

Part: Occupational Safety and Health (OSH)

This part of the “FairStone”-Standard contains regulations and requirements to guarantee the safety and health of the natural stone industry workers. As a basis international standards from the International Labour Organisation (ILO) as well as the knowledge of the Mining Section for Prevention of the International Social Security Association (ISSA) on good and successful practices in the mining and natural stone industry have been used.

National laws and by-laws containing regulations on occupational safety and health or on other items, mentioned in this standard, are of course valid in addition and have priority.

The standard aims to initiate a continuous improvement process in participating enterprises in the field of safety and health. As most of the natural stone producers are small and medium companies (SME) and some of the needed improvements require big investments, in the first phase good organisation, intensive training and personal measures have to be taken. Over the time period increased investments to improve technical safety and health conditions will be required by the auditors. Nevertheless the protection of worker’s health is the overall aim of this standard and has to be guaranteed.

Contractors, subcontractors, travelling workers and part-time workers have completely to be included into the “FairStone”- Standard. All regulations apply to them identically. The employer of the company, wearing the “FairStone” Quality Seal has to guarantee for.

1. Organisation of Safety and Health

- a. An organization plan of the company, delivering information on the general structure, functions, departments and responsibilities must be available.
- b. Responsibilities and responsible persons must be clearly defined.
- c. Delegation of employers’ responsibility to responsible persons shall be done in written form and must be documented. Responsible persons must give information on their duties, tasks and competences.
- d. Responsible persons on safety issues (safety specialist) shall give advice to the employer or responsible persons in all questions of safety. They must be trained and educated for their tasks.
- e. Responsible persons on health (company physicians) shall give advice to the employer or responsible persons in all questions of workers health. They must be trained and educated for their tasks.
- f. A plan for the necessary preventative occupational examinations has to be set up.
- g. All workers shall have access to preventative occupational examinations and consultations.
- h. Responsible persons on cleanness at the workplaces should be nominated for relevant parts of the factory.
- i. The employer shall create an OSH-Policy for the prevention of work-related injuries, occupational diseases and incidents for his enterprise. The OSH-Policy should be announced to all employees.
- j. A plan for safety signs, giving information on hazards, duties and prohibitions as well as emergency exits has to be set up.
- k. All the necessary safety signs and emergency signs have to be installed.
- l. A suggestion box for proposals and ideas from workers to improve occupational safety and health as well as complaints shall be installed.

2. Risk Assessment

- a. A systematic analysis of all risks and major hazards at the workplaces of the company (list of all hazards resulting from operation, malfunction, breakdown, maintenance and repair) is required.**
- b. If necessary, measurements shall be done in order to clarify the potential hazards to worker's health, the level of exposure and the exposed workers (e.g. dust and noise measurements).**
- c. The employer shall take all necessary measures (technical, organisational, personal) to control risks and hazards.**
- d. The employer has to make a record to document hazards, measures to control, responsible persons and the fixed date for improvement.**
- e. The employer has to update the risk assessment record once a year or after essential changes (e.g. investments in new technology, new substances, new construction).**

3. Training and Instruction

- a. Regular training of managers and master craftsmen on general duties, OSH-principles, responsibilities, sufficient knowledge, social competence and motivation measures is required.**
- b. Initial training for new workers on typical risks for safety and health hazards and procedures in the natural stone industry, identified in the risk assessment, is required at least 2 days long.**
- c. In addition specific training for workers and instruction on specific work procedures, chemicals, machinery, use of PPE is necessary.**
- d. Refresher training for workers must be organized at least once a year one day.**
- e. Training must be carried out by competent persons in a manner and language, which is understandable by workers.**
- f. Training must be documented (name of instructor, contents, sign of workers).**
- g. A training plan should be established.**
- h. Interactive training and workers involvement should be offered.**
- i. Written instruction documents on major production procedures, dangerous machines, chemicals and hazardous substances must be available at the workplaces, understandable and accessible for all workers.**
- j. Education, training and permissions of special target groups must be done according to the national legislation (e.g. cranes, forklifts, environment)**

