

GOOD PRACTICE GUIDE

FOR THE MANUFACTURE OF SILESTONE®
AND ECO BY COSENTINO®



RECYCLED SURFACES



THE ORIGINAL



COSENTINO®

HEALTH AND SAFETY

THIS GUIDE PROVIDES INFORMATION CONCERNING ASSISTANCE ON HEALTH AND SAFETY ISSUES TO BE CONSIDERED IN THE CUTTING, GRINDING, POLISHING AND IN GENERAL, IN THE MANUFACTURE OF SILESTONE.

SILESTONE® is a quartz composite.

Health and Safety standards are established by the appropriate legislative bodies corresponding legislation are to be satisfactorily met in the manufacturing process.

The guidance provided herein explains the protection and prevention measures to be observed in order to develop safe working procedures.

These instructions are addressed to employers and employees focused on SILESTONE® and ECO by COSENTINO® manufacture to help them control the exposure to respirable crystalline silica and similar risks.

This manual establishes the specific preventive measures to be observed for the correct treatment of our product.

Following the instructions in this guide will reduce risks associated with this activity.

This document should be available for companies specialised in this field so that they make the best use of the implemented control measures.

As well as this information, the Good Practice Guide for in handling Silica issued by NEPSI should be provided.

This does not however, exempt employers from meeting standards established in each country's regulations relating to risk assessment, measuring chemical contaminants and occupational exposure limits (OEL's).

Visit <http://www.nepsi.eu> for further information.

These instructions provide information and advice on:

- Water-injected hand machines and tools
- Local extraction and filtration systems.
- General ventilation in factories plants.
- Periodic maintenance and supervision
- Cleaning.
- Dust monitoring.
- Other risks: cuts, projected particles, noise, handling loads.
- Personal Protective Equipment.
- Training and information for workers.
- Health Surveillance.

RECOMMENDATIONS

GOOD PRACTICE GUIDE

ACCESS

Restrict access to work areas to the work area to authorised personnel only.

WATER-INJECTED HAND CUTTING MACHINES AND TOOLS

Use a reputable exhaust ventilation supplier. Only use qualified engineers to carry out the job.

The design should include the following items: a hood, an enclosure or other inlet to collect and contain contaminants, ducts to remove contaminants away from the source, a filter or any other air cleaning device, normally placed between the hood and fan, a fan or other device to move air to provide the air flow, and finally other ducts to discharge the clean air outside the workplace.

Apply local exhaust ventilation at the generation source to capture the dust.

Tightly close the dust source to help prevent it spreading.

LOCAL EXTRACTION AND FILTRATION SYSTEMS

Local exhaust ventilation should be connected to a suitable dust extraction unit (e.g. a bag filter or cyclone).

Workers are not allowed to stand between the source of exposure and the local exhaust ventilation, otherwise, they will be directly in the path of the contaminated air flow.

Where possible, ensure that the work area is not close to doors, windows or walkways so as not to interfere with the local exhaust ventilation and to prevent dust from spreading.

Ensure that there is a clean air supply to replace the extracted air.

The ducts should be short and simple, avoid long sections of flexible ducts.

Discharge extracted air to a safe place away from doors, windows and air inlets.





GENERAL VENTILATION IN FACTORIES

Ensure that the building is properly ventilated, if necessary using forced ventilation. Ensure the ventilation system does not move settled dust and that contaminated air does not spread to clean areas.

Dust suppression sprays (fine mist) may be used to prevent the generation of airborne dust throughout indoor and outdoor traffic routes or conveyors.

Emissions from dust extraction systems in buildings must comply with local environmental legislation.

Use walls and flooring surfaces that can easily be kept clean and that do not absorb or accumulate dust.

When necessary, to prevent dust from spreading between building levels, use solid floors where possible and cover them with a wear-resistant material, coloured to highlight dust contamination.

Control panels can be protected by using a membrane.

When using wet cleaning methods, provide an adequate number of correctly positioned water connection points.

Provide an adequate number of vacuum connection points when using a central vacuum cleaning system.

RECOMMENDATIONS

GOOD PRACTICE GUIDE

PERIODIC MAINTENANCE AND SUPERVISION

Ensure equipment is maintained in good working order and conditions as advised by the supplier's recommendations.

Clean the equipment on a regular basis.

Do not clean with a dry brush or using compressed air.

Do not allow dust/waste deposits to dry out before they are cleaned up.

Ensure the local exhaust ventilation is maintained in good working order and conditions in accordance with the supplier's or the installer's recommendations.

Noisy or vibrating fans can indicate a problem.

Replace consumables (filters, etc) in accordance with the manufacturer's recommendations.

Do not modify any part of the system. If you do so, check with the supplier to ensure that the system retains the CE mark.

