

# **Good Practice Guide**

Steps to Avoid Health Hazards Related to Crystalline Silica Dust





Copyright© 2019 Caesarstone Ltd. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, without the prior written permission of the publisher. 3rd Edition, April 2019

# Contents

#### **GOOD PRACTICE GUIDE**

04	Part I. Introduction	
12	Part II. Health & Safety Guidelines	
14	1. Airborne Dust Monitoring	
16	2. Reducing Respirable Crystalline Silica	
16	2.1 Water-integrated Machinery & Tools	
18	2.2 Ventilation Systems	
20	2.3 Installation Safety	
22	3. Personal Protective Equipment	
23	3.1 General Personal Protective Equipment	
24	3.2 Respiratory Protective Equipment	
28	4. Cleaning, Maintenance & Hygiene	
28	4.1 Cleaning & Dust Disposal	
30	4.2 Equipment & Housekeeping	
32	4.3 Personnel Hygiene	
34	5. Other Procedures	
34	5.1 Training	
36	5.2 Medical Surveillance	
37	5.3 Written Exposure Control Plan	
38	Part III. Further Information	
<u>40</u>	Part IV. Disclamers	
42	Part V. Receipt Form	



# Part I

# Introduction

# We, at Caesarstone, view the existence of a safe and healthy working environment for all workers in the industry of fabricating stone slabs as a foremost interest. Caesarstone provides services of

the highest standards to fabricators who choose to work with us. Caesarstone is proud to present a new version of the Good Practice Guide, relating to occupational health and safety in a respirable crystalline silica dust (RCS) environment. This Guide is the result of our ongoing quest for new methods of providing you, the fabricators, with information in the most user friendly format, in order to promote improved safety in the industry.



This Guide includes current information about safety measures in an RCS environment as well as information that fabricators around the world have found to be relevant to their work.

The purpose of this Good Practice Guide is to assist you, the employer or owner of the fabrication plant, in creating a safe working environment for yourself and your employees.

### This Good Practice Guide includes the following topics:



We invite you to share this Guide with your employees and use it in your health and safety training. Please also see our videos and other safety information on the Caesarstone fabricators website: mos.caesarstoneus.com.

Following this guide will help you achieve your goal of ensuring that your employees return home safe and sound every day.

A safe working environment is advantageous both health-wise and financially; investing in this issue is beneficial from every point of view.

We at Caesarstone are always at your disposal and welcome any questions, comments or suggestions for improvement of this Guide and the topics raised in it.

### **About stone surfaces**

Various types of stone are used as countertops, vanity tops, flooring, wall cladding and other applications.

#### COMPONENTS

Caesarstone is manufactured from approximately 90% inorganic, rock-sourced material which is mainly crystalline silica (SiO<sub>2</sub>) such as quartz and cristobalite; and high-quality polymer resins and pigments.

#### USED WORLDWIDE

Caesarstone products are in use today in millions of homes and commercial settings globally, such as: Starbucks in the USA and Canada; McDonald's in Australia; Twinings Tea Development Laboratories; Assuta Hospital in Tel Aviv; and numerous restaurants around the world.

#### SAFE TO USE

Stone products such as Caesarstone are not hazardous when transported, shipped or used by the end consumer. They are completely safe for domestic and commercial use. However, fabrication processes create RCS, which is hazardous to the health of fabrication workers and of any others who are continuously exposed to it, when safety guidelines are not followed. Therefore, fabrication of stone slabs, and of engineered stone slabs, which contain around 90% crystalline silica, must be performed under carefully controlled safety conditions. Fabrication processes may include cutting, grinding, chipping, sanding, drilling, polishing, installing, dismantling and others.

