



HSE Standard Implenia CH

Directive

Scope	Units	Implenia Gruppe
	Countries	CH

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1 Purpose and scope

1.1 General

This Implenla CH HSE Standard contains binding regulations for all persons present at Implenla Switzerland work sites. This includes (non-exhaustive list) Implenla employees, temporary employees, subcontractors, suppliers and visitors, regardless of their function and activity.

Due to Implenla's activities, many requirements relate to work on construction sites. In particular, references to the "BauAV" are limited to construction work and do not apply to other workplaces such as office premises. What is covered by the term "construction work" is defined on fedlex.admin.ch (in the current version of the "Construction Work Ordinance").

This HSE Standard Implenla CH contains the minimum requirements for occupational safety and health protection (Health & Safety) as well as for the environment. These must not be weakened or neglected at any time. A tightening up of the regulations defined here is possible through construction, project as well as site management.

The Implenla HSEQ Directive is the overarching document and is also binding. In the case of work contracts with contractors outside Implenla, it is up to the Implenla unit holding the contract to implement and communicate the necessary content of the HSEQ Directive. Conflicts between Implenla documents in the HSEQ area are resolved by the corresponding global functions at Implenla.

If a legal requirement is more stringent or if there is a conflict between this HSE Standard and legal requirements, the legal requirements always apply. In other words, legal requirements are neither replaced nor overridden by this HSE Standard. However, if this HSE Standard is more stringent and does not conflict with legal requirements, the provisions in this Standard shall apply.

This HSE Standard does not claim to represent all legal requirements. It is the responsibility of site managers, project managers, construction managers, contractors and each individual to comply with the applicable legal requirements.

1.1.1 Definitions

The term "**management**" refers to the person who has overall responsibility for a project, construction site, production site or office site. "Management" therefore applies mutatis mutandis to site, plant yard and production site managers. "Management" does not go lower than the level in the hierarchy mentioned here, i.e. it does not include the levels of department manager, foreman or supervisor. The "management" is also subject to the rules set out here.

"**Work site**" means the entire work area such as construction site, office building, production sites, factory yards and company premises.

"**Workplace**" means the immediate environment around the work such as room, pit, workbench.

"**Contractors**" means organizations working under the direction of Implenla, such as Implenla's performing units, (sub)contractors and suppliers.

"**Employee**" is a person who performs work or work-related activities that are within Implenla's control and who has a direct or indirect (e.g. "temporary worker") contractual relationship with Implenla.

"**Employers**" are natural or legal persons who employ people in an employment relationship. It is therefore possible that several employers are represented on a project. In the case of temporary workers hired by Implenla, "Implenla" is deemed to be the employer in the context of this document.

In case of contradiction or ambiguity between different language versions of this document, the German version shall prevail.

Implenla Switzerland Ltd. is hereinafter referred to as "Implenla".

1.2 Contractors

These HSE Standards are an integral part of every work contract concluded by Implenla Switzerland Ltd. with other contractors (incl. subcontractors).

The contractual partner is obliged to take into account and comply with all measures listed in this HSE Standard. He is also obliged to inform all employees working at the place of work (employees, temporary employees, subcontractors, suppliers, etc.) about the contents of this document and to oblige them to comply with the measures and guidelines described in this document.

If a contractual partner assigns the implementation of the contract for work and services to another subcontractor / employer, it must ensure that the subcontractor / employer implements the health, safety and environmental protection measures contained in the contract for work and services and in this HSE Standard.

The contractors fully accept the contents of this HSE Standard and acknowledge that they may be subject to sanction measures defined by the management in case of non-compliance with the rules stated therein by themselves or by any third party company subordinated to them.

2 Personal behavior

Impeccable conduct on the part of all employees at Implenla workplaces is the basis for accident-free work. Supervisors are obliged to ensure that the personnel deployed, as well as all persons subordinate to them, are familiar with and comply with the legal regulations and the rules applicable in the workplace (e.g. on the construction site).

