



SAFETY TIP OF THE WEEK

FOR THE CONSTRUCTION INDUSTRY



Company _____ Date _____

To encourage all of us to promote safety on a continuing basis, the Builders Exchange publishes a safety tip in each issue of the weekly **Bulletin**. The superintendent/foreman of each job should use this safety tip in a short safety meeting Monday morning. We suggest that this 5-to-10 minute meeting be just before lunch or perhaps right after the morning break. You can then emphasize the SAFETY TIP OF THE WEEK all week long.

How to Reduce Dust Exposure

Week Ending 2/26/2021

What makes dust so harmful for construction workers is that it is a combination of particles from various materials used on project sites. These fine grains could be heavy metals, asbestos, pollen, silica and much more. If inhaled, this dust can induce a number of health issues, such as heart strain, reduced lung capacity and irritation of the eyes, nose, throat, and lungs. Silica, a small crystalline substance that is more than 100 times smaller than ordinary sand, can also cause lung cancer, kidney disease, chronic obstructive pulmonary disease (COPD) and silicosis, an incurable lung illness that can be fatal.

Here are some of the top dust mitigation strategies.

Personal protective equipment - All employees should have personal protective equipment (PPE) and proper training on how to use it to limit exposure to dust. Filtering respirators and dust masks can offer extra protection against breathing in harmful particles. The National Institute for Occupational Safety and Health (NIOSH) recommends half-face particulate respirators with N95 filters or better to limit exposure to silica, as these models offer improved efficiency over earlier dust and mist filters. Workers should also wear safety goggles when irritants are present, as they are the only type of protection that creates a seal around the eyes. These goggles can incorporate prescription lenses mounted behind the protective material for those requiring vision correction. While this PPE should have adequate ventilation, it must protect against dust entry.

Restricted site access - Excessive vehicle movement can lead to dust generation on construction sites. To keep the debris to a minimum, site managers should restrict access points. They should also create paved parking areas to limit the spots where vehicles can create dust. Beyond vehicular access, construction companies can limit activity during high winds, as continuing tasks will only accelerate particulate problems.

Water applications via trucks - Another standard method for dust control during construction is to water down the site. While project managers can always hope for rain, they should also opt for water trucks to spray down the area and keep dust suppressed.

Depending on the scope of the project, workers should apply water at least three times a day.

Chemical suppression products - Project managers can find certain chemical dust suppressants, though the performance of these products will depend on the application method, surface moisture content, site precipitation, drainage and more. Most of these suppressants are designed for areas with medium traffic and surfaced with gravel. Calcium chloride, for example, is a salt that can absorb moisture from the air without becoming a liquid. The result is a binding effect on particles, preventing dust.

Pre-work preparation materials - Site managers can offer protection against dust with the right preparation materials. For example, plastic sheeting on the floors and ceilings of the workspace can contain particles. Sticky plastic sheeting is another option, viable for hard surfaces and carpets. Accessory kits with zipper closures are also useful, as they keep the particles contained to one area. When outside, workers can apply mulch and vegetation to the soil to prevent dust. Another way to control harmful inhalants is to properly store and cover materials, especially when carried on trucks.

Natural and block barriers - Another technique that can help with dust control is to use barriers on construction sites, such as board or snow fences, crate walls or bales of hay. These barriers play a significant role in controlling airflow, preventing gusts from blowing soil particulates off the ground.

Experts believe that more than 500 construction workers die from exposure to silica dust each year. Other irritants, too, such as those from wood, gypsum, limestone, and marble, can lead to serious illness. To keep workers safe, construction companies must utilize dust mitigation methods, such as the ones above, on every project site. Sign up for our Silica Competent Person class on March 24!

www.bceva.com/events

Special Topics for this Job: _____

MSDS # _____ Reviewed – Title: _____

Present at Meeting:

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Supervisor's Signature: _____

Note: These SAFETY TIPS OF THE WEEK are to help members provide a safe workplace and to instruct employees in ways to prevent accidents. Ensure you record the names of those who attend your safety meetings, and file this form with your permanent accident prevention records.