



## Helpful Tips for the US OSHA Construction Silica Regulation

### 3M Respiratory Protection Options for the US OSHA Construction Silica Regulation

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

| APF   | 10   | 25   | 50   | 1000   | Additional PPE  |
|---|--|--|--|--|---|
| <p>If you are referring to OSHA 29 CFR 1926.1153 Table 1</p> <p><b>Find your Assigned Protection Factor</b></p> | <p><b>Disposable Respirators and Half Face Reusable Respirators</b></p> <p><a href="#">8210</a> <a href="#">6000</a></p> <p><a href="#">8210V</a> <a href="#">6500QL</a></p> <p><a href="#">8511</a> <a href="#">7500</a></p> <p><a href="#">9211+</a> <a href="#">HF800</a></p> <p>Pair with 3M™ Particulate Filter <a href="#">2097</a> or <a href="#">7093</a>, except HF-800 series pair with 3M™ Secure Click™ Particulate Filter P100: <a href="#">D3097</a></p> | <p><b>Powered Air Purifying Respirator Systems with M-307 Respiratory Hardhat</b></p> <p><a href="#">TR-600HIK</a></p> <p><a href="#">TR-300N+ HIK</a></p> | <p><b>Full Face Reusable Respirators (With quantitative fit test)</b></p> <p><a href="#">6000</a></p> <p><a href="#">FF-400</a></p> <p>Pair with 3M™ Particulate Filter P100 <a href="#">2097</a> or <a href="#">7093</a>.</p> | <p><b>Powered Air Purifying Respirator Systems with M-407 Respiratory Helmet</b></p> <p><a href="#">TR-600</a></p> <p><a href="#">M-407</a></p> <p><a href="#">TR-300+</a></p> | <p><a href="#">Flexible Fit Earplug</a> <a href="#">H-700 Hard Hat</a></p> <p><a href="#">X4 Earmuff</a> <a href="#">WCP96 Polycarbonate Faceshield</a></p> <p><a href="#">Solus™ CCS Series</a> <a href="#">H24M Faceshield Holder</a></p> <p><a href="#">4520 Protective Coverall</a> <a href="#">Protecta SRL</a></p> <p><a href="#">Protecta Vest Style Harness</a></p> |
| MUC   | 0.5 mg/m³ ▶  | 1.25 mg/m³ ▶   | 2.5 mg/m³ ▶  | 50 mg/m³ ▶   |   |



**+2M**  
U.S. Workers  
are potentially exposed to occupational silica.<sup>1</sup>



**Silicosis**  
can cause serious lung damage.<sup>1</sup>

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This table identifies the minimum required respirator assigned protection factor for the task. US Federal 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.

| Equipment/task<br>(7 of the 18 OSHA categories are described below) | Engineering and work practice control methods   | Required respiratory protection and minimum assigned protection factor (APF) |                  | Examples of Noise Levels for Common Construction Tools |
|---|---|--|------------------|--|
|   |   | ≤4 hours/shift   | >4 hours/shift   |  |
| (ii) Handheld power saws (any blade diameter)                       | <ul style="list-style-type: none"><li>▶ Use saw equipped with integrated water delivery system that continuously feeds water to the blade.</li><li>▶ Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.<ul style="list-style-type: none"><li>• When used outdoors</li><li>• When used indoors or in an enclosed area</li></ul></li></ul>  | None<br>APF 10   | APF 10<br>APF 10 | 94-98 dB <sup>2,3,4</sup>                              |
| (iv) Walk-behind saws   | <ul style="list-style-type: none"><li>▶ Use saw equipped with integrated water delivery system that continuously feeds water to the blade.</li><li>▶ Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.<ul style="list-style-type: none"><li>• When used outdoors</li><li>• When used indoors or in an enclosed area</li></ul></li></ul>  | None<br>APF 10   | None<br>APF 10   | 98-102 dB <sup>2,3</sup>                               |
| (viii) Dowel drilling rigs for concrete                             | <p>For tasks performed outdoors only:</p> <ul style="list-style-type: none"><li>▶ 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.</li><li>▶ Use a HEPA-filtered vacuum when cleaning holes.<ul style="list-style-type: none"><li>• When used outdoors</li></ul></li></ul>  | APF 10   | APF 10           | 97-104dB <sup>3</sup>                                  |
| (x) Jackhammers and handheld powered chipping tools                 | <ul style="list-style-type: none"><li>▶ Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact.<ul style="list-style-type: none"><li>• When used outdoors</li><li>• When used indoors or in an enclosed area</li></ul></li><li>OR</li><li>▶ Use tool equipped with commercially available shroud and dust collection system.</li><li>▶ Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li><li>▶ 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.<ul style="list-style-type: none"><li>• When used outdoors</li><li>• When used indoors or in an enclosed area</li></ul></li></ul> | None<br>APF 10   | APF 10<br>APF 10 | 97-113 dB <sup>2,3,4</sup>                             |
| (xi) Handheld grinders for mortar removal (i.e., tuck-pointing)     | <ul style="list-style-type: none"><li>▶ Use grinder equipped with commercially available shroud and dust collection system.</li><li>▶ Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li><li>▶ 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.</li></ul>  | APF 10   | APF 25           | 87-99 dB <sup>2,3,4</sup>                              |
| (xii) Handheld grinders for uses other than mortar removal          | <ul style="list-style-type: none"><li>▶ Use grinder equipped with commercially available shroud and dust collections system.</li><li>▶ Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li><li>▶ 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.<ul style="list-style-type: none"><li>• When used outdoors</li><li>• When used indoors or in an enclosed area</li></ul></li></ul>  | None<br>None   | None<br>APF 10   | 87-100 dB <sup>2,4</sup>                               |

1. [www.osha.gov/silica-crystalline](https://www.osha.gov/silica-crystalline)  
2. ANSI/ASSE A10.46 – 2013 Hearing Loss Prevention for Construction and Demolition Workers  
3. OSHA's Approach to Noise Exposure in Construction Feb 2003  
4. Construction Industry Noise Exposures University of Washington Dept of Environmental and Occupational Health Sciences 2004