Supervisors must also ensure that their personnel behave appropriately, free from aggressiveness, vulgarity or disrespect for others. This applies to everyone at all times. This principle applies regardless of hierarchical level, function and form of communication (oral, written, handwritten, gestural or electronic, including social networks).

Implenla reserves the right to impose sanctions on both the person in question and his or her employer or to bring criminal charges against him or her.

The rules described in the Implenla Code of Conduct also apply.

3 Implenia Safety Rules



SAFETY RULES

-  1. I care for myself and my colleagues. In case of doubt I say STOP!
-  2. I only start my work after assessing any risk and taking mitigation actions
-  3. I always wear the required Personal Protective Equipment (PPE)
-  4. I strictly adhere to zero tolerance regarding alcohol and drugs
-  5. I take fatigue and stress seriously
-  6. I report all incidents immediately and inform my colleagues

4 Provision of a responsible person for occupational safety and health protection

Every employer must designate a person for each construction site who is responsible for occupational safety and health protection (BauAV, Art. 5.1). This person may issue instructions in this regard to the employees in his company. He must be present on the construction site during the execution of the work.

5 Safety and health protection concept / risk management

Before starting work, each contractor must carry out a risk assessment and measures planning for their activities, documented in writing. Based on the assessed risks for each work, it must be checked which measures are necessary to ensure occupational safety and health protection during the execution of its work. The risk assessment and planning of measures must in particular also take into account hazards that affect third parties or could emanate from third parties.

Prior to the start of construction work, each contractor must produce a written safety and health protection concept in which the safety and health protection measures required for the work on the construction site are shown (BauAV, Art. 4.1). This also includes those related to risks to which third parties are exposed. This concept should also regulate emergency planning and organization, including first aid.

The safety and health concept, the details of the associated measures and the supplementary work instructions must be documented in written form with any useful additional illustrations or plans.

