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

<table>
<thead>
<tr>
<th>OSHA Table 1</th>
<th>Objective data performance testing</th>
<th>Scheduled air monitoring</th>
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<tbody>
<tr>
<td>Choose a pre-determined control solution, based on your application, from OSHA Table 1 — Exposure Control Methods for RCS Dust.</td>
<td>Utilize performance or objective data (internal or 3rd 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.</td>
<td>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.</td>
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<tr>
<td>Application Equipment/Task</td>
<td>Table 1 Requirements</td>
<td>Hilti Solution</td>
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<td>SDS+ rotary drilling with a shroud and dust collection system</td>
<td>Engineering Controls: Vacuum Requirements</td>
<td>Tools: TE 2 / 2-A, TE 3-C, TE 4-A, TE 7 / 7-C, TE 30-A / 30-C Accessory: DRS-S Vacuum: VC 125/150/300</td>
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<tr>
<td>SDS-max drilling or chiseling (with Hilti SDS-max combihammer)</td>
<td>Engineering Controls: Vacuum Requirements</td>
<td>Tools: TE 50-AVR, TE 60 / 60-ATC, TE 70 / 70-ATC, TE 80-ATC Accessory: DRS-Y Vacuum: VC 125/150/300</td>
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<td>Safeset™ and Hilti hollow drill bits</td>
<td>Engineering Controls: Vacuum Requirements</td>
<td>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</td>
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<td>Gas saws (any blade diameter)</td>
<td>Engineering Controls: Water delivery system</td>
<td>Tools: DSH 700-X, DSH 900-X Accessory: DWP 10 (or hose with continuous water supply)</td>
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<td>Rig-mounted core drills</td>
<td>Engineering Controls: Water delivery system</td>
<td>Tools: DD 110, DD 150, DD 160, DD 250/350 Accessory: DWP 10 (or hose with continuous water supply), Water management System (WMS)</td>
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<td>Handheld grinders for mortar removal (i.e., tuckpointing)</td>
<td>Engineering Controls: Vacuum Requirements</td>
<td>Tools: AG 450-7S or 7D, DAG 500, DEG 500, DCG 500 Accessory: Tuck pointing hood Vacuum: VC 125/150/300</td>
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<tr>
<td>Handheld grinders for uses other than mortar removal</td>
<td>Engineering Controls: Vacuum Requirements</td>
<td>Tools: AG 450-7S or 7D, DAG 500, DEG 500, DCG 500 Accessory: Cutting/grinding hood Vacuum: VC 125/150/300</td>
</tr>
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</table>

**Engineering Controls:** 99% filter efficiency, Filter-cleaning mechanism, HEPA filter for hole-cleaning for drilling.

**Respirator Needed:** No

**Vacuum Requirements:**
- 99% filter efficiency
- Filter-cleaning mechanism
- HEPA filter for hole-cleaning for drilling

**Outdoor:**
- > 4 hours (APF 10)

**Indoor:**
- APF 10

**Water delivery system:**

- 25 cubic feet per minute (cfm) of airflow per inch of wheel diameter

**≤ 4 hours:**
- APF 10
- > 4 hours: APF 25

**Tools:** DSH 700-X, DSH 900-X

**Accessory:** DWP 10 (or hose with continuous water supply)

**Vacuum:** VC 125/150/300