

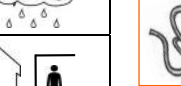



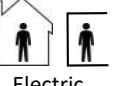













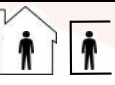







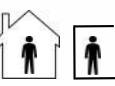








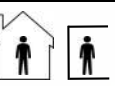

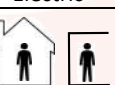











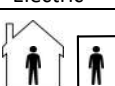








# Respirable Crystalline Silica 29 CFR 1926.1153 Table 1


Equipment / Task	Location of Use	Engineering and Work Practice Control Methods	Respiratory Protection Requirements	
			≤ 4 hours / shift	> 4 hours / shift
(i) Stationary masonry saws 	 Electric	  		
	 Gasoline	Plus   - Ventilate - CO Monitor - Prevent Fire (Gasoline)		
	 Gasoline	Plus   - Ventilate - CO Monitor - Prevent Fire (Gasoline)		
(ii) Handheld power saws (any blade diameter) 	 Electric	 or  		
	 Gasoline	Plus 		
	 Gasoline	Plus   - Ventilate - CO Monitor - Prevent Fire (Gasoline)		
(iii) Handheld power saws for cutting fiber-cement board 	 ≤ 8"	 		
	 Gasoline	  - Not listed as table 1 activity - Respirator with air sampling		
(iv) walk-behind saws 	 Electric	  		
	 Gasoline	Plus 		
	 Gasoline	Plus   - Ventilate - CO Monitor - Prevent Fire (Gasoline)		
(vi) rig-mounted core saws or drills 	 Electric	  		
	 Gasoline	Plus   - Ventilate - CO Monitor - Prevent Fire (Gasoline)		
	 Gasoline	Plus   - Ventilate - CO Monitor - Prevent Fire (Gasoline)		


  
 Outdoors


  
 Indoors or enclosed area


  
 Provide an integrated water delivery system that continuously feeds water to equipment blade | cutting Surface | point if Impact\* (\* Integrated not required)


  
 Operate and maintain equipment in accordance with manual






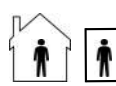








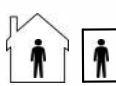

























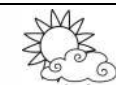











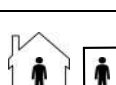



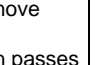
  
 Equipped with commercially available dust collection system (DCS) with 99% or greater efficient filter, plus (+) filter cleaning mechanism (++) filter cleaning mechanism or cyclonic pre-separator

  
 A DCS with a filter at least 99.97% efficient in removing monodispersed particles of 0.3 micrometers in diameter

  
 Minimize accumulation of visible airborne dust by providing sufficient ventilation






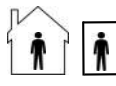







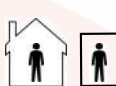



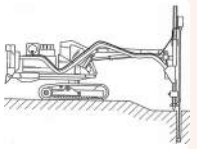

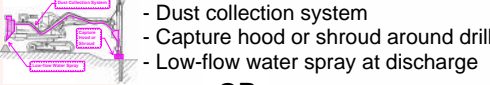













  
 Assigned Protection Factor

  
 Dust collection system (DCS) requires CFM rating to equal or exceed wheel diameter x 25

Equipment / Task	Location of Use	Engineering and Work Practice Control Methods	Respiratory Protection Requirements	
			≤ 4 hours / shift	> 4 hours / shift
(vii) handheld and stand-mounted drills (including impact and rotary hammer drills) 	 Electric	99%  		
	 Gasoline	Plus   To clean drill holes		
(x) Jackhammers and handheld powered chipping tools 	 Electric	  		
	 Gasoline	Plus 		
	 Gasoline	Plus   - Ventilate - CO Monitor - Prevent Fire (Gasoline)		
(xi) Handheld grinders for mortar removal 	 Electric	99%  DCS CFM = 25 x  		
	 Gasoline	  - Not listed as table 1 activity - Respirator with air sampling		
	 Gasoline	Plus   - Not listed as table 1 activity - Respirator with air sampling		
(xii) Handheld grinders for uses other than mortar removal 	 Electric	  		
	 Gasoline	Plus   - Not listed as table 1 activity - Respirator with air sampling		
	 Gasoline	Plus   - Not listed as table 1 activity - Respirator with air sampling		
(xiii) Walk-behind milling machines and floor grinders 	 Electric	  		
	 Gasoline	Plus   - Ventilate - CO Monitor - Prevent Fire (Gasoline)		
	 Gasoline	Plus     Use to remove loose dust in-between passes		

Note: For each employee engaged in a task identified on Table 1, the employer shall fully and properly implement the engineering controls, work practices, and respiratory protection specified for the task on Table 1, unless the employer assesses and limits the exposure of the employee to respirable crystalline silica in accordance with paragraph 29 CFR 1926.1153(d).

