

# Protecting contractors from dust and heat exposure during historic redevelopment Regent's Crescent, Central London

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Regent's Crescent has undergone an intensive restoration

## Case Study Key Facts

- Regent's Crescent was designed by celebrated architect John Nash
- The Crescent remains the property of the Crown Estate
- The Crescent has housed students and provided workspace for office workers over the past century
- The new development will see the properties restored to prestigious residential use

## Marylebone icon undergoes restoration to former glory

Regent's Crescent, constructed between 1812-1821, is a significant Regency era build. Designed by John Nash, one of the foremost architects of the Regency and Georgian periods, the semi-circular bank of houses and gardens are Grade I listed. The Crescent is part of Nash's town-planning scheme, linking central London to Regent's Park, and features his trademark elegant stuccoes.

Major historical events have shaped the architecture of the terrace. The Napoleonic Wars bankrupted the original builder, halving the physical footprint of the initial plans. The Second World War saw the properties nearly destroyed and needing intensive restoration. Unfortunately, the first restoration replaced the buildings behind the façade with substandard office buildings. In 2015, PDP Architects received planning permission to remove these mid-century structures and to restore the buildings to residential use. PDP's proposals include 67 new apartments and 9 Garden Villas, and they engaged JRL Midgard to carry out the build.



## Ventex Centrifugal Fan 300M

### Tech specs:

- 110V Supply
- Long duct runs up to 80m
- Mobile
- Available with soft start

### Key benefits:

- Suitable for extraction of pollutants in air
- Long distance ventilation
- High temperature extraction

**“The equipment was delivered to site circa 7 hours after our initial enquiry. The equipment was uncomplicated, easy to install and completed by three men in one day. We have installed the kit in our temporary basement offices on a live construction site and we have noticed a remarkable difference in the quality of air we breathe as well as keeping the ambient temperature nice and cool since the equipment has been up and running. I would happily recommend RVT and the equipment they supply.”**

Ian Parrott  
Building Services Manager  
Midgard Ltd

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## The challenge

The Crescent’s Project Managers found that they were tight for on-site office space from which to run the development.

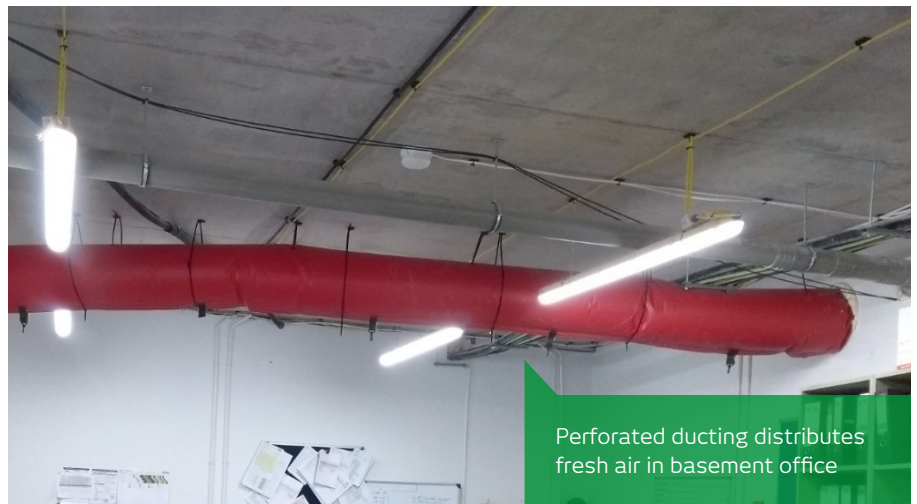
They created temporary office spaces and welfare areas within the basement of the existing buildings, but these proved to be hazardous working environments. Dust ingress, intense heat and airlessness in the newly created work areas needed to be rapidly addressed.

The Building Services Manager engaged RVT to find a solution to lower the temperature and to drastically increase the quality of the air within the basement offices, meeting rooms and bathrooms.



## The RVT solution

RVT’s recommendation was to ventilate the space using 300mm Ventex Centrifugal Fans coupled with 42 metres of ducting. The intake ducting was used to draw air down from the mast of a tower crane, which was then passed through the fans and a filtration system before being distributed through four basement offices. This highly efficient arrangement comprehensively cleared the environment of harmful toxins.



Perforated ducting distributes fresh air in basement office

This heavy duty centrifugal fan can deliver over 5,600m<sup>3</sup> clean air per hour, which was ideal for this basement office.

The Regent’s Crescent team benefitted enormously from the clean air distributed by the powerful equipment. Hot and stuffy air was purged out and cool, clean air was circulated in via perforated ducting, making the working environment more comfortable and safer to operate in.