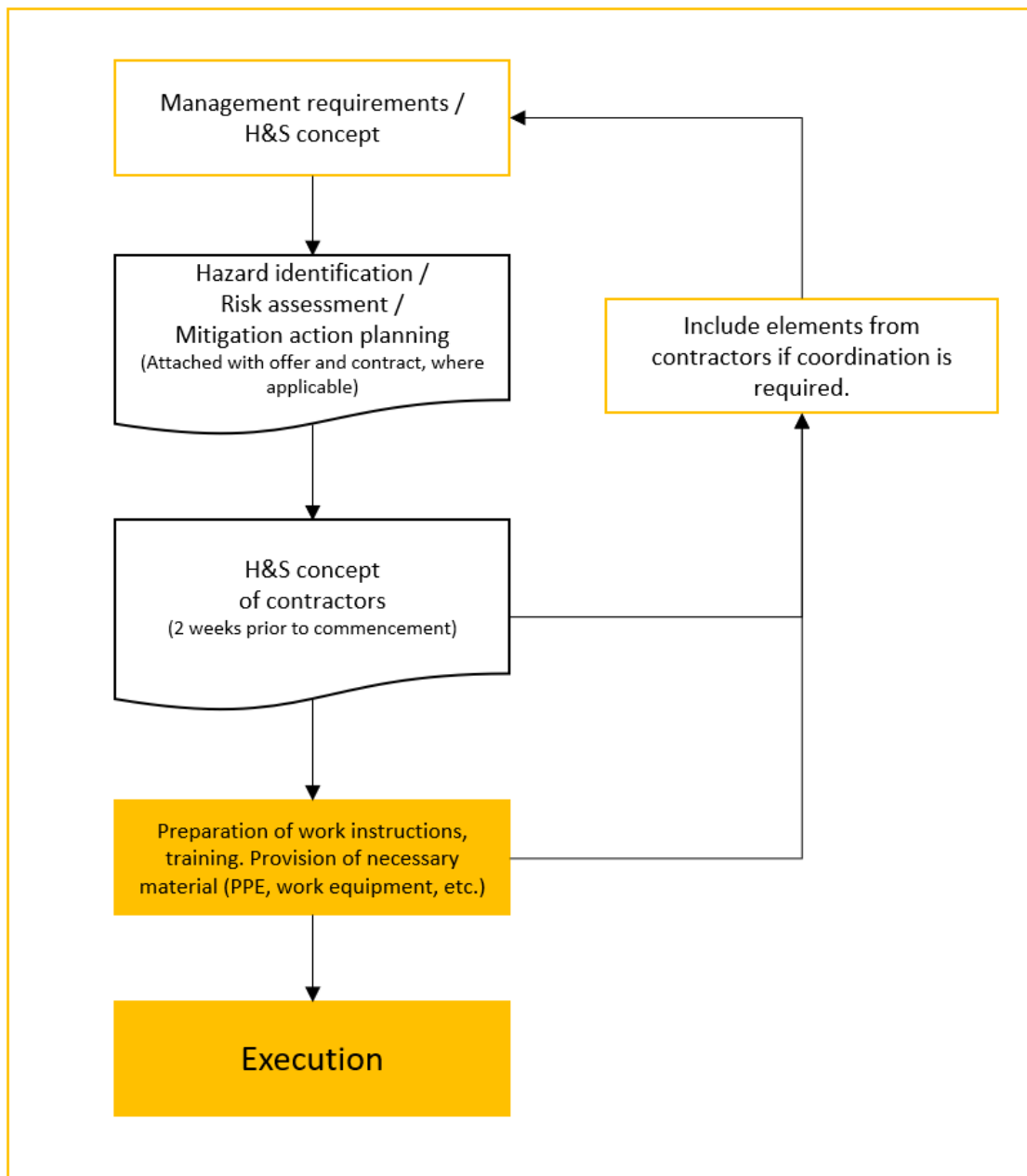
If required by the risk assessment or requested by the project or client, additional assembly concepts should be prepared, which may be required for a specific task or work step. These assembly concepts must take into account the risks assessed for the task and include appropriate measures.

These documents are managed by an "owner", i.e. this person is responsible for content and implementation. The owner is therefore associated with the activities and is, for example, the site manager. The owner is designated by the responsible organization may change over time. The current owner is clearly indicated on the document. Management reserves the right to call in these documents for review and potential conflicts. If coordination of actions is required, the documents shall be submitted to management without request and coordination of actions shall be agreed upon.

These documents shall be checked or updated as often as necessary, especially in case of changes in the organization, process, schedule, materials, substances or products used, machinery or any other characteristic of the activity. If the aforementioned general conditions do not change, a specified periodic inspection shall be carried out. The safety and health concept must take into account the current situation at all times.

The measures decided in the safety concept must be implemented before work begins. They must be effective, i.e. work as planned, and be regularly and demonstrably checked.

In addition, all legal and official regulations - namely those of the building police, fire police, scaffolding control and SUVA - must be complied with.



Process concerning documentation for occupational safety and health protection in projects. The above mentioned review and update due to changes or periodic due date is not shown here.

6 Emergency planning

6.1 Emergency planning and organization

All projects and sites must have emergency planning and the necessary organization to enable them to respond appropriately in the event of incidents in the area of HSE and in the event of expected damage to Implenia's reputation. The necessary resources, such as people and materials, as well as training courses, must be made available or carried out and documented.

Emergency planning must be regularly reviewed and practiced. The results of such reviews and exercises, as well as any changes made to the emergency plan as a result of them, must be documented in writing.

Units and companies contracted by Implenia must coordinate and communicate their emergency planning with Implenia's Project or Site Management Unit.

6.2 Incident reporting

Incidents that have caused or could have caused damage to people, the environment or Implenla's reputation (so-called "near misses") must be reported to management immediately. This applies to all companies and persons involved, including temporary employees, subcontractors, visitors and third parties.