# For more information about Caesarstone components and their associated risks please refer to the Caesarstone SDS.



### What is crystalline silica?

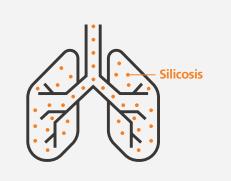
Crystalline silica commonly occurs in nature as the mineral quartz, and is found in granite, sandstone, quartzite, various other rocks, and sand. It is comprised of two chemical elements: silicon and oxygen (silicon dioxide; SiO<sub>2</sub>). It is a component of many manufactured products in daily use, such as glass, pottery and quartz surfaces; and of construction materials such as bricks, blocks, tiles, slabs, cement, ceramic and concrete.



### Hazards of respirable crystalline silica

RCS particles are tiny enough to enter the lungs. This can cause irreparable damage and can result in silicosis. Unprotected workers are at risk for:

- SILICOSIS
- LUNG CANCER
- CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)
- **KIDNEY DISEASE**
- AUTO-IMMUNE DISEASES SUCH AS RHEUMATOID ARTHRITIS (according to certain schools of thought)



### What is silicosis?

Silicosis is an occupational disease that has been known about for more than a century. It may affect workers in the stone fabrication and the construction industries, among others.

Silicosis is an incurable, progressively disabling and sometimes fatal lung disease. It is caused by ongoing, occupational exposure to RCS of less than 10 microns. RCS particles become trapped in lung tissue, causing inflammation and scarring and reducing the lungs' ability to take in oxygen. Symptoms of silicosis can include progressive shortness of breath, cough and fatigue.

Silicosis can result from exposure to RCS over many years, but very high short-term exposures can cause it to develop rapidly. It has three clinical forms: chronic, accelerated and acute. These forms are largely dependent on intensity of exposure and total cumulative exposure.



Silicosis and other diseases associated with RCS are 100% preventable with the correct safety measures in place. This Good Practice Guide brings you information about such safety measures.

# Responsibility of fabrication plant owners (employers)

#### **EMPLOYERS IN PLANTS WHERE CAESARSTONE IS FABRICATED SHOULD:**

- be familiar with all the health and safety regulations and standards related to their work and fully comply with them
- periodically assess the health and safety risks related to their business and take the appropriate safety measures
- educate their employees regarding the risks and the safety measures related, among others, to RCS, including by using this Good Practice Guide and all other safety-related information produced by Caesarstone or required by local law
- ensure that their workers always use appropriate Personal Protective Equipment (PPE) in order to protect themselves from the dangers of exposure to RCS
- ensure that levels of RCS are minimized as far as is reasonably practicable, and in any event to below the statutory limit



# Responsibility of distributors & stone suppliers

#### **CAESARSTONE DISTRIBUTORS AND STONE SUPPLIERS ARE REQUIRED TO:**

- provide information to their customers about the safety measures required for protection against the dangers of working with RCS, including this Good Practice Guide and all other safety-related information produced by Caesarstone or required by local law
- include occupational health and safety warnings and information about means of protection in all invoices and shipping documents
- comply with all the applicable laws and regulations regarding importing, selling and distributing slabs containing RCS in the countries where they operate
- follow Caesarstone's instructions regarding protection against the dangers of working with RCS



# Part II

# Health & Safety Guidelines

### Permissible Exposure Limit, Action Level & Threshold Limit Values

The Permissible Exposure Limit (PEL)\* is a safety limit set by each state/geographic region above which exposure to RCS is **LEGALLY FORBIDDEN**.

The Action Level (AL) is typically half the value of the PEL and is the airborne level of RCS that initiates certain required activities such as RCS monitoring and medical surveillance.

Threshold Limit Values (TLVs®) are recommendations made by the American Conference of Governmental Industrial Hygienists (ACGIH®), a scientific organization that advances occupational and environmental health. According to ACGIH® exposure at or below the level of the TLV® does not create an unreasonable risk of disease or injury, assuming a daily 8-hour time-weighted average working day over a working lifetime. The ACGIH® TLV® for RCS is 0.025 mg/m<sup>3</sup>.

