



NEW OSHA RESPIRABLE CRYSTALLINE SILICA (RCS) DUST REGULATIONS

What has changed?

- **The permissible exposure limit:**
Reduced from **250 µg/m³** averaged over an 8-hour day to **50 µg/m³** averaged over an 8-hour day
- **Exposure compliance methods:**
Evolved from air monitoring to 3 compliance options:
 - “Table 1” —prescribed control methods or systems
 - Performance or objective data
 - Scheduled air monitoring
- **Medical exams:**
Medical surveillance (exams) must be offered for employees required by the standard to wear a respirator for 30 or more days per year

5 Steps to Get Started

1. Educate yourself on the RCS standard (1926.1153)
2. Identify applications with potential exposure to RCS dust
3. Train employees and competent person
4. Develop & implement Silica Written Exposure Control Plan
5. Ask questions—reach out to local industries groups

OSHA Table 1	Objective data performance testing	Scheduled air monitoring
Choose a pre-determined control solution, based on your application, from OSHA Table 1 — Exposure Control Methods for RCS Dust.	Utilize performance or objective data (internal or 3 rd party) to document that workers performing a particular application are in compliance with the permissible exposure limit of ≤ 50 µg/m³ averaged over an eight hour day.	Periodically test for a particular application to validate if the user falls under the permissible exposure limit of ≤ 50 µg/m³ averaged over an eight hour day.



Application Equipment/Task		Table 1 Requirements		Hilti Solution
		Engineering Controls	Respirator Needed	
	SDS+ rotary drilling with a shroud and dust collection system	Vacuum Requirements <ul style="list-style-type: none"> • 99% filter efficiency • Filter-cleaning mechanism • HEPA filter for hole-cleaning 	No	Tools: TE 2 / 2-A, TE 3-C, TE 4-A, TE 7 / 7-C, TE 30-A / 30 / 30-C Accessory: DRS-S Vacuum: VC 125/150/300
	SDS-max drilling or chiseling (with Hilti SDS-max combihammer)	Vacuum Requirements <ul style="list-style-type: none"> • 99% filter efficiency • Filter-cleaning mechanism • HEPA filter for hole-cleaning for drilling 	Chiseling Outdoor: > 4 hours or any indoor (APF 10)	Tools: TE 50-AVR, TE 60 / 60-ATC, TE 70 / 70-ATC, TE 80-ATC Accessory: DRS-Y Vacuum: VC 125/150/300
	Safeset™ and Hilti hollow drill bits	Vacuum Requirements <ul style="list-style-type: none"> • 99% filter efficiency • Filter-cleaning mechanism 	No	Tool: Any Hilti SDS+ drill, any Hilti SDS-max drill Accessory: TE-CD hollow drill bit (SDS+), TE-YD hollow drill bit (SDS-max) Vacuum: VC 125/150/300
	Demolition hammers and breakers	Vacuum Requirements <ul style="list-style-type: none"> • 99% filter efficiency • Filter-cleaning mechanism 	Outdoor: > 4 hours (APF 10) Indoor: APF 10	Tools: TE 500-AVR, TE 700-AVR, TE 800-AVR, TE 1000-AVR / 1500-AVR, TE 3000 Accessory: DRS-B. For TE 3000 use TE 3000 dust removal system Vacuum: VC 125/150/300
	Gas saws (any blade diameter)	<ul style="list-style-type: none"> • Water delivery system 	Outdoor: > 4 hours (APF 10) Indoor: APF 10	Tools: DSH 700-X, DSH 900-X Accessory: DWP 10 (or hose with continuous water supply)
	Rig-mounted core drills	<ul style="list-style-type: none"> • Water delivery system 	No	Tools: DD 110, DD 150, DD 160, DD 250/350 Accessory: DWP 10 (or hose with continuous water supply), Water management System (WMS)
	Handheld grinders for mortar removal (i.e., tuckpointing)	Vacuum Requirements <ul style="list-style-type: none"> • 99% filter efficiency • Filter-cleaning mechanism or cyclonic pre-separator • 25 cubic feet per minute (cfm) of airflow per inch of wheel diameter 	≤ 4 hours: APF 10 > 4 hours: APF 25	Tools: AG 450-7S or 7D, DAG 500, DEG 500, DCG 500 Accessory: Tuck pointing hood Vacuum: VC 125/150/300
	Handheld grinders for uses other than mortar removal	Vacuum Requirements <ul style="list-style-type: none"> • 99% filter efficiency • Filter-cleaning mechanism or cyclonic pre-separator • 25 cubic feet per minute (cfm) of airflow per inch of wheel diameter 	Outdoors: none Indoors: > 4 hours (APF 10)	Tools: AG 450-7S or 7D, DAG 500, DEG 500, DCG 500 Accessory: Cutting/grinding hood Vacuum: VC 125/150/300

