

Health & Safety Information for Fabricators



Safety Comes First

At NobleStone, we are committed to promoting safe fabrication practices and helping fabricators work in line with current UK Health and Safety guidance.

This information is intended for fabricators, installers and distributors of engineered stone, including business owners, managers and supervisors.

Our engineered quartz surfaces are designed for interior applications, including kitchen worktops, bathrooms, wall cladding, staircases and other surfaces.



Silica Dust Awareness

Engineered stone is widely used for kitchen worktops and other interior surfaces and may contain up to 90% crystalline silica. Wherever reasonably practicable, businesses should work with materials containing the lowest available silica content.

Fabrication activities such as cutting, drilling, grinding and polishing can generate high levels of fine dust containing respirable crystalline silica, commonly referred to as RCS.

If this dust is inhaled, particularly over a prolonged or repeated period, it can cause serious and potentially life-changing respiratory diseases, including:

- Silicosis
- Chronic obstructive pulmonary disease, also known as COPD
- Lung cancer
- Reduced lung function
- Other serious respiratory conditions

Although the damage caused by these diseases may be irreversible, exposure and illness are preventable when the correct control measures are properly implemented and maintained.



Control the Risk

Businesses must assess and control exposure to silica dust in accordance with the Control of Substances Hazardous to Health Regulations, known as COSHH.

The essential controls for protecting workers include:

- *Using on-tool water suppression*
- *Controlling the mist and slurry generated*
- *Using suitable powered air-purifying respirators, known as PAPR*
- *Providing effective local exhaust ventilation, known as LEV*
- *Organising work areas and limiting access*
- *Maintaining good housekeeping and cleaning procedures*
- *Providing suitable protective clothing and equipment*
- *Arranging regular health surveillance*

No single control measure should be relied upon on its own. Controls should be used together as part of a properly planned system of work.

On-Tool Water Suppression

Engineered stone must not be cut, drilled, ground or polished dry.

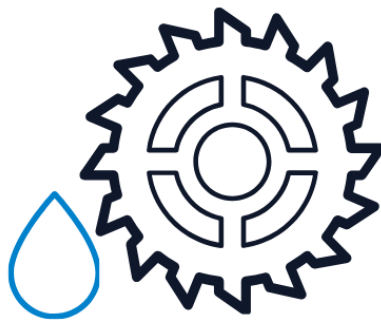
Using water at the point where the tool contacts the stone helps suppress dust before it becomes airborne. Mains-fed water is preferable wherever reasonably practicable.

Where recirculated water is used, additional monitoring, cleaning and maintenance will be required to ensure that bacteria and silica levels remain properly controlled.

Water-suppression systems should be:

- *Checked before work begins*
- *Positioned correctly at the point where dust is generated*
- *Supplied with an adequate and continuous flow of water*
- *Properly cleaned and maintained*
- *Repaired or replaced where damage or poor performance is identified*

Water suppression reduces dust but does not remove the need for ventilation, respiratory protection and other controls.



Controlling Mist and Slurry

The mist and slurry produced when working with engineered stone may contain crystalline silica and must also be controlled.

Mechanical ventilation should be provided to prevent the accumulation of contaminated mist in the workplace. The ventilation system must be suitable for extracting wet mist and should discharge contaminated air safely outside the building.

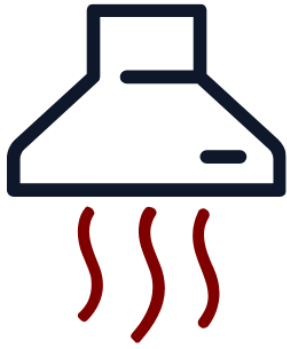
Work involving powered handheld tools should, wherever reasonably practicable, be carried out inside a partially enclosed and externally ventilated booth, such as a water-wall local exhaust ventilation booth.

Local exhaust ventilation systems should be:

- *Designed for the specific work being undertaken*
- *Positioned close to the source of the contamination*
- *Capable of extracting wet mist effectively*
- *Regularly cleaned and maintained*

- *Thoroughly examined and tested at the legally required intervals*
- *Used correctly whenever fabrication work is taking place*

Slurry must not be allowed to dry because dried slurry can create hazardous dust when disturbed.



Respiratory Protective Equipment

Powered air-purifying respirators are an effective form of respiratory protective equipment for engineered-stone fabrication work.

PAPR equipment may be more comfortable for workers to wear for extended periods and is generally more suitable for wet working environments. Depending on the type of hood or face covering used, face-fit testing may not always be required, which can make some systems suitable for workers with facial hair.

Respiratory protective equipment must be:

- *Suitable for the worker and the specific task*
- *Selected as part of the COSHH risk assessment*
- *Worn throughout the period of exposure*
- *Checked before every use*
- *Kept clean and in good working condition*
- *Stored in a clean and uncontaminated location*
- *Maintained in accordance with the manufacturer's instructions*

Thorough maintenance, examination and testing should be carried out at least once every month, or more frequently where required by the manufacturer or the conditions of use.

Where tight-fitting respiratory protection is used, workers must be clean-shaven around the sealing area and must have passed an appropriate face-fit test.



Personal Protective Equipment

Anyone involved in the fabrication, handling or installation of engineered stone should be provided with suitable personal protective equipment.

Depending on the work being undertaken, this may include:

- *Respiratory protective equipment*
- *Eye and face protection*
- *Protective gloves*
- *Suitable safety footwear*
- *Protective coveralls*
- *Waterproof clothing where exposure to mist is likely*
- *Hearing protection where required*

Coveralls should be made from materials that do not easily retain dust. Synthetic materials are generally more suitable than cotton for contaminated working environments.