PELs for RCS are being reviewed and revised worldwide. On March 25, 2016, the USA Occupational Safety and Health Administration (OSHA) changed the PEL for RCS in the USA to 0.05 mg/m<sup>3</sup> with an AL of 0.025 mg/m<sup>3</sup>.

You should consult with occupational health and safety experts regarding minimizing the exposure level in your workplace.

\*PEL is sometimes referred to as the Workplace Exposure Standard (WES) or Workplace Exposure Limit (WEL).





# 1. Airborne Dust Monitoring

Employers should determine the amount of RCS to which workers are exposed if it is, or is likely to be, at or above the Action Level, averaged over an 8-hour day.

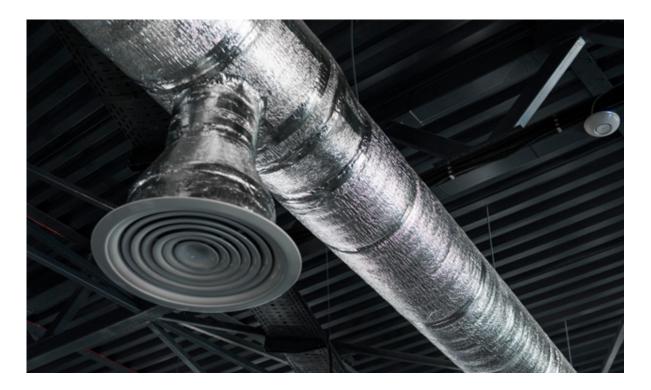
The method of assessing the level of RCS in the workplace is by air sampling and analysis.

#### AIR SAMPLING

Work with occupational health and safety experts to establish air sampling strategies and to perform exposure assessments of RCS. Air sampling and analysis should be conducted in accordance with well-established sampling and analytical methodologies and at least according to the frequency required by your local regulations.

In order to ensure the safety of the entire working site, it is recommended also to monitor locations other than fabrication areas that are exposed to RCS, such as offices and storage areas.

Communicate the results to employees - their involvement is likely to encourage compliance with safety procedures.



#### HAZARDOUS DUST SIGNS

Areas with hazardous dust must be clearly marked with appropriate signage:

DANGER! RESPIRABLE CRYSTALLINE SILICA MAY CAUSE SEVERE HEALTH DAMAGES. WEAR RESPIRATORY PROTECTION IN THIS AREA AND FOLLOW SAFETY INSTRUCTIONS. AUTHORIZED PERSONNEL ONLY



#### **RECORD KEEPING**

Keep complete records of all RCS sampling – in the future you may be required to show the steps you have taken to ensure that your workplace is safe.





### 2.1 Water-integrated Machinery & Tools

Dry cutting, grinding or polishing quartz surfaces generates very high RCS levels. Properly designed water-integrated tools and machinery significantly reduce the level of RCS and should therefore be used for all cutting, grinding and shaping.

It is important to note that water-integrated rotating tools generate RCS-contaminated water mist, which may be dispersed and inhaled. For this reason, RPE may be necessary even when using water-integrated tools.

#### **CNC MACHINES**

CNC machines such as waterjet cutters and automated sawing machines are faster, safer and more accurate than manual saws. The safety doors that prevent dust dispersal and distance the operator from the dust source must always be used.



#### MANUAL SAWS

Manual saws are less accurate and slower than CNCs. Despite the application of water, worker exposure to RCS is generally higher than with computerized systems (CNCs) as they do not have safety doors and the operator must stand closer to the dust source to operate the machinery.

#### MANUAL TOOLS

When working with manual tools, the operator's breathing zone is very close to the dust source, where high levels of RCS are generated. It is therefore extremely important to implement the following safety procedures:

- Always use water-integrated manual tools. If it is not possible to use water-integrated tools at the installation site, follow the instructions in Section 2.3, Installation Safety.
- Prevent dispersal of RCS-contaminated water mist from water-integrated tools by using guards, plastic flaps or brush guards.
- Set the air and water pressure to achieve the optimal amount of water on the slab to prevent dispersal of dry RCS or RCS-contaminated water mist.
- Use a half face respirator when working with manual tools.

