



Dust, Fume & Noise  
Control Solutions for

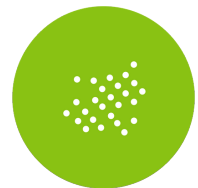
# Demolition Projects

## The Demolition Process

Demolition is a skilled and technically challenging operation. Whether you are carrying out soft-strip, structural alterations or completely dismantling the building and recycling the materials a methodical approach is required that minimises the risks to site operatives, the public and the environment:

- Surveying the building, its structural condition, and the surrounding environment paying special attention to sensitive receptors like schools, SSSI's and residential properties
- Drafting demolition plans and method statements (RAMS)
- Drafting and implementing health and safety plans
- Removal of hazardous materials

The immediate **safety risks** are well known; falling from height, falling materials, uncontrolled collapse, hazardous materials, heavy machinery, risks from connected services, however we can't forget the long-term **health risks** that arise from excessive exposure to dust, fumes and noise, and this is where RVT can help demolition companies.



**Dust**



**Fumes**



**Noise**

# Managing Health Risks During Controlled Demolition

The industry has come on a long way since the days of the ball and chain; high-reach excavators with shears, crushers, grapples and breakers allow the safe demolition of multi storey buildings, lower down excavators fitted with clamshell buckets, Skidsteer loaders, crushers and screens allow the sorting of materials for recycling to be carried out with minimal manual labour. Despite the many advances the one constant is airborne dust, this increases the risk of exposure to respirable crystalline silica, aspergillus spores and other airborne contaminants. Excessive exposure to dust can lead to long-term health problems, including: heart disease, lung disease, COPD, aspergillosis, silicosis and cancer. It is therefore essential that exposure to dust is managed effectively.

## Water suppression

Airborne dust is a particular problem in the summer months when everything is very dry, RVT therefore offer a wide range of water suppression units, which vary in size and can offer a throw of between 10m and 80m. Some units provide a very fine mist, whereas others provide a high concentration of water to suppress heavier dust particles. Some models feature an integrated water tank for convenience, whereas other units need to be connected to a water supply; each are best suited to different applications.



Learn more  
about  
Hydramist



## Containing noise and dust

Where the site has restricted space around it or when high-rise buildings are being reduced in height it is common to use top-down or deconstruction methodologies; small excavators and Bobcats dismantling one floor at a time or a crane removing individual sections from modular panel system buildings. Noise from this type of work can be a major challenge especially to neighbouring buildings. During these processes the buildings are often scaffolded both to provide safe access and to enable a level of protection from falling masonry etc.

RVT can supply a range of acoustic barriers that are certified to BS 7955 making them suitable for suspension off scaffolding, fences, hoardings or other temporary structures. The acoustic quilts not only contain the noise, but they can also contribute towards containing dust and debris. It is normally only necessary to wrap the scaffold lifts immediately above and below the work area.



View  
Soundex  
Quilts





## Managing Health Risks During Internal Demolition

Interior demolition and structural alterations involve demolishing spaces within a building for renovation, expansion or change of design. The process can involve removal of ceilings, walls, floors, railings, wiring, utilities and much more. Contractors will therefore be cutting, breaking and removing a variety of materials, including plasterboard, brick, stone, fibreglass, metals, plastics etc. and naturally this causes a lot of dust, fume and noise.



### Fume control

When removing structural steelwork, falsework or propping systems, RVT Group can provide fume extraction kits, welding fume filters, carbon filters, spark guards and more. We can also offer high airflow units with 4-way spigots, therefore providing multiple extraction points.

Working with diesel powered plant in enclosed spaces can significantly reduce manual handling, but also introduces health and environmental risks from the exhaust emissions. RVT offer a range of RAVEX exhaust filtration kits suitable for machines of up to 150kw, diesel fume extraction for static plant like bore hole rigs and generators and can design ventilation systems to handle the residual gases all backed up by our Monitex P55 exhaust gas monitor.



[View Diesel Exhaust Filter Kits](#)

### Do you require additional ventilation?

Calculating ventilation requirements can be tricky and there are a number of things to consider, we therefore recommend speaking to a fully trained RVT consultant to help you select a fully effective, reliable and robust Ventex ventilation solution. RVT's largest units offer an airflow of 104,000 m<sup>3</sup>/h, however multiple units can be used together to provide suitable ventilation for the largest of projects.

[View Ventilation Solutions Online](#)

## Dust Control Solutions

When demolishing walls and ceilings containing brick, block, stone or concrete, contractors can unwittingly expose themselves to a variety of respirable dust particles including silica dust and aspergillus spores. Failure to install adequate engineering controls to control dust, will leave workers vulnerable to long-term health problems such as heart disease, lung disease, respiratory problems, asbestosis, silicosis and cancer.



The Dustex® Raptor is a multi-purpose portable extraction unit, with integrated HEPA filter, designed to capture dust from a wide range of construction activities. With an airflow of 1,000m<sup>3</sup>/h this is the most powerful filtration unit of its size on the market.



The Dustex WandaFilta Plus Kit contains a capture hood, ducting, Ventex Centrifugal Fan 300M and the WandaFilta Plus unit. This powerful mobile filtration kit has an airflow of up to 6000 m<sup>3</sup>/h and is ideal for extremely dusty construction tasks, such as heavy demolition and concrete alterations.



### Monitoring: If you don't measure it, you can't manage it!

If you have concerns regarding the level of dust, noise or vibration (perhaps you are demolishing a building in a city centre, with close neighbouring buildings, and are working to strict council guidelines), RVT can provide environmental noise, dust and vibration monitors.

If you have a demolition project on the horizon and would like to speak to a consultant, please submit your enquiry online, or call us on [0808 178 3286](tel:08081783286).

Submit  
an  
Enquiry

