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Construction Dusts

Your Essential Guide

What are construction dusts?

What risk to construction workers is airborne, breathable and nearly invisible?

Construction dusts.

When inhaled, these cause thousands of new respiratory illnesses every year: but when we can't always avoid making them, how do we combat them?

It's our responsibility to protect people, but to do so, we first need to know what we are facing...

Construction dusts can take the form of...

- **Wood dusts**
- **Silica (aka 'RCS') dusts**
- **Welding fumes**
- **Gypsum dusts**
- **Cement and mortar dusts**
- **Plaster dusts**
- **Mineral fibres (aka 'MMMF')**

Activities that can generate construction dusts:


Cutting tiles/ paving blocks (or 'chasing' floors/walls)


Drilling into walls


Cutting/ installing plasterboard


Sanding wood (including painted wood)


Dry sweeping a site floor


Mixing plaster

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Now we know what they are, what are the risks?

What are the risks of inhaling construction dusts?

Just like breathing in asbestos fibres, inhaling **small amounts** of construction dusts over time is harmful. Regular exposure over a long period of time can cause chronic lung diseases such as:

- **COPD**
- **Asthma**
- **Silicosis**
- **Lung cancer**

Every year...

12,000
lose their lives to construction dusts.

19,000
new respiratory conditions caused by historic workplace exposure.

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If the risks are so significant, why haven't we acted sooner?

Why are the risks misunderstood?

Why do we underestimate construction dusts?

1. They are (mostly) invisible.

2. Employers and employees aren't always aware of which materials and activities create dusts.

3. We prioritise immediate safety hazards over long-term health risks.

Did you know?

The daily workplace exposure limit for RCS is less than the size of a grain of sand (0.1mg/m^3).

Dropping substances like cement or plaster into a mixer or bucket can generate a 'cloud' of harmful dusts.

Respiratory protective equipment must be tested to fit your face for it to be effective.

The daily workplace exposure limit for respirable crystalline silica (0.1mg/m3) is miniscule. Here it is compared to a penny.

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If we know that we will be at risk, here's what we can do...

What can we do about construction dusts?

There are 3 easy steps that can help you keep your site and your people safe.

1. Assess every risk before starting a project
You will need a COSHH assessment – but other hazards may need to be assessed too (e.g. lead paints).

2. Plan your work
Know the risks? Then, plan to avoid them (e.g. plan for air monitoring to control exposure against limits, ventilate work areas).

3. Put controls in place
Risks assessed? Work planned? That's when safe work begins. If dust can't be eliminated entirely, water suppression, air filtering, on-tool extraction and/or RPE may be needed.

Don't neglect RPE

- Test it using AEC's face-fit testing service
- Wear it
- Use it with other controls

Knowing the risks is the best protection – a construction dusts awareness course is vital for this.

We provide half day courses either remotely, at our Essex & Manchester locations, or from your workplace.

Now we know the risks, let's protect our teams from construction dusts – together.

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