### **2.2 Ventilation Systems**

Proper ventilation is key to providing a safe and healthy workspace for yourself and your employees.



#### GENERAL WORKSPACE VENTILATION

General workspace ventilation systems introduce fresh air and dilute contaminants in the workplace.

Ventilation systems should provide at least six exchanges of air per hour.

Extracted air should be released at a safe distance from doors and windows according to your local regulations and standards.

In order to avoid contamination of outside areas and optimize the effects of ventilation in your workplace, consult with experts to determine the best locations for workstations.

#### LOCAL EXHAUST VENTILATION

Local Exhaust Ventilation (LEV) is an engineering system that captures RCS at the source and transports it away from the worker's breathing zone. This prevents workers from inhaling RCS and reduces contamination of the general workplace air.

LEV is connected to a dust extraction unit such as a bag filter/cyclone.

LEV should be installed and operated at all work stations.

Workers should not stand between the dust source and the LEV in order to avoid exposure to the flow of RCS as it is being extracted.

#### MANUAL TOOLS DUST COLLECTION

In rare cases when the use of dry manual tools is unavoidable, use a dedicated dust collection attachment connected to the manual tool and a high-efficiency particulate air (HEPA) vacuum. This is particularly important as the operator's breathing zone is very close to the dust source.

#### **STANDING FANS**

Do not use standing fans as they may disperse settled or airborne dust to clean areas or outside the work area.

#### ISOLATING WORKERS FROM DUST-GENERATING PROCESSES

Workers should keep a distance from the work process whenever possible in order to reduce exposure to RCS.

Distance should be maintained between workers using powered hand tools and other workers at the workplace in order to prevent exposure to RCS created by other workers.

Provide physical barriers between different workers and workstations in order to prevent RCScontaminated water mist moving into other work areas or towards other workers.

Ensure that settled RCS cannot be dispersed to clean areas or outside the work area.

For recommended cleaning methods of settled RCS dust see Section 4.1, Cleaning & Dust Disposal.

#### PROFESSIONAL SUPPLIERS

Work only with professional ventilation suppliers who employ qualified engineers for project execution.

#### A combination of water-integrated tools and ventilation is more effective at reducing RCS than either of these methods on its own.

### 2.3 Installation Safety

Safety rules must be followed, and PPE used when installing surfaces in order to protect both the installer and anyone else in the area.

#### **FABRICATE IN THE PLANT**

If no cutting, grinding, sanding or polishing of the countertop is performed during installation, no RCS should be released. Therefore, as far as possible, perform all fabrication work in the plant in order to avoid creation of RCS at the installation site. If significant dust-producing modifications are required upon installation, it is recommended to return the slabs to the plant to perform these processes.

#### **BEFORE INSTALLATION**

To prevent excessive dispersion of RCS at the installation site, before performing any dust-producing work the local heating/air-conditioning system should be shut down and sealed off; and surfaces should be covered with protective plastic sheets.

#### **DURING INSTALLATION**

If dust-producing modifications at the installation site are unavoidable, use water-integrated cutting or grinding tools and an integrated dust collector with a HEPA filter. Wherever possible, perform such work outdoors. As in every place where professional, technical work is carried out, no person other than the professional installer should be present near the working area during the performance of this work.

#### AFTER INSTALLATION

After completing an installation, thoroughly clean the work surface and remove all dust using wet methods and a HEPA filtered vacuum cleaner. Remove dust in sealed sacks according to local regulations.





When performing modifications at the installation site, use a half face respirator.

