

GOOD PRACTICES FOR RESPIRATORY PROTECTIVE EQUIPMENT FOR THE SLAB INDUSTRY

This task guidance sheet provides good examples use of respiratory protective equipment (RPE) in a case by case approach in all parts of typical fabrication plants of slabs, installation sites and related work areas to increase worker protection from respirable crystalline silica.

ACCESS

Restrict access to the work area to authorised personnel only.

GENERAL

- Risk assessment must be carried out to determine whether existing controls are adequate. If necessary, respiratory protective equipment (with the appropriate protection factor) should be provided and worn.
- Choose the appropriate respiratory protective equipment according to the respirable crystalline silica level, in consultation with an occupational health and safety professional, and considerations in the “When to use” sections below.
- When it is necessary to use more than one item of PPE, make sure that these items are compatible with each other.
- Use respiratory protective equipment according to the supplier’s instructions.
- Keep records of use, training and maintenance.
- Use a properly fitting respirator (half face or disposable mask) that creates a tight seal.
- Perform a medical/occupational health assesment to ensure that fabricators are able to work with respiratory protective equipment.

Using respiratory protective equipment does not exempt the employer from controlling the level of respirable crystalline silica or from bringing it to below the required Occupational Exposure Limit.



GUIDANCE FOR EMPLOYERS ON CONTROLLING EXPOSURE TO RCS IN THE WORKPLACE



WHEN TO USE A HALF FACE RESPIRATOR

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



WHEN TO USE POWERED AIR PURIFYING RESPIRATORS (PAPR)

- If the fabricator has facial hair
- If the protection achieved with any other respiratory protective equipment is not sufficient
- If exposure levels are thought to be very high

In these cases, use a PAPR type TH3 equipped with a P3 filter. Always consult your personal protective equipment supplier in order to make sure that the protection factor is adequate.



WHEN TO USE A DISPOSABLE MASK

- Only in the case of short or occasional exposures to respirable crystalline silica (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
- 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 supplier's instructions.
- Ensure that your disposable dust mask contains documentation that it conforms to standard EN 149:2001.



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EXAMINATION AND TESTING

- For each work activity, make an assessment to determine how frequently respiratory protective equipment should be replaced in order to guarantee its effectiveness, as advised by the supplier.
- Visually check respiratory protective equipment daily for signs of damage. If used infrequently, check it before each use.
- Seek advice from the supplier on appropriate fit testing methods.
- Perform fit testing before first use to ensure that it creates a good seal and provides the required protection. This can be done using simple testing methods, e.g., a mist of sugar solution can be dispersed in the air to check if the operator tastes it. If so, there is evidence of leakage.
- Check effectiveness each time it is worn.
- Keep records of inspections for a suitable period of time which complies with national laws (minimum five years).

CLEANING AND HOUSEKEEPING

- Keep non-disposable items of respiratory protective equipment clean.
- Employers must provide clean storage facilities for respiratory protective equipment when not in use.
- Use wet cleaning methods.
- **Respiratory protective equipment should NOT be taken home.**
- **DO NOT clean up with a dry brush or using compressed air.**

MAINTENANCE

- Ensure equipment used in the task is maintained in efficient working order and in good repair as advised by the supplier.
- Replace respiratory protective equipment at intervals recommended by the supplier.

TRAINING

- Give your employees information on the health effects associated with respirable crystalline silica dust.
- Provide employees with training on: dust exposure prevention; checking controls are working and using them; when and how to use any respiratory protective equipment provided and what to do if something goes wrong. Refer to task guidance sheet **2.3.4** and part 1 of the Good Practice Guide.

SUPERVISION

- Have a system to check that control measures are in place and that they are being followed. Refer to task guidance sheet **2.3.3**.
- Employers should make sure that employees have all the means to perform the checklist given on the following page.

PERSONAL PROTECTIVE EQUIPMENT

- Refer to task guidance sheet **2.1.15** dedicated to personal protective equipment.
- Respiratory protective equipment should be selected that is compatible with other items of personal protective equipment, e.g., ear protection, goggles, welding visors.

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EMPLOYEE CHECKLIST

- Look for signs of damage, wear or poor operation of any equipment used. If you find any problems, tell your supervisor.
- Make sure to use the right respiratory protective equipment for each task.
- Even if you do not normally wear respiratory protective equipment, it may be necessary for you to wear it temporarily in the event other control measures fail.
- Use, maintain and store any respiratory protective equipment provided in accordance with instructions.
- Adjust your respiratory protective equipment so that it fits you correctly.
- If you have facial hair, this could reduce the effectiveness of a dust mask. In this case you should use PAPR.
- When it is necessary for you to wear more than one item of personal protective equipment, ensure that all items are compatible with each other.

This guidance sheet is aimed at employers to help them comply with the requirements of workplace health and safety legislation, by controlling exposure to respirable crystalline silica. Specifically, this task guidance sheet provides good examples of how one specific sector chooses the type of mask appropriate for the task.

Following the key points of this task guidance sheet will help reduce exposure.

Depending on the specific circumstances of each case, the examples given here may not be relevant for the other sectors. Seek advice from an occupational health

professional to adapt to another sector.

This document should also be made available to persons who may be exposed to respirable crystalline silica in the workplace, in order that they may make the best use of the control measures which are implemented.

This sheet forms part of the Good Practices Guide on silica dust prevention, which is aimed specifically at the control of personal exposure to respirable crystalline silica in the workplace.