



## Silica dust control during tuckpoint grinding

Grinding mortar generates high levels of silica-containing dust. Breathing in this fine dust can cause a serious lung disease called silicosis. Mortar dust can also contain lead.

### Controlling the dust

Specially designed angle grinders and orbital cutting saws are available for tuckpoint grinding. These grinders are equipped with Local Exhaust Ventilation (LEV), which captures the silica dust within a shroud at its source, and draws it into a vacuum where it is filtered in a HEPA filter and discharged. Attachments include shrouds (suction casings that surround the wheel), hose attachments, and vacuum systems (HEPA equipped). The new designs allow for good visibility when cutting.

Hand tools (chisels, wire brushes, pointing trowels, mortar rakes) will not typically produce harmful levels of fine silica dust.

### To protect yourself you should:

- Establish a barrier around your work area to restrict unprotected workers from entering
- Wear proper respiratory and eye protection, and wear coveralls when visible dust is present in the air
- Use LEV systems to capture and control the dust at its source, whenever possible
- Look for safety and efficiency features on a tuckpoint grinder such as an adjustable two-sided shroud, viewing window, easy wheel access, and hose position opposite the trigger
- Check to make sure that the vacuum system you are assigned is approved for use with silica dust (100 series HEPA filtered), and is operating properly
- Inspect the shroud on your grinder to make sure it is in good condition
- Construct a partial or full enclosure to contain the dust and control its discharge through approved filters when an LEV grinder is not available
- Avoid side-to-side movements of the grinder; the grinder wheel should rotate toward the inlet to the vacuum
- Clean the vacuum and change the filters on a regular basis; when cleaning vacuum systems, safe work procedures must be followed
- Report problems to your supervisor

Never blow dust from the cracks or walls; use a vacuum.



*Tuckpoint grinding with LEV*



*Tuckpoint grinder with LEV*



*Orbital/oscillating cutting saw with LEV*

Project: \_\_\_\_\_ Address: \_\_\_\_\_

Employer: \_\_\_\_\_ Supervisor: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Shift: \_\_\_\_\_

Number in crew: \_\_\_\_\_ Number attending: \_\_\_\_\_

Other safety issues or suggestions made by crew members:

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Record of those attending:

Name: (please print)	Signature:	Company:
1.		
2.		
3.		
4.		
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8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

Manager's remarks: \_\_\_\_\_

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Manager: \_\_\_\_\_ Supervisor: \_\_\_\_\_

*(signature)*

*(signature)*



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