# **3. Personal Protective** Equipment (PPE)

PPE should be used to protect workers in all parts of the fabrication plant, installation sites and related work areas. PPE includes general Personal Protective Equipment and Respiratory Protective Equipment (RPE). All PPE provided to workers must meet regulatory and industry standards.

#### MANDATORY USE

Employers must provide their workers with PPE in workplaces where health and safety hazards exist and ensure that they use it as required. Access to hazardous work areas should be restricted to authorized workers who are equipped with the necessary PPE. These areas should be clearly marked with appropriate signage to ensure that workers are aware of the hazards.

#### **EQUIPMENT COMPLIANCE & MAINTENANCE**

PPE should be used, checked, cleaned, maintained and stored according to the manufacturer's instructions and regulation requirements.

#### TRAINING

Employees and outsourced workers should receive training on the fitting, selection, adaptation, use and maintenance of all PPE.

#### RECORD KEEPING

Keep records of all items of PPE used, of PPE training and of PPE maintenance checks - in the future you may need to demonstrate that you have complied with safety requirements.



### **3.1 General Personal Protective Equipment**



#### The following equipment should be worn in the fabrication plant and at installation sites.

- Hair covering to contain long hair
- Safety helmet when handling and transporting
- Nonslip, steel-capped safety shoes
- Dust mask
- Safety glasses or other approved eye protection
- Earplugs when working in noisy areas
- Gloves for protection against chemicals or rough material
- In wet areas, aprons and steel-capped rubber boots in addition to the above

# **3.2 Respiratory Protective Equipment (RPE)**

In hazardous areas with RCS, RPE should be used to increase worker protection from RCS.

There are various types of RPE available for different materials and levels of exposure. An occupational health and safety professional should determine the appropriate RPE based on the RCS concentrations in your workplace and other professional considerations.

Please be aware that the use of RPE does not exempt the employer from keeping the level of RCS as low as is reasonably practicable and in any event to below the required PEL by using water-integrated tools, LEV and other engineering controls.

Create and enforce policies for all workers to wear RPE in areas where hazardous dust exposure may occur.







Disposable mask

Half face respirator

#### TYPES OF RPE

Three types of RPE are most common: Powered Air Purifying Respirators (PAPR), half face respirators and disposable dust masks. PAPR and half face dust masks provide higher protection than disposable dust masks. The RPE manufacturer's instructions generally specify for what level of RCS the mask is appropriate; how to fit the mask; and the permitted duration of use. In the absence of these instructions you should consult with an expert.

Below are several rules of thumb for when to use each type of RPE. However, you should still use them according to the manufacturer's instructions, local regulations and after consultation with a health and safety expert, all of which should take precedence over the rules of thumb if there is any contradiction.

#### WHEN TO USE A HALF FACE RESPIRATOR:

- When fabricating with wet manual tools in the fabrication plant
- When standing close to locations where RCS is created
- At the installation site if performing dust-producing modifications

#### WHEN TO USE A DISPOSABLE MASK:

#### Only in locations far from where RCS is created (workers and visitors), e.g.:

- When washing the floor and machinery with running water
- Near CNC machines that are water-connected to exhaust ventilation systems

#### WHEN TO USE PAPR:

- If exposure levels are unknown
- If the RCS level is extreme
- If the fabricator has facial hair

#### Ensure that your RPE complies with your local regulations.



#### **REPLACING DISPOSABLE DUST MASKS**

Masks marked with the letters NR (not reusable) are intended for single shift use.

Masks marked with the letter R (reusable) are intended for more than single shift use, according to the manufacturer's instructions.

Ensure that your disposable dust mask contains documentation that it conforms to standard EN 149:2001.

#### **REPLACING FILTERS IN HALF FACE RESPIRATORS**

Usually every 6 months - but always follow the manufacturer's instructions.