4. Safety Checks and Inspections

- a. The employer shall establish a plan for systematic and regular inspections of all machinery, tools, electrical installations, vehicles, ladders and relevant equipment.**
- b. Inspections shall be carried out by competent persons.**
- c. Inspections as well as necessary repair work shall be documented.**
- d. There must be an inspection plan with a list of all fixed and handhold machines and the time intervals for regular inspection.**

5. First Aid and Fire Prevention

- a. First aid for cases of accidents and emergency has to be organized by the employer.**
- b. Workers and supervisors shall be trained in the use of the rescue and first aid measures.**
- c. Rescue chain including the procedure for access to additional care must be organized and known by all employees.**
- d. First Aid boxes containing materials for first aid must be available at the workplace, clearly marked and accessible for everybody.**
- e. First Aid materials have regularly to be refilled and renewed at least every 2 years.**
- f. Fire fighting equipment including fire extinguishers must be available at the workplace and easy to reach.**
- g. Fire extinguishers must be checked by competent persons at least every 2 years.**

6. Personal Protective Equipment (PPE)

- a. The employer shall provide on his own costs for all workers in the natural stone industry:**
 - Safety helmets**
 - Hearing protection**
 - Dust mask for silica dust**
 - Suitable protective gloves**
 - Safety shoes**
 - Safety glasses**
 - High visible cloths**
 - If necessary: water proof clothing, safety shield for welding and flaming.**
- b. Workers must use and take good care of all PPE, provided by the employer.**
- c. PPE must be maintained and replaced according to the instruction by the manufacturer.**
- d. Safety glasses must be worn wherever eye injuries can occur due to airborne dust particles or small ejected pieces of natural stone or others.**

7. Workplace Safety

- a. Floors, platforms and stairways shall be plain and of robust construction.**
- b. Platforms and walkways for maintenance and repair of machinery shall be accessible via permanent stairways or fixed ladders.**
- c. Water ducts and floor openings have to be covered.**
- d. Workplaces and walkways, higher than 1 meter above lower level or at waste water basins have to be safeguarded by fixed railings of 1 meter height.**
- e. Floors, platforms and stairways shall be regularly maintained, kept clean, free of oil or other slippery fluids, materials and obstacles.**
- f. Workplaces, walkways and storage areas must be clean and in good order.**
- g. Workplaces and walkways should always be well lit.**
- h. Workplaces and walkways shall be kept free of not needed materials.**
- i. Waste pieces of natural stone shall be collected in waste containers.**

8. Silica Dust and Mineral Dust

- a. The employer shall take all possible measures in order to eliminate exposure or reduce the concentration of silica dust and other mineral dust in the atmosphere at the workplaces.**
- b. Technical (e.g. wet processing, dust collection at the source) and organisational (separation of areas with higher concentration from those of lower, reduction of exposure time) measures have to be preferred in order to reduce the exposure of the workers.**
- c. Wet processing should be preferred instead of dry processing.**
- d. Dry dust shall be extracted by vacuum dust collectors wherever possible.**
- e. Regular housekeeping and cleaning in order to avoid dust accumulation has to be done.**
- f. Cleaning shall be done by water or vacuum cleaner instead of the use of brooms.**
- g. Product cleaning by compressed air shall be avoided.**
- h. In case of wet drilling or sawing, water quantity has to be sufficient and water feed shall be initiated before processing.**
- i. Workers should be informed about the risks of silica dust and the suitable prevention measures in order to create awareness.**

9. Noise and Vibration

- a. Noise measurements should be used to identify the areas of risk to noise, which have to be clearly marked.**
- b. Technical (e.g. use of low noise blades for circular saws, installation of noise absorbers) and organisational (e.g. separation of areas with higher noise level from those with lower, reduction of exposure time) measures shall be preferred in order to reduce the exposure of the workers.**
- c. In case of new installations, new production methods or redesign of workplaces, systems have to be planned in such a way, to reduce noise and vibration. This includes the purchase of new machinery.**
- d. Workers should be informed about the risks of noise and vibration as well as suitable prevention measures in order to create awareness.**
- e. Seats of mobile machinery such as forklifts have to be maintained properly or exchanged to new seats with good vibration reducing performance.**

