

Client:



Location:

Berkley Street, London



Products Used:



Dust Kept Under Control During Full Office Renovation Works

Project Overview

An office building in the prestigious area of Mayfair, London needed significant renovation works.

These works would take place over 18 months and require extensive changes such as structural alterations and rooftop extensions. BAM Construction was the trusted contractor appointed to carry out the renovation work required and keep the office building as desirable as the surrounding location.

Challenge

As part of the renovation works, new utilities needed to be installed which required running services (cables/pipes) through steel girders.

The girders were encased in concrete and fire-resistant materials which required removing in order to allow oxy-propane cutting works to proceed on the girders beneath. The concrete removal process created large quantities of dust which required managing. If left uncontrolled, there was a risk that dust would become airborne and migrate to other areas of renovation, local welfare rooms and even to members of the public using the street outside of the building.

With vast amounts of dust created, on-site teams needed to adhere to Workplace Exposure Limits (WELs) in-line with the Control of Substances Hazardous to Health (COSHH) regulations¹. To aid their commitment to worker safety and project compliance, BAM Construction reached out to RVT Group to install engineering controls that would keep people safe without delaying the progress of works.

[1] britsafe.org/safety-management/2024/airborne-hazards-protecting-workers-airways





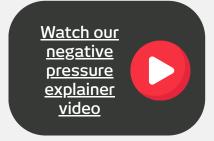
Negative and Positive Pressure: What's the difference?



Negative pressure removes airborne hazards by ventilating the air that is already inside a room.



Positive air pressure pushes air out of a room by increasing the rate of airflow.



Solution

RVT Group recommended a solution in-line with the 3C's® methodology (Capture, Contain, Control) and installed two dust control solutions to manage the varying levels of dust in different areas of the project.

Capture:

RVT Group supplied a DUSTEX® DustMaster® Pro to extract dust directly from the area where cutting works were taking place. By placing the capture hood as close to cutting activities as possible, potentially hazardous dust was drawn into the extraction unit via the high performance mixed flow fan. Once captured, dust was then forced through 3 stages of filter media, up to HEPA standard, making it ideal for protecting BAM's workers from silica and other harmful construction dust.

A DUSTEX® Raptor was used in the adjoining office to minimise the risk of harmful airborne dust particles impacting workers nearby.

Contain:

BAM Construction used polythene sheeting to separate work areas, ensuring dust created did not travel or harm those nearby. When paired with the dust extraction units, a fully-contained dust control solution was created.

Control:

Sealing off the work area and extracting from inside the enclosed area created a negative pressure extraction system. This fully controlled the direction of airflow and meant that contaminated air could not escape unless extracted via the DUSTEX® DustMaster® Pro.

RVT Group's dust control solution gave BAM the confidence that harmful particulates from cutting could not migrate into 'live' or 'sensitive' environments.





Is dust an issue for your project? Could you benefit from a negative pressure system?

Download our dust brochure >

