Benefits

- Removal and ventilation of dust through industrial standard filters
- Effective restoration of fresh air within enclosed space and basements
- Suitable distribution of good quality air to passageways and rooms
- Preventative measures for build-up of fumes and pollution

"The equipment worked well and resolved the issues at hand. We couldn't fault the service, either. The delivery was bang on time, the driver very helpfully unloaded and explained the equipment and then helped to set everything up. There was one breakdown during the course of the hire, which we contacted RVT about at 4:30pm one evening; they had an engineer on site next morning at 8am to exchange the kit - happy!"

Contractor's Site Manager

The RVT Solution

RVT used three techniques in combination to ensure that good air quality was maintained for the workers on site.

1 Dust extraction and filtration:

Dust was tackled by the installation of two, powerful centrifugal fans situated at the end of a passageway. The fans extracted foul air and dust, carrying it along 300mm ducting and passing through EU7 grade filters, located 24 metres away from the vaults.

2 Forced ventilation:

To maintain good air quality within the vault, a powerful axial fan was located outside the vault at the other end of the building to the fan extracting the dust. Fresh air was forced in via 30 metres of 450mm ducting to provide a continuous flow of fresh air.

In order to ensure that the fresh air being brought into the vaults was suitably distributed within specific areas of work, a series of smaller axial fans were positioned in passageways, directing airflow and preventing pockets of poor quality air arising.

3 Exhaust fume filtration:

Fumes produced by excavators in the enclosed spaces were managed by the introduction of adaptable add-on filters that could be clipped on to the excavators' exhaust outlets.

Powerful centrifugal fan to extract dust at one end

Another powerful fan, this time of axial type, to blow fresh air in at the opposite end