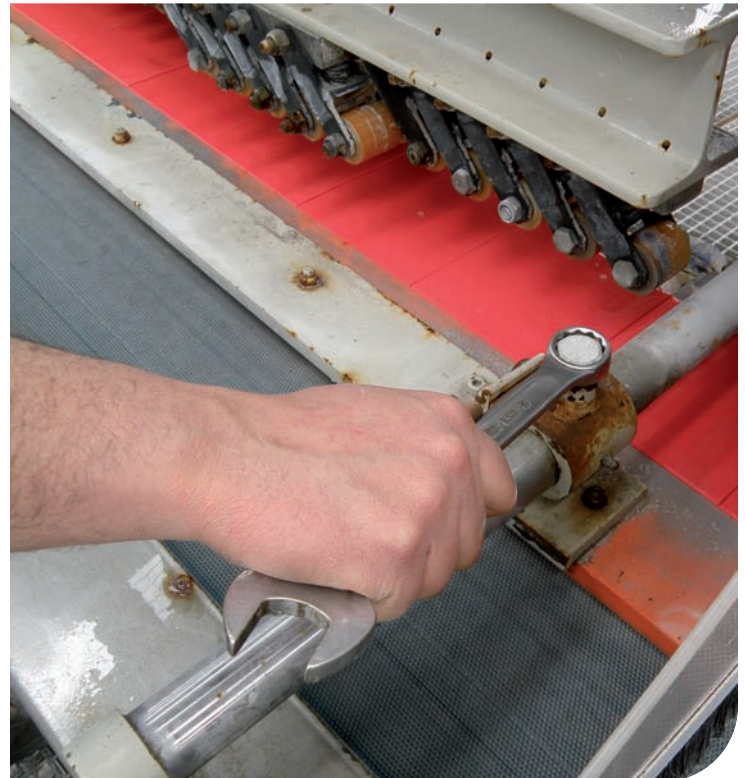
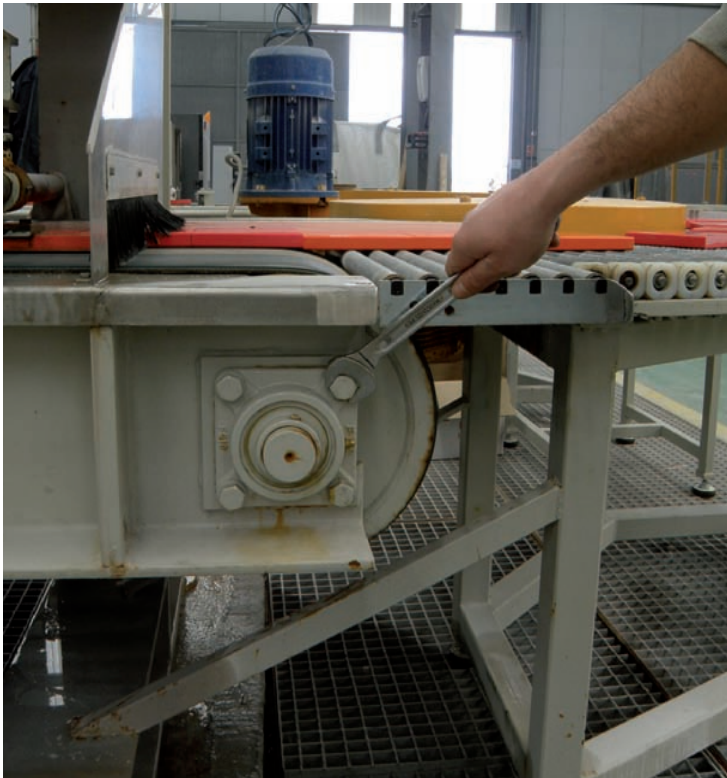
You must receive instructions for use and a diagram of the installed systems. You must receive a commissioning report showing the airflows at all inlets, the air speed in the ducts and the pressure index in the cleaner or filter.

Please contact the supplier for information on the expected performance of the local exhaust ventilation.

Keep this information to compare with future test results.

At least once a week, visually inspect the equipment for signs of damage. If they are constantly used, check them more frequently. If used rarely, check before each use.

Keep records of inspections for the period of time required by the country's laws (minimum five years).





CLEANING

Clean the equipment on a regular basis.

Clean the workplace daily.

Clean floors and other surfaces on a regular basis.

Use wet or vacuum cleaning methods.

Clean up any spillages immediately.

As a general rule, vacuum cleaning systems are not suitable for cleaning up spillages or wet materials.

Do not clean with a dry brush or using compressed air.

Do not allow dust / debris deposits to dry out before they are cleaned up.

If vacuum cleaning systems are required for spillages of large volumes of dust, they should be specially designed to avoid overloading and blocking.

When it is not possible to use wet or vacuum cleaning methods, and only dry cleaning with brushes can be carried out, ensure that workers wear appropriate personal protective equipment and that measures are taken to prevent crystalline silica dust from spreading outside the work area.

DUST MONITORING

Risk assessment must be carried out to determine whether existing controls are adequate.

Both personal and static measurements can be used together, as they are complementary. It is up to the experts designated by employers and employees' representatives to opt for the most appropriate solutions, while respecting the applicable legislation.

The sampling strategy, equipment used, analysis methods etc, must be defined by Industrial Hygiene specialists.

Keep complete records of dust monitoring campaigns and adopt a quality system as described above.

