



WEEKLY SAFETY MEETING

RESPIRABLE CRYSTALLINE SILICA SiO_2

This is a very condensed version of our newly updated Silica Safety Program to warn our employees of the hazards of silica exposure, preventions, and ways to eliminate exposure. See the full program on www.wingercompanies.com Employee login: [Safety1234](#).

Silica is a white or colorless crystalline compound, SiO_2 , occurring abundantly as quartz, sand, flint, agate, and many other minerals and used to manufacture a wide variety of materials, especially glass and concrete. That cloud of dust you see when a worker cuts or grinds concrete, brick, or stone is not just harmless dust. It contains crystalline silica and it can kill. Most crystalline silica is in the form of quartz. Common sand is almost 100% quartz. Most concrete and masonry products contain large amounts of sand. Fine, microscopic particles created by cutting and grinding can get deep into the lungs. When you inhale dust, silica particles scar your lungs, causing a disabling, irreversible, and incurable lung disease called silicosis.

Silicosis is a serious lung disease, and can also increase the risk of lung cancer and other systemic diseases. The bad news is that these diseases can be very fatal. The good news is that silicosis is 100% preventable. You can work with silica-containing materials in ways that do not result in exposure to dust. On September 23, 2017, in order to reduce the number of worker fatalities from silicosis, OSHA lowered the Permissible Exposure Limit (PEL) to 50 $\mu g/m^3$ as an 8-Hour Time Weighted Average (TWA). The Action Level which is a concentration of airborne respirable crystalline silica of 25 $\mu g/m^3$ as calculated in an 8-Hour TWA is the new level employers must prevent exposure to their employees. Since we are in the construction trade, these are the specific measures Winger has put into place:

- ✚ Every Winger jobsite will be assessed by a competent person (foreman, lead journeyman, etc.) for respirable silica dust. These hazards could be created either from Winger personnel performing their job tasks or those created by others.
- ✚ Use OSHA CFR §1926.1153 Table 1. Engineering controls will be put into place to reduce the amount of respirable silica into the atmosphere.
- ✚ When cutting, drilling, sawing, cleaning, etc., use the wet method whenever possible. When the wet method cannot be used or is not allowed, vacuums with HEPA or approved filters, hollow drill bits, etc., will be used.
- ✚ Winger employees will operate and maintain tools with manufacturer's instructions to minimize dust exposure during work, disposing of dust, and keep them in good working order.
- ✚ Do not dry sweep or use compressed air for cleaning purposes.
- ✚ PPE is always the last resort.
 - The following PPE **MUST** be worn for tasks involving silica dust without engineering controls:
 - Dust goggles
 - Faceshield
 - Hearing protection if sound is over 85 dB
 - Hardhat
 - Cut resistant / Dexterity gloves
 - Safety toed work boots
 - Clean shaven
 - Half mask respirator or disposable N-, R- or P-95 particulate respirator (for example, 3M 8210 N-95 Particulate Respirators) and check to make sure each employee has the following:
 - ✓ Is clean shaven
 - ✓ Respirator Pulmonary Function test
 - ✓ Respirator Fit Test
 - ✓ Respirator Training
 - If engineering controls are in put place that eliminates the hazard of airborne dust, the following PPE will be worn:
 - Safety glasses with attached side shields
 - Hardhat
 - Hearing protection if sound is over 85 dB
 - Cut resistant / Dexterity gloves
 - Safety toed work boots

Meeting Date: _____
Supervisor: _____

Trainer: _____
Location: _____

Attendees: (Please print clearly)



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SILICA EXPOSURE CONTROL PLAN

- 1. Silica is a white or colorless crystalline compound, SiO₂, occurring abundantly as quartz, sand, flint, agate, and many other minerals and used to manufacture a wide variety of materials, especially glass and concrete. True or False? _____
- 2. Fine, microscopic particles created by cutting and grinding can get deep into the lungs and cause damage. True or False? _____
- 3. That cloud of dust you see when a worker cuts or grinds concrete, brick, or stone is harmless dust. True or False? _____
- 4. Silicosis disease is 100% preventable. True or False? _____
- 5. The Action Level which is a concentration of airborne respirable crystalline silica of 25 µg/m³ as calculated in an 8-Hour TWA period. True or False? _____
- 6. Every Winger jobsite will be assessed by a competent person for respirable silica dust. True or False? _____
- 7. These hazards could be created either from Winger personnel performing their job tasks or those created by others. True or False? _____
- 8. Engineering controls will be put into place to reduce the amount of respirable silica into the _____.
 - a. Atmosphere
 - b. Winger trucks
 - c. None of the above

- 9. Use OSHA CFR §1926.1153 Table 1 for guidance and compliance. True or False? _____
- 10. When cutting, drilling, sawing, cleaning, etc., use the wet method whenever possible. True or False? _____
- 11. When the wet method cannot be used or is not allowed, vacuums with HEPA or approved filters, hollow drill bits, etc., will be used. True or False? _____
- 12. Winger employees will operate and maintain tools with manufacturer’s instruction to minimize dust and keep them in good working order. True or False? _____
- 13. It is ok to dry sweep or use compressed air for cleaning purposes. True or False? _____
- 14. PPE is always the first resort. True or False? _____
- 15. If engineering controls are not put in place full PPE, including dust particulate respirators, faceshield and safety goggles are required. True or False? _____

Printed Name: _____ Trained by: _____

Signature: _____ Trained by Signature: _____

Date: _____ Location: _____