Management immediately escalates these reports to Implenla management and the relevant specialists (e.g. in the case of personal injury, always the occupational safety specialists). Further information on dealing with incidents, including the formation of a "task force" for incidents with significant consequences, is contained in the "[Incident Management](#)" directive. Violations of compliance rules must be reported to Implenla's Legal & Compliance department.

Communication with third parties regarding incidents, except for alerting public emergency organizations, shall be done exclusively in consultation with Implenla's Communications Department.

6.3 Organization of first aid

First aid must be provided at all times. To this end, verifiably trained first aiders must be present at the place of work at all times to provide first aid / first aid to injured persons. Regarding qualification, the [guidelines to ArGV 3 Art. 36](#) apply. Each independent unit is responsible for its own first aid. Mergers between units are permitted as long as the organization is effective and operational at all times.

Emergency cases must be available at the work sites in sufficient number and within reasonable reach. When determining the number and location of emergency cases, local conditions as well as the construction site infrastructure and the progress of construction work must be taken into account. Their location must be visually marked. The need for and availability of AEDs (Automatic Defibrillators) must also be considered.

When organizing first aid, the guideline values in the following table can be taken into account:

Recommendations according to the guide					
Number of employees per site / construction site	1 - 10	50	100	250	over 250
Number of first aiders	1 - 2	6	8	10	according to first aid concept
Number of first aid material points	1	several according to first aid concept			

6.4 Escape and rescue routes

Escape and rescue routes must be planned and clearly marked. They must always be kept clear and must not be obstructed, even briefly. Changes to the escape and rescue routes must be approved and communicated by the management.

7 Training and prevention measures

Employers undertake to deploy only personnel (their own employees, employees of their subcontractors, temporary employees, etc.) at Implenla's work sites who have sufficient basic knowledge of health and safety at work, particularly in the case of construction sites, work yards and production sites.

For all tasks that require special qualifications or training (e.g., operating machinery), they shall ensure that these employees have the permits, certificates or training certificates required at the location where the task is to be performed, as well as the specific instruction for the machine or work equipment used.

When a contractor is first deployed to the work site, a safety briefing is conducted by management. On this occasion, the elements necessary for carrying out a workplace-specific safety introduction are passed on to the person responsible for the unit/company. The latter supplements the introduction with all useful information to be taken into account for his own activity at the place of work to ensure that it can be carried out safely for his personnel and for third parties.

Implenla conducts regular training and preventive measures at its construction sites. At Implenla's request, contractor employees must also attend or actively participate. Employees who do not speak the local language (German, French, Italian) must be assigned to work groups in which there is always one person

who can adequately translate work instructions. These persons must be provided by Implenla in the case of companies under contract to Implenla. No claims can be made for time spent in this way.

8 Disciplinary proceedings for employees

In the event of violations by employees of legal and/or Implenla and project-specific regulations, corrective and/or disciplinary measures will be applied. The latter include:

admonition	The warning is given verbally and is documented
warning ("yellow card")	The warning is given in writing
reprimand ("red card")	Expulsion from the place of work.

Further measures can be defined locally or on a project-specific basis. Anyone whose conduct or condition endangers themselves or others or violates compliance rules or the Code of Conduct, may be expelled from the place of work directly and without prior warning or admonishment (BauAV, Art. 5.2, but applies to all Implenla places of work).

Implenla reserves the right to impose further consequences, e.g. under labor law. Implenla's documents on consequence management" also apply.

9 Occupational safety and health

9.1 Personal Protective Equipment (PPE)

The use of PPE is mandatory at all Implenla construction sites, work yards and manufacturing plants and for all persons who are in the work area. Production companies such as Holzbau can issue their own PPE regulations based on their risk assessment.

The PPE must meet the given conditions and requirements and correspond to the current state of the art. The current applicable EN and ISO standards must be considered.