The personnel in charge of the samplings must set a good example and wear respiratory protection equipment in the required areas.

RECOMMENDATIONS

GOOD PRACTICE GUIDE

OTHER RISKS: CUTS, PROJECTED PARTICLES, NOISE, HANDLING LOADS.

The manufacture of SILESTONE® and depending on the specific characteristics of the production system, may involve some risk such as; blows and cuts with objects and tools, projected particles, noise exposure, vibrations and handling loads.

Review the risk assessment results carried out by Health and Safety experts.

Use the appropriate tools for each task and keep them in good working order.

Use the personal protective equipment required at all times: gloves, eye and ear protection.

Use mechanical means to transport heavy parts or materials.

As far as possible avoid handling or transporting weights over 20 kg or in awkward positions, also try to avoid repetitive movements.

INSTALLATION OF SILESTONE® WORKTOPS

The worktop should be finished when it leaves the workshop so that no further work will be carried out in-situ.

If the worktop requires a final check in the construction site, we recommend you to find a well-ventilated place (terrace, balcony, etc). and use a wet cleaning method if possible. For this task, FFP3 type Silica respiratory protection and ear and eye protection must be used for particles. If the final check is carried out by using a dry cleaning method, safety measures are the same. We also recommend the use of a portable vacuum system (vacuum cleaner).

Use instruments such as manual suction pads when handling the parts.

When fixing joints, trims, sockets etc using products such as Solumastik, Colorsil, dissolvents, etc. latex gloves must be worn, and FFP3 protection containing organic vapour filters.

To complete the installation, all dust must be cleaned up in order not to create, as far as possible, dusty environments, also the worktop must be cleaned.





PERSONAL PROTECTIVE EQUIPMENT (PPE)

In those areas or workplaces where risks still exist the use of personal protective equipment is mandatory and they must be clearly defined by appropriate signs.

Personal protective equipment must comply with relevant EC legislation on the design and manufacture in relation to health and safety. All the personal protective equipment that the company provides must bear the CE mark.

Respiratory protection for silica must have FFP3 classification. Note that facial hair reduces the effectiveness of a mask. Operators with facial hair should be provided with respirators or other suitable alternatives.

When using PPE, provide employees with training on selection, use and maintenance of the equipment.

If employees have to wear more than one PPE item, ensure that they are compatible with each other.

Check the effectiveness of respiratory protective equipment before use. Consult the supplier about the appropriate adaptation methods.

Keep records of PPE provided.

Provide clean storage facilities for PPE when not in use.

HYGIENE

Provide storage facilities for workers' clothes. Clean clothes must be separated from work clothes.

This area should have toilets, wash basins and showers as well as personal lockers.

Workers should wash their hands and faces and take overalls off before eating.

Define a specific and clean area where workers can prepare meals, eat and drink away from their workstation.

Provide workers with an adequate supply of clean work clothes, including additional outfits. Workers who handle silica dust should wear overalls made of a fabric that prevents the absorption of dust.

Do not use compressed air to clean overalls. Workers should not smoke at their workplace.

TRAINING AND HEALTH

GOOD PRACTICE GUIDE

TRAINING AND INFORMATION FOR EMPLOYEES

Staff must receive training on risks associated with the manufacture of SILESTONE®.

New employees should attend a training session that addresses all health and safety aspects, including the company's safe working procedures for dealing with hazardous substances such as respirable crystalline silica.

Use a variety of training methods incorporating visual aids, videos, group discussions and handouts.

Workers' knowledge should be assessed at the end of each session to verify that they have understood the training material.

Refresher training sessions should be organised to keep workers up to date on health and safety aspects.

Give your workers information on the health and safety effects associated with respirable crystalline silica dust, noise or any other risk associated with their activity.

Give them information on:

- Good practices to use in the workplace and safe working procedures.
When and how to use respiratory protective equipment (RPE) or other personal protective equipment (PPE).
- Dust monitoring programs and other planned corrective measures.
- Safety data sheets for the used products.
- Work equipment, machinery and tools affecting their work.

In the event that an employee's measured personal exposure to respirable crystalline silica exceeds the relevant occupational exposure limit value, that employee must be provided with details of his/her personal exposure monitoring result.

Attendance at training sessions shall be compulsory. Participation must be well documented and records should be kept.

Workers should be asked to provide feedback on each training session, which might help in the organisation of future training sessions.



HEALTH SURVEILLANCE

The Occupational Health scheme should keep a record of which tasks are exposed to respirable crystalline silica.

Specific health surveillance protocols shall be implemented for those employees at risk.

- Spirometry.
- X ray.
- Periodicity
- High-resolution tomographies.

TECHNICAL ADVISING REPORT

Recommendations and proposals of this document provide only indications for implementing organizative & technical measures and personal habits. At no time they substitute the legal requirements of the country about Health & Safety aspects; risk evaluations, preventive measures, specific technical reports, training, information, internal rules and procedures, health care medicine, etc. ... that correspond to the Health & Safety department of the companies or their external H&S advisors.



THE ORIGINAL

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