#### FILTER SPECIFICATIONS

RPE filters are classified as P1, P2 and P3; or N95, N99 and N100 in order of increasing filtration efficiency:

FILTER	PROTECTION FROM AIRBORNE PARTICLES
P1	80%
Р2	94%
РЗ	99.95%
N95	95%
N99	99%
N100	99.97%

# When using disposable masks use P3 or N95 filters; when using half face respirators use P3 or N95 filters or higher (N99, N100).

#### FITTING

Half face respirators should be fit tested on each worker before first use, and checked each time they are worn to ensure that they create a good seal and provide the required protection.

As facial hair can lessen the effectiveness of the seal, workers with facial hair should work with Powered Air Purifying Respirators (PAPR) or other suitable alternatives.

#### MEDICAL EVALUATION

Workers should be medically evaluated to determine if they are able to wear RPE. You should consult with an occupational health and safety professional to determine the local requirements for this evaluation.

#### STORAGE

It is particularly important to store RPE according to the manufacturer's instructions. If RPE is left lying around in dirty areas, there is an increased risk of exposure to RCS on the inside of the facepiece, and parts deteriorating from exposure to dirt, solvents, vapors, oil and sunlight.





### 4.1 Cleaning & Dust Disposal

Correct cleaning methods reduce the spread of RCS and contribute to a safer working environment.

#### **REGULAR CLEANING**

Create a regular, recurring schedule for cleaning all equipment and systems at least daily. Check that the work area is clean at the end of each shift.

#### **CLEANING METHODS**

Recommended methods of cleaning floors, walls and other surfaces with RCS are: low pressure wet hosing, wet sweeping and HEPA vacuum systems.

Low pressure wet hosing or wet sweeping should be used to prevent settled dust from spreading.

Dry sludge should be cleaned by HEPA vacuum cleaning systems only.

# Under no circumstances should dust be swept up with a dry broom or removed using compressed air.

#### CLEAN IMMEDIATELY

Clean wet or dry sludge immediately; never wait for the end of day cleanup. Prevent water pooling and drying on surfaces leaving dry dust deposits. Wet dust that is allowed to dry out can easily become airborne and inhaled.

#### VACUUM CONNECTION POINTS

Provide ample vacuum connection points for a central vacuum cleaning system. This will enable the system to reach all parts of the plant and encourage workers to use this system for dry spillage.

#### WATER CONNECTION POINTS

Provide ample water connection points for wet cleaning techniques in order to make wet hosing accessible in all relevant areas of the plant.

#### WALLS AND FLOORING

Select wall tiles and flooring surfaces that are hermetically sealed and easy to clean.

#### DRAINAGE SYSTEMS

Clean and maintain all drainage systems to ensure effective disposal of contaminated water and prevent blockages.

#### DISPOSAL OF DUST AND SLUDGE

Wet sludge must be kept inside a sealed container for disposal so that it does not dry out and become airborne.

Some states may have specific requirements for disposing of construction waste, including dust containing silica. Contact your state's Department of Environmental Protection or your regional office of the Federal Environmental Protection Agency (EPA) for more information.



## 4.2 Equipment & Housekeeping

Proper maintenance, housekeeping and recording is essential to proper implementation of the health and safety guidelines.

#### MAINTENANCE OF SYSTEMS & TOOLS

### All ventilation, exhaust and other systems should be designed, installed and maintained in consultation with licensed professionals to ensure safety and effectiveness.

All systems and tools should be kept in good working order and inspected and maintained regularly according to the manufacturer's instructions, or at least once a week if no instructions exist.

Do not make changes to any working system or tools without the manufacturer's approval.

Keep user instructions and diagrams in an accessible and safe place for reference.

Keep records of all checks and maintenance for the period of time required by your local regulations; you may be required to present these to demonstrate compliance.

#### WATER SYSTEMS

Take precautions to prevent freezing in cold weather.

#### ELECTRICAL SYSTEMS

All electrical systems should be designed for ultimate safety in wet environments to prevent electric shocks.