# Respirable Crystalline Silica 29 CFR 1926.1153 Table 1

Equipment / Task	Location of Use	Engineering and Work Practice Control Methods	Respiratory Protection Requirements	
			≤ 4 hours / shift	> 4 hours / shift
(v) Drivable saw 		 <b>B</b> 		
		   - CO monitoring - Not listed as table 1 activity - Respirator with air sampling	JHA Required	
(viii) Dowel drilling rigs fro concrete 		 <b>99% HEPA</b>		
		   - CO monitoring - Not listed as table 1 activity - Respirator with air sampling	JHA Required	
(ix) Vehicle-mounted drilling rigs for rock and concrete 		 - Dust collection system - Capture hood or shroud around drill - Low-flow water spray at discharge <b>OR</b>  - Water for dust suppression at drill bit		
		 - If worker in vicinity - Not listed as table 1 activity - Respirator with air sampling	JHA Required	
(xiv) small drivable milling machines (less than half-lane) 		  <b>Operate</b> Dust Emissions		
		   - CO monitoring - Not listed as table 1 activity - Respirator with air sampling	JHA Required	

**Outdoors**

Provide an integrated water delivery system that continuously feeds water to equipment **B** blade | cutting **S**urface | point if **I**mpact\* (\* Integrated not required) | **D**esigned to suppress dust

**Indoors or enclosed area**

Exhaust ventilation on drum enclosure

Water spray and mist at crusher and transfer points

**Surfactant or Suppressant**

Operate and maintain equipment in accordance with manual to minimize dust

Enclosed cab or booth, maintained free of settled dust (as practicable), cleaned by portable dust collect system, door seals and mechanisms good, gaskets and seals good, positive pressure by fresh air, HVAC with ≥Merv 16 filter

**99% HEPA**

Equipped with commercially available dust collection system (DCS) with 99% or greater efficient filter, plus (+) filter cleaning mechanism

Operated by remote control upwind of operation

**HEPA**

A DCS with a filter at least 99.97% efficient in removing monodispersed particles of 0.3 micrometers in diameter

Minimize accumulation of visible airborne dust by providing sufficient ventilation















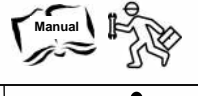




























Cutting depth and cutting **A**sphalt | or **ANY** material

**APF 10**

Assigned Protection Factor

Engaged worker

No engaged workers

Equipment / Task	Location of Use	Engineering and Work Practice Control Methods	Respiratory Protection Requirements	
			≤ 4 hours / shift	> 4 hours / shift
(xv) Large drivable milling machines (half-lane and larger) 		 <b>A</b> <b>OR</b>  <b>Any</b> Depth - no limit      Depth ≤ 4"   <b>Operate</b> Dust Emissions		
		  <b>Operate</b> Dust Emissions		
(xvi) Crushing machines 		  <b>Manual</b> <b>Plus</b>  <b>OR</b> 		
		 - Not listed as table 1 activity - Respirator with air sampling	JHA Required	
(xvii) Heavy equipment and utility vehicles (e.g. bobcat, TLB) used to abrade or fracture silica-containing materials SCM (e.g. hoe-ramming, rock ripping) or used during demolition activities involving SCM. 		  		
		   - CO monitoring - Not listed as table 1 activity - Respirator with air sampling	JHA Required	
(xviii) Heavy equipment and utility vehicles for tasks such as grading and excavating but not including (xvii) equipment / tasks 		   <b>OR</b>   <b>and/or</b>  <b>Operate</b> Dust Emissions		
		   - CO monitoring - Not listed as table 1 activity - Respirator with air sampling	JHA Required	

Note: For each employee engaged in a task identified on Table 1, the employer shall fully and properly implement the engineering controls, work practices, and respiratory protection specified for the task on Table 1, unless the employer assesses and limits the exposure of the employee to respirable crystalline silica in accordance with paragraph 29 CFR 1926.1153(d).