



Respirable Crystalline Silica Task-Based Objective Data

Collection Form

CPWR-The Center for Construction Research and Training has developed a free, interactive online database of respirable crystalline silica, welding fumes, lead, and noise exposure data for the construction sector. The database can be searched by different combinations of tasks, tools, controls and other unique factors and calculates workers' estimated exposure levels. See:

<http://ecd.cpwrconstructionsolutions.org>

The data collection form on the next page was developed to record required information for the silica branch of the database. No individual and company names, contact information, monitoring site location, or other personally identifiable information will be shared outside of the CPWR research team.

Sampling Instructions:

- Follow *NIOSH Method 7500: Silica, crystalline, by XRD method*. Other sampling and/or analysis methods may be considered with submitted justification.
- Use personal air sampling pump calibrated with less than 10% error.
- Collect personal breathing zone samples.
- Analyze samples in an accredited lab.

Sample duration can vary depending on task duration. Each sample should be representative of respirable silica exposure from one task/tool/control combination (e.g., handheld saw cutting block with local exhaust ventilation).

For more information on sampling and analysis see: <https://www.cdc.gov/niosh/docs/2003-154/pdfs/7500.pdf> and <https://www.osha.gov/dts/otpca/nrtl/nrtl1ist.html>

Please return the completed data collection forms, a copy of the lab analysis report, and any additional notes you feel would be helpful to sbrooks@cpwr.com. If you have any questions or concerns, please contact Sara Brooks at (301) 495-8532. Thank you!

*CONTACT INFORMATION	
Name:	
Company:	
Email:	
Phone:	



THE CENTER FOR CONSTRUCTION
RESEARCH AND TRAINING

Respirable Crystalline Silica

Task-Based Objective Data Collection Form

*DATE

Note: All fields with an () are required.

SAMPLING LOCATION		
Site Name:	State:	Country:
*Type of Worksite: <input type="checkbox"/> Active worksite <input type="checkbox"/> Simulated worksite <input type="checkbox"/> Laboratory		
*Project Type: <input type="checkbox"/> Renovation <input type="checkbox"/> Demolition <input type="checkbox"/> New Construction		
Comments:		

SAMPLING ENVIRONMENT	
*Environment:	<input type="checkbox"/> Outdoor <input type="checkbox"/> Semi-indoor <input type="checkbox"/> Indoor <input type="checkbox"/> Confined Space
Other Ventilation Sources:	

WORK CONDITIONS	
*Trade/Occupation (i.e. bricklayer, laborer):	
*Task (i.e. cutting, grinding):	
*Material Disturbed (i.e. block, brick, concrete):	
Comments:	

TOOL/EQUIPMENT	
*Manufacturer:	
*Model/Type:	
*Good Working Order: <input type="checkbox"/> Yes <input type="checkbox"/> No	Power (hp/rpm):
Comments:	

CONTROLS	
*Type:	<input type="checkbox"/> Water <input type="checkbox"/> LEV <input type="checkbox"/> Combination (Water + LEV) <input type="checkbox"/> Enclosed Cab <input type="checkbox"/> None <input type="checkbox"/> Other: _____
*Good Working Order: <input type="checkbox"/> Yes <input type="checkbox"/> No	Comments:

SAMPLING DATA			
*Sample ID:	Sample Type: Personal Breathing Zone	*Flow Rate (L/min):	Pre- and Post-Calibration: performed with less than 10% error? <input type="checkbox"/> Yes <input type="checkbox"/> No
Time		*Total Air Volume (L):	
On:	Off:		
Comments:			

LAB ANALYSIS			
Laboratory:	Total Respirable Dust ($\mu\text{g}/\text{m}^3$):		
Date of Analysis:	*Analysis Method: <input type="checkbox"/> NIOSH 7500 <input type="checkbox"/> Other (specify): _____		
*Total Respirable Crystalline Silica - ($\mu\text{g}/\text{m}^3$):	Quartz ($\mu\text{g}/\text{m}^3$):	Cristobalite ($\mu\text{g}/\text{m}^3$):	Tridymite ($\mu\text{g}/\text{m}^3$):