10. Hazardous Substances

- a. The employer shall identify hazardous substances at the workplaces and check if less hazardous substances are available.**
- b. In case of the use of hazardous substances the exposure of the workers has to be minimized.**
- c. Written instructions for all hazardous substances have to be prepared.**
- d. It is forbidden, to fill hazardous substances or chemicals in drinking bottles.**

11. Machinery and Equipment

- a. All moving parts of machines have to be safeguarded carefully by fixed guards, fences or light barriers in order to prevent accidents caused by shearing, cutting, squeezing, drawing in and coiling up. Protective devices must be designed in such a way to prevent from reaching dangerous parts.**
- b. Machines must be equipped with a lockable main switch and an emergency switch.**
- c. Handhold machines and hand tools must be kept in safe condition.**
- d. Bend pulleys and tensioning drives must be secured by fixed guards.**
- e. All saw blades of circular saws shall be enclosed by fixed guards as far as practicable.**
- f. Circular saws for woodworking shall be provided with strong, rigid and easily adjustable hood guards for the saw blades and with riving knives of suitable design matched to the saw blade in use. The width of the opening in the table for the saw blade shall be as small as possible.**

12. Electrical Hazards

- a. All electrical installations shall be appropriately designed for use in rough industrial conditions as well as for wet atmosphere where required.**
- b. The electrical energy distribution facilities shall be appropriately situated and protected from access of unauthorized persons.**
- c. Electrical switch boxes must be kept close all the time.**
- d. All parts under high voltage must be safeguarded from touching by hand.**
- e. Electrical cables are not allowed to be repaired by insulating tape.**
- f. Electrical connections must be made by suitable, wet proof plugs, connection boxes or cable drums only.**
- g. Electrical energy installations, switch boxes and connection boxes shall be appropriately labelled.**
- h. Hand-held electrical power tools should be equipped with a “dead man” or “quick release” control, so that the power is automatically shut off wherever the operator releases control.**
- i. Hand-held electrical machines should have its frame grounded or be double isolated.**

13. Storage

- a. Blocks, slabs and products of natural stone shall be stored in a way to prevent tilting, falling or slipping.**
- b. Waste materials shall be collected in special containers.**
- c. Racks and other storage facilities have to be stable and safe. Racks shall be set on firm ground and designed to avoid accidental movement.**
- d. The maximum load of racks and storage facilities must be known by the workers.**

14. Transport

- a. Tyres, lights and driver’s seats of forklifts have to be maintained.**
- b. Cranes must be labelled with the maximum permitted load.**
- c. Switchboxes at cranes must be closed.**
- d. For maintenance and repair a safe access to higher parts of the cranes must be possible.**
- e. All lifting devices such as steel ropes and lifting straps shall be in undamaged condition.**
- f. Load hooks must have a safety clip to avoid unintended loosening of the load.**
- g. Transport devices have to be available in order to reduce hard work, manual lifting and transport to its minimum.**

15. Ergonomics of Work

- a. Workplaces and work processes should be designed in such a way, to avoid health risks from repetitive work, working postures, physical load and manual handling and transport of materials as far as possible.**
- b. Tables and trestles should be available to carry out work in an ergonomic position.**
- c. Workers should be trained in using correct working techniques.**
- d. Workers should be informed about the hazards related to physical work, work postures, repetitive movements and lifting and carrying loads.**

16. Welfare

- a. The following facilities should be provided, kept clean and maintained:**
 - sanitary and washing facilities or showers**
 - facilities for changing and for storage and drying of cloths**
 - separate room for taking meals.**
- b. Men and women workers should be provided with separate sanitary and washing facilities.**
- c. Eating and smoking at workplaces in dusty atmospheres should be avoided.**

17. Shipping

- a. Overseas containers have to be loaded in a way, that the loading process can be done safely.**
- b. Safe unloading at the customer's workshop must be considered during the loading.**
- c. Fumigation of containers by hazardous substances shall be avoided.**

18. Block Supply Chain

- a. The employer has to prove and declare that the raw material blocks are extracted and processed without the use of child labour by his supplier.**