

IMPORTANT NOTE TO CONSTRUCTION MANAGERS

Before delivering this toolbox talk ensure that:

- Surveys have been undertaken to determine any at-risk areas for for highly toxic dusts, such as asbestos.
- You have undertaken a task specific risk assessment and determined the control measures including a suitable type of respiratory protection.

 If you are providing respiratory protection you have, or will arrange face fit testing.





















What's the issue with this picture?



The composition of construction dust will change from site to site and day to day, depending on the specific work being done. However, dust on a site will often contain:

- Respirable crystalline silica (RCS)
- Wood dust
- · Lower toxicity dusts such as plaster or limestone

In some situations there is a chance that dust may also contain **asbestos** fibres. Where asbestos is likely to be present, prior to any works starting, an asbestos survey will have been completed, and where necessary any asbestos will have been removed by a Licenced Asbestos Removal Contractor (LARC).











What's the issue with this picture?



Regular breathing of these dusts over a long period of time can cause life-changing lung disease, for example:

- RCS can cause silicosis, an irreversible lung disease, and also lung cancer.
- Wood dust is a common cause of occupational asthma as well as lung cancer for hard wood dusts.
- Asbestos is a lung carcinogen, which currently kills around 5,000 people every year, and most of these victims have worked in the construction industry.











What's the issue with this picture?



Many common construction tasks generate high levels of dust. Although work should be planned to minimise this, it is inevitable that work equipment and the site itself will require regular cleaning to prevent dust contamination building up.

The issues are:

- In the past, sweeping up has been a common way of clearing up dust and other debris but sweeping causes a lot of the dust to become airborne, and creates a health risk for workers.
- Using compressed air to remove dust contamination, although less common, generates even higher levels of airborne dust.
- Using suitable vacuum cleaners offers a much less dusty alternative than the above two options.













Picture illustrates H class vacuum for use with on-tool extraction and for cleaning up.

As far as possible, construction work should be designed and planned to avoid dusty tasks, and engineering controls (such as water suppression or on-tool extraction) should be applied to any activities which generate airborne dust.

Where there is a need to remove dust contamination, vacuum cleaners offer a much less dusty approach than dry sweeping, but:

- It's not good enough to use a standard, domestic type vacuum cleaner.
- Standard vacuum cleaners won't be up to the job of operating in the construction environment.
- Standard vacuum cleaners lack several important features, which means that they won't protect workers properly from airborne dust exposure.













Picture illustrates H class vacuum for use with on-tool extraction and for cleaning up.

For most construction dust, we need to make sure that the vacuum cleaner supplied is:

- An M or H class industrial vacuum cleaner and clearly marked as such.
- Fitted with a High Efficiency Particulate Air (HEPA) filter to ensure that the dust that's being collected won't be released back into the workplace air through the cleaner's exhaust (HEPA filters typically remove well over 99% of airborne dust).
- Fitted with low flow indicators.
- A unit with pre-filters, built-in 'back flushing' filter cleaning mechanisms or similar devices because lots of fine dust can quickly clog filters.













Picture illustrates H class vacuum for use with on-tool extraction and for cleaning up.

- A unit with robust tools and accessories, in good condition and suitable for the work, allowing access into tight spaces and corners is required.
- You must never attempt to clean up asbestos dust, this must be done by trained asbestos operatives under controlled conditions.

Where electricity is supplied by a portable generator, the power requirements of vacuum cleaners need to be taken into account.













Picture illustrates H class vacuum for use with on-tool extraction and for cleaning up.

In reality, vacuum cleaners might not be suitable for all cleaning tasks. If some sweeping up is still needed, then:

- Sweeping should be done carefully.
- Wherever possible, the contamination should be wetted beforehand to suppress airborne dust generation.
- Sweeping should be done when other workers aren't around, so that they aren't breathing in any dust that is raised.

Although vacuum cleaners generate much less airborne dust than dry sweeping, often respiratory protective equipment (RPE, i.e. dust masks) will have to be provided as well. The type of RPE will be dependent on the type of dust and will be highlighted in the task specific risk assessment.











What do you need to do?



- Co-operate in controlling health and safety risks, as you are legally required to do.
- Read and understand the relevant risk assessments before starting work.
- Use the vacuum cleaners provided.

- Report any damaged or defective equipment immediately.
- Wear, store and check your RPE in keeping with your training. Challenge colleagues who are not following good practice in controlling airborne dust.
- Report dusty activities as health and safety 'near misses'.











Housekeeping - a recap

1

What might construction dust contain?

- · RCS.
- Wood dust.
- Lower toxicity dusts, such as plaster or limestone.
- In some situations, possibly asbestos fibres.

2

What are the main health effects of uncontrolled exposure to construction dust?

- The irreversible disease silicosis.
- Lung cancer.
- · Occupational asthma.

3

Do you have everything you need to protect yourself?

- Read and understand the risk assessment.
- · Use vacuum cleaners.
- Know how and when to wear your RPE.
- Avoid dry sweeping wherever possible.





















So what does good practice look like?

Visual standards demonstrate 'what good looks like'.

They are intended to reinforce expectations of health and safety standards.









Visual Standard: Housekeeping



Mouse over to play movie

- Vacuum cleaners are used for cleaning up dust contamination rather than sweeping brushes.
- · Vacuum systems used for extraction are of M class or H class.
- · RPE must be worn for cleaning tasks, even where vacuum cleaners are used.
- RPE is checked so they are suitable for individual workers.
- Workers know how and when to use respirators.











Construction Managers Toolkit



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