Exemption from wearing PPE, e.g. for groups of visitors, can be approved by the management. However, this is only limited in time and location, as well as based on a risk assessment and with the necessary measures implemented (e.g. separation of visitors and work locations, special walkways, after completion of work, etc.).



Hard hat: constant wearing

A medical exemption from wearing a hard hat means that the workers in question may not be employed on the construction site.

The management can order an exemption from the obligation to wear a hard hat for certain, clearly defined work areas. For example, for work during interior construction. This only applies if the risk assessment prepared for this purpose permits it.



Safety shoes: wear constantly

S3 (shoes) / S5 (boots) with anti-puncture sole



Eye protection: constant availability on the construction site

According to activity requirements. A shield integrated in the construction helmet is not considered a substitute for safety glasses.

Double eye protection is required for some activities (according to risk analysis and, where applicable, safety data sheet).



Hearing protection: constant availability on the construction site

Above a noise level of 85 dB (A), the employer must provide personal noise protection equipment. If the permitted limit value is exceeded or if prescribed by the work equipment manufacturer or for the workplace concerned, employees must use the appropriate personal soundproofing equipment.



Gloves: constant availability on the construction site

According to activity requirements, considering the identified risks (mechanical, chemical, thermal, etc.).



Work and protective clothing (EN 340 and 343): wear at all times

Protective clothing that meets the requirements of the work to be performed is mandatory. Special protective clothing is required when working with acids and bases, with or near hot surfaces or other heat sources, and during sandblasting work. The clothes must be in good and clean condition and adapted to the stature of the wearer.



High-visibility vests / high-visibility clothing: wear at all times

High-visibility vest, T-shirt or jacket (min. protection class 2).

High visibility vests or shirts will be tolerated for visitors, but wearing high visibility work clothes fitted to the size of the wearer is preferred.

If the minimum requirements on a project are higher (e.g. combination outerwear/pants min. protection class 3), these must be complied with.



Respiratory protection: if necessary, permanent availability at the place of work

According to activity requirements and the instructions and specifications of the manufacturer of the material to be processed and the materials or products used (safety data sheet).



Fall protection / rescue harness

If, for technical reasons, collective protection measures such as fall protection, side protection, scaffolding or safety nets cannot be used when working at height, suitable PPE must be used. (Proven training of appropriate duration, as required: Work on the harness - at least 1 day; Work on the rope - corresponding diploma).

PPE must be tested in accordance with applicable requirements. It must be possible to prove the validity of the test.

9.2 Construction site access / ID card requirement

9.2.1 Employees

Only authorized persons have access to Implenla workplaces.

Only Implenla employees in connection with activities associated with the place of work as well as companies, subcontractors with a valid contract for work and services and their employees with an existing work permit are eligible.

All employees must be able to identify themselves to Implenla's site management or its subcontractors when entering and leaving the construction site and while on site.

9.2.2 Visitors

The specific risks as well as behavioral and preventive measures regarding the site and the construction site areas must be explained to the visitors. Management may require that this participation in this briefing be confirmed in writing by each visitor.

Visitors must have the required PPE. Minimum equipment: hard hat, reflective high-visibility vest and S3 safety shoes. Exceptions see chapter 9.1.

All visitors must always be accompanied by a representative of management or an order taker for the entire duration of the visit and until they leave the work site (from the main entrance to the arrival area).

9.3 Delivery and removal of material

Deliveries and removals are generally made via the signposted access points.

Deliveries and removals for construction sites and work yards must be reported in advance in writing to the management and the person responsible for logistics if requested. Deliveries must be made to the storage location assigned for this purpose by the management.

During transport and storage, the relevant regulations apply, in particular:

- the instructions of the manufacturer and the supplier.
- compliance with the good condition of the types of packaging (structural homogeneity).
- Order and stability of storage (e.g., no loose stacks of loads).
- the different or even separate storage of materials, the combination of which can be dangerous (e.g. gas and chemicals).
- the homogeneity and tying of loads during lifting, which may only be performed by specially trained personnel.
- Trucks, trailers, vans and construction machines that are in use on or at the construction site may have heavy soiling on the chassis or wheels, depending on the weather and the surface. Dirty vehicles and construction machines are not allowed to drive on the internal and public roadways without cleaning.

