Helpful Tips for the New US OSHA Construction Silica Regulation

3M Respiratory Protection Options for the OSHA Construction Silica Regulation

This is only a brief overview. Consult the product User Instructions and the full OSHA regulation 29 CFR 1926.1153 before starting any silica work.

<table>
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<tr>
<th>APF</th>
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<th>25</th>
<th>50</th>
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<th>Additional PPE</th>
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<tr>
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<td>Disposable Respirators and Half Face Reusable Respirators</td>
<td>PAPRs and M-307 Respiratory Hardhat</td>
<td>Full Face Reusable Respirators (With quantitative fit test)</td>
<td>PAPRs and M-407 Helmet</td>
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Over 2 Million U.S. Workers are potentially exposed to occupational silica.¹

Silicosis can cause serious lung damage.¹

Visit 3M.com/OSHASilica for more info

OSHA.GOV

If you are referring to OSHA 29 CFR 1926.1153 Table 1
Find your APF

If you are doing an objective or scheduled assessment
Find your MUC*
This table identifies the minimum required respirator assigned protection factor for the task. OSHA states, however, this is only the minimum protection factor required for the respirator, and employers have the flexibility to provide a more protective respirator to those employees who request one or require a more protective respirator based on the employer’s evaluation of the worksite.

<table>
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<tr>
<th>Equipment/task</th>
<th>Engineering and work practice control methods</th>
<th>Required respiratory protection and minimum assigned protection factor (APF)</th>
<th>Examples of Noise Levels for Common Construction Tools</th>
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</thead>
</table>
| (ii) Handheld power saws (any blade diameter) | • Use saw equipped with integrated water delivery system that continuously feeds water to the blade.  
• Operate and maintain tool in accordance with manufacturer’s instructions to minimize dust emissions.  
- When used outdoors  
- When used indoors or in an enclosed area | None  
APF 10  
APF 10 | 94-98 dB^{1,2,3} |
| (iv) Walk-behind saws | • Use saw equipped with integrated water delivery system that continuously feeds water to the blade.  
• Operate and maintain tool in accordance with manufacturer’s instructions to minimize dust emissions.  
- When used outdoors  
- When used indoors or in an enclosed area | None  
None  
APF 10  
APF 10 | 98-102 dB^{1,2} |
| (viii) Dowel drilling rigs for concrete | For tasks performed outdoors only:  
• Use shroud around drill bit with a dust collection system. Dust collector must have a filter with 99% or greater efficiency and a filter cleaning mechanism.  
• Use a HEPA-filtered vacuum when cleaning holes.  
- When used outdoors | APF 10  
APF 10 | 97-104 dB^{2} |
| (x) Jackhammers and handheld powered chipping tools | • Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact.  
- When used outdoors  
- When used indoors or in an enclosed area  
OR  
• Use tool equipped with commercially available shroud and dust collection system.  
• Operate and maintain tool in accordance with manufacturer’s instructions to minimize dust emissions.  
• Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.  
- When used outdoors  
- When used indoors or in an enclosed area | None  
APF 10  
APF 10  
APF 10  
APF 10 | 97-113 dB^{1,2,3} |
| (xi) Handheld grinders for mortar removal (i.e., tuck-pointing) | • Use grinder equipped with commercially available shroud and dust collection system.  
• Operate and maintain tool in accordance with manufacturer’s instructions to minimize dust emissions.  
• Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.  
- When used outdoors  
- When used indoors or in an enclosed area | APF 10  
APF 25 | 87-99 dB^{1,2,3} |
| (xii) Handheld grinders for uses other than mortar removal | • Use grinder equipped with commercially available shroud and dust collections system.  
• Operate and maintain tool in accordance with manufacturer’s instructions to minimize dust emissions.  
• Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.  
- When used outdoors  
- When used indoors or in an enclosed area | None  
None  
APF 10 | 87-100 dB^{1,3} |

1. ANSI/ASSE A10.46 – 2013 Hearing Loss Prevention for Construction and Demolition Workers
2. OSHA’s Approach to Noise Exposure in Construction  Feb 2003
3. Construction Industry Noise Exposures University of Washington Dept of Environmental and Occupational Health Sciences 2004

Disclaimer: The noise ranges noted here are from reliable sources. Employers are strongly encouraged however to conduct their own noise exposure assessments to determine worker exposure at their jobites.

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