

Silica Dust. Are You Ready?

Respiratory protection based on the OSHA Silica regulation revision.

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

APF	10	25	50	1000	Abrasive Blasting
<p><i>If you are referring to OSHA 29 CFR 1926.1153 Table 1</i></p> <p>Find your APF</p>	<p>Disposable Respirators and Half Face Reusable Respirators</p>  <p>8210V</p>  <p>8511</p>  <p>6500QL</p>	<p>PAPRs and M-307 Respiratory Hardhat</p>  <p>TR-600</p>  <p>M-307</p>  <p>GVP PAPR</p>  <p>TR-300</p>	<p>Full Face Reusable Respirators (With quantitative fit test)</p>  <p>FF-6800</p>  <p>FF-400</p>	<p>PAPRs and M-407 Helmet</p>  <p>TR-600</p>  <p>M-407</p>  <p>GVP PAPR</p>  <p>TR-300</p>	 <p>W-8100B</p>
MUC*	0.5 mg/m ³ ▶	1.25 mg/m ³ ▶	2.5 mg/m ³ ▶	50 mg/m ³ ▶	Abrasive Blasting

*Maximum Use Concentration



Over 2 Million U.S. Workers are potentially exposed to occupational silica.¹



Silicosis can cause serious lung damage.¹

¹OSHA.GOV

Visit 3M.com/OSHASilica for more info

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.

Equipment/task (7 of the 18 OSHA categories are described below)	Engineering and work practice control methods	Required respiratory protection and minimum assigned protection factor (APF)	
		≤4 hours/shift	>4 hours/shift
(ii) Handheld power saws (any blade diameter)	<ul style="list-style-type: none"> Use saw equipped with integrated water deliver system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions: <ul style="list-style-type: none"> - When used outdoors 	None	APF 10
(ii) Handheld power saws (any blade diameter)	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> - When used indoors or in an enclosed area 	APF 10	APF10
(iv) Walk-behind saws	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> - When used indoors or in an enclosed area 	APF 10	APF 10
(viii) Dowel drilling rigs for concrete	<p>For tasks performed outdoors only:</p> <ul style="list-style-type: none"> 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. 	APF 10	APF 10
(x) Jackhammers and handheld powered chipping tools	<ul style="list-style-type: none"> Use tool with water delivery system that supplies a continuous steam or spray of water at the point of impact: <ul style="list-style-type: none"> - When used outdoors - When used indoors or in an enclosed area <p>OR</p> <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> - When used outdoors - When used indoors or in an enclosed area 	None APF 10	APF 10 APF 10
(xi) Handheld grinders for mortar removal (i.e., tuck-pointing)	<ul style="list-style-type: none"> 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. 	APF 10	APF 25
(xii) Handheld grinders for uses other than mortar removal	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> - When used outdoors - When used indoors or in an enclosed area 	None None	None APF 10