### 4.3 Personnel Hygiene

Personnel hygiene is another important factor in health protection as it reduces the worker's contact with RCS.



#### **PROVIDE FACILITIES**

Provide bathroom facilities in the plant with toilets, showers, sinks and individual lockers for storing fresh changes of clothing. Make two changing rooms available to all plant workers: one in which they change from home clothes into clean work clothes and store their home clothes during working hours; and another in which they change out of work clothes at the end of a working day before showering and changing back into home clothes.

#### DESIGNATED WORK CLOTHES

Workers should wear only designated work clothes, including footwear and socks. Workers should leave their work clothes and shoes in the workplace and never remove them from the plant. Employers should provide explanations on the importance of separating work clothes from clean clothes.



#### LAUNDER CLOTHES

Employers should launder all employees' working clothes and provide them with clean working clothes each day.

#### **DO NOT CLEAN CLOTHES WITH COMPRESSED AIR**

Do not clean work clothes with compressed air as this may disperse dust.

#### EAT AND DRINK IN DESIGNATED AREAS

Provide workers with a separate room or area away from the fabrication area for food preparation and eating. This makes for a more pleasant as well as a safer eating environment. Permit eating, drinking and smoking only in designated areas that are not exposed to RCS. Workers should wash their hands and face, and change clothes before eating, drinking or smoking.

Smoking is hazardous to health and may increase health damage from RCS. Encourage your employees to stop smoking.



# **5. Other Procedures**



## 5.1 Training

Provide ongoing training to all workers at all levels, including outsourced workers, on safety issues that are specific to their workplace. The more workers are involved in and aware of the health and safety guidelines, the more likely they are to comply with them. Training should be conducted in the worker's mother tongue if possible.

#### **PROVIDE INFORMATION**

In the training sessions you should provide clear information about:

- health and safety guidelines for your workplace and installation sites, including the specific measures that have been employed to protect workers from exposure to RCS, such as engineering controls, safe work procedures, PPE and RPE
- your local PEL and AL requirements
- your workplace monitoring results

#### FREQUENCY

Health and safety training should be performed on a regular basis, at least annually. Health and safety guidelines and regulatory requirements can vary over time and it is important to ensure that your workers are aware of any changes in regulations.

#### **COMPULSORY TRAINING ATTENDANCE**

Attendance at training sessions should be compulsory. Ensure that new workers receive training before commencing any work.

#### RECORD KEEPING

Keep records of workers' attendance at training sessions, the dates of those training sessions, and the training material provided to workers. This will help you plan future training sessions and provide you with a record if you need to demonstrate in the future that you fulfilled your obligations to protect your employees.

#### EMPLOYEE FEEDBACK

Encourage employee feedback in order to improve future training sessions. Assess workers' knowledge in order to verify that they understand the training material.



## **5.2 Medical Surveillance**

Medical surveillance is required for workers in this industry because there can be a significant risk to workers' health if exposure to RCS is not controlled.

All workers must be provided with information about the purpose of medical surveillance.

Individuals with lung illnesses or lung disability should not work in an environment with potential exposure to RCS. Other illnesses may also prevent individuals from working in an environment with potential exposure to RCS. Employers should follow occupational health physicians' instructions regarding such individuals.

#### MEDICAL SURVEILLANCE PROGRAM

Implement medical surveillance corresponding to your local regulations for workers who are exposed to RCS. Consult with an occupational health and safety professional to establish your specific requirements.

Medical surveillance may include a physical examination, along with a medical and work history review, a chest x-ray, a pulmonary function test, and other tests that may be deemed medically necessary.