Workers should not wear their own outer clothing in fabrication or other contaminated areas.

Suitable arrangements must be provided for:

- ***Separating clean and contaminated clothing***
- ***Storing protective clothing and equipment***
- ***Cleaning or laundering reusable workwear***
- ***Replacing damaged or heavily contaminated items***
- ***Preventing workers from taking contaminated clothing home***



Work Area, Access and Training

The fabrication area should be organised to minimise the number of people who may be exposed to silica dust, mist or slurry.

Access to contaminated work areas should be limited to authorised workers who have received appropriate information, instruction and training.

Workers should understand:

- ***The health risks associated with silica exposure***
- ***Which activities may generate silica dust or mist***
- ***How to use water-suppression and ventilation systems***
- ***How to wear, check and maintain respiratory protection***
- ***How to clean equipment and working areas safely***
- ***How to report defective controls or equipment***
- ***The importance of health surveillance***

Safe handling and storage procedures should also be followed to reduce the risk of injury from moving, lifting or storing stone slabs.

Cleaning and Housekeeping

A planned cleaning and housekeeping programme must be maintained.

The following procedures should be followed:

- ***Do not eat, drink or smoke in contaminated work areas.***
- ***Clean work equipment and the immediate working area every day.***
- ***Clean other equipment and the general workroom at least once a week.***
- ***Do not use dry brushing to remove dust from floors, surfaces, clothing or machinery.***
- ***Do not use compressed air to remove dust from clothing, surfaces or machinery.***
- ***Remove dry dust using suitable industrial vacuum equipment, such as appropriately filtered or HEPA-filtered extraction equipment.***
- ***Use wet-cleaning methods wherever practicable.***
- ***Clear slurry regularly before it dries.***
- ***Collect and dispose of slurry and contaminated waste safely.***

- *Do not disturb dried dust, overspray or slurry deposits.*
- *Keep walkways, workstations and access routes clean and unobstructed.*

Household vacuum cleaners should not be used for collecting silica dust unless they have been specifically designed and approved for that purpose.



Equipment Inspection and Maintenance

Fabrication equipment, water-suppression systems, ventilation systems and respiratory protective equipment must be kept in effective working order.

Businesses should:

- *Plan regular preventative maintenance*
- *Check equipment for damage before work begins*
- *Stop work where essential control equipment is defective*
- *Arrange repairs before the equipment is used again*
- *Maintain written records of inspections, servicing and testing*
- *Follow the manufacturer's cleaning and maintenance instructions*

Workers should be encouraged to report defects, reduced water flow, poor extraction, damaged respirators or other problems immediately.

Welfare and Hygiene

Suitable welfare facilities must be available to help workers remove contamination safely.

These should include:

- *Warm running water*
- *Mild skin cleansers*
- *Suitable barrier or protective creams where appropriate*
- *Soft paper or fabric towels for drying hands*
- *Clean changing and storage facilities*
- *Separate areas for clean and contaminated clothing*
- *A clean area for eating and drinking away from fabrication work*

Workers should wash their hands and face thoroughly before eating, drinking, smoking or leaving the workplace.

Health Surveillance

Regular health surveillance is an essential requirement alongside effective engineering controls and protective equipment.

Workers who may be exposed to respirable crystalline silica should be placed under an appropriate health-surveillance programme where required by the COSHH assessment.

Health surveillance may help identify early signs of ill health and should be carried out by a competent occupational-health professional.

Records should be maintained securely and workers should be informed of the purpose of the checks and how their health information will be handled.

Health surveillance does not replace the need to prevent or adequately control exposure.

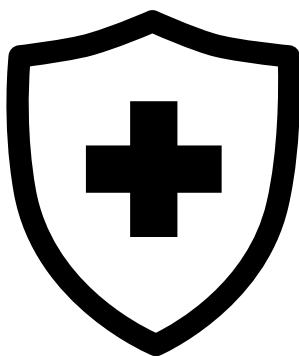
Management Responsibilities

Managers and supervisors should ensure that:

- *A suitable and sufficient COSHH risk assessment has been completed.*
- *Appropriate control measures have been installed and are being used.*
- *Workers receive adequate information, instruction and training.*
- *Exposure is prevented or reduced as far as reasonably practicable.*
- *Water suppression, ventilation and respiratory protection are maintained.*
- *Cleaning and waste-disposal procedures are followed.*
- *Access to contaminated areas is restricted.*
- *Health surveillance is provided where required.*

- ***Control measures are reviewed whenever working methods, equipment or materials change.***

Where possible, businesses should consider using engineered stone and other materials with a lower crystalline-silica content.



Industry Guidance

NobleStone strongly encourages all fabricators, installers, distributors and workshops to follow current Health and Safety Executive guidance, COSHH requirements and workplace-exposure controls.

Detailed practical guidance is available in the HSE publication:



**ENGINEERED
STONE**

<https://workright.campaign.gov.uk/engineered-stone>

This guidance should be read alongside the business's own risk assessments, equipment-manufacturer instructions and advice from competent health and safety professionals.

Remember: no engineered-stone fabrication work should be carried out dry. Effective water suppression, mist extraction, respiratory protection, cleaning, maintenance, training and health surveillance must all form part of the system used to protect workers.



DOWNLOAD ↓



Noble Stone — Quartz Health, Safety and Environment Information

[Click here to access PDF](#) - Please retain for your records