#### FREQUENCY

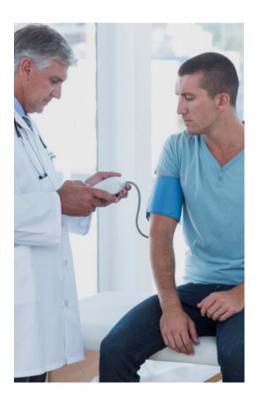
Medical surveillance should be performed:

- before a worker starts work to establish a baseline from which changes can be detected
- periodically according to your local regulations and in consultation with the doctor
- when the worker leaves your employment

#### MAINTAIN RECORDS

Maintain workers' medical surveillance records in accordance with applicable laws and local regulations; in the future you may be required to show that you have complied with regulatory requirements.

Workers' rights to privacy must be upheld in all matters relating to confidential medical information, according to your local regulations.



## 5.3 Written Exposure Control Plan



Some states require that employers who operate a working environment with exposure to RCS develop and implement a Written Exposure Control Plan.

A Written Exposure Control Plan describes workplace exposures and ways to reduce those exposures, such as engineering controls, work practices, housekeeping methods, and restricting access to areas where high exposures occur.

We recommend that you consult with occupational safety and health professionals or other appropriate experts in order to correctly implement all aspects of such a plan.

## Part III

# Further Information

The links below are sources of information that will help you increase your knowledge about protection from the health risks of exposure to RCS. We hope you find them useful.

The USA Occupational Safety and Health Administration www.osha.gov

The International Labour Organization

The European Network for Silica (NEPSI) www.nepsi.eu/good-practice-guide

The National Institute for Occupational Safety and Health (NIOSH) www.cdc.gov/niosh

Safe Work NSW Video - Working Safely with Crystalline Silica https://www.safework.nsw.gov.au/hazards-a-z/hazardous-chemical/priority-chemicals/crystalline-silica

Health and Safety Executive – UK www.hse.gov.uk

Safe Work Australia www.safeworkaustralia.gov.au/silica

Caesarstone's Silica Dust Health Hazards and Protection Video mos.caesarstoneus.com/home-page/article-collection/good-practice-guide/

youtu.be/cq\_xtowzkII

## Part IV

# **Disclaimers**



This Good Practice Guide includes health and safety information and recommendations regarding RCS and is brought as a service to you by Caesarstone. Notwithstanding our efforts to bring you the most professional and updated information, the information in this Guide cannot not serve as or replace medical, health, safety, legal or any other professional advice.

Fabricators are fully responsible for the health and safety of their workers, including with respect to the safety risks related to RCS. Such responsibility includes the obligation to know the applicable safety regulations and standards and to fully comply with them.

It is important to note that the information provided in this Guide is only a general summary of the main recommended safety measures regarding RCS. This Guide does not replace and/or specify all safety measures applicable to your business and included in your local laws, regulations and standards, all of which you should know and strictly follow. You should not regard the information in this Guide as an interpretation of any applicable law, regulation or standard.

To protect the health and life of all workers exposed to respirable crystalline silica, it is always necessary to consult with a local occupational health and safety advisor about the precise safety measures you should implement in your working environment.

# Part V **Receipt Form**



Please complete your details and email this form to your local Caesarstone office at technical@caesarstoneus.com or post it to:

Caesarstone USA Inc. 1401 W. Morehead Charlotte, NC 28208 USA

### Receipt Form: Good Practice Guide - Steps to Avoid Health Hazards Related to Crystalline Silica Dust

Dear Sir/Madam,

I, the undersigned, hereby confirm that I have received from you the Caesarstone<sup>®</sup> *Good Practice Guide* - *Steps to Avoid Health Hazards Related to Crystalline Silica Dust* (the "Guide"), to which this Receipt Form is attached, and that I have read the Guide.

I understand the importance of the Guide, the hazards of working with crystalline silica (e.g., quartz, silica sand, cristobalite) and the measures of protection as described in the Guide. I commit to implementing all the safety measures.

I have also received the 2019 Caesarstone SDS. (Please mark if you have received it.)

Sincerely,

Signature:	Fabricator's company name:
Print name:	
Job title:	
Phone no:	Address:
Email:	
Date:	