Contractors who pollute the roads with their vehicles or construction machinery must pay for the resulting cleaning costs.

9.4 Order and cleanliness on the construction site

The work site must be kept permanently in a clean and tidy condition. Unnecessary equipment and materials including packaging must be removed by the person responsible. The containers provided for this purpose (waste garbage cans, skips, etc.) must be used. See also chapter 10.1.

9.5 Smoking

Smoking is prohibited in the following rooms and locations:

- Enclosed spaces (of any kind, including shelters, offices, and furnished containers).
- Proximity to combustible materials and hazardous products.

The management may decide that smoking is allowed only in designated and appropriately marked places.

9.6 Electronic devices / music

Management reserves the right to prohibit any use of headphones of any kind at the work site for safety reasons. Where permitted, music devices may be operated at room volume at most. The use of cell phones and tablets on the construction site should be restricted as far as possible and only used for business (in exceptional cases also for urgent private) calls. Care should be taken to ensure that use takes place in a safe place at a standstill and does not interfere with ongoing activities. The use of cell phones and tablets is strictly prohibited for all machine operators or drivers operating a machine or vehicle without a hands-free device.

9.7 Breaks and catering

Eating at the workplace or in a place not designated for this purpose is prohibited for hygienic reasons. As a matter of principle, all waste (packaging waste, leftover food, etc.) must be disposed of in accordance with the regulations immediately after the end of the break.

9.8 Traffic routes and traffic routing

The work sites must be accessible via safe traffic lanes executed in accordance with the regulations of the BauAV. Lanes must be marked by suitable measures (e.g. ground markings, barricade slats), be free of obstacles and be appropriately secured if there are cavities, funnels, slopes or other profiles that could cause vehicles or machines using the lanes to crash or tip over.

Whenever possible, personal routes should be visually and physically separated from traffic routes (barriers, railings, etc.).

Wherever possible, traffic routes should be designed in such a way that it is not necessary for vehicles to reverse. If reversing cannot be avoided, it should be kept to a minimum. To this end, measures such as the supervision of a guide or technical means (e.g. camera) must be taken. The driver of the vehicle must make sure that there is no person behind his vehicle. Reversing over longer distances is only permitted if it is not possible to continue driving or turn around.

9.9 Roadways

Roadways must be able to withstand the maximum expected loads.

Embankments and ramps must be designed and fixed in such a way that they cannot collapse. To this end, the distance between the edge of the lane and the edge of the embankment or ramp must be at least 1.0 m. If the ground conditions are unfavorable, the distance must be correspondingly greater. If this is not possible for reasons of space, suitable technical measures must be taken.

In the case of structures such as bridges or dams, proof of the load-bearing capacity of the track must be available, prepared by a specialist engineer. The maximum load capacity of the guideway must be indicated on a sign.

Measures must be taken to protect workers, especially from stones, dirt and splashes of dust, sand, debris or water, but also from direct collisions with moving machinery or vehicles (markings, separation blocks, guardrails, barriers ...).

9.10 Wires, cables and hoses

Electrical lines, welding cables, air hoses, etc., should be laid as far as possible so that they do not constitute an obstacle. Any risk of falling or tripping due to the laying of cables must be avoided.

Lines and cables representing energy carriers (hydraulic, electric, air pressure, etc.) must be in undamaged condition (including accessories such as plugs, couplings, extension cables, etc.), have no unnecessary lengths or loops, and, if possible, be fixed.

9.11 Working at height and fall protection

9.11.1 Fall protection

All work at height must be carried out in accordance with the provisions of the BauAV, SUVA, other applicable legislation and in accordance with the measures determined in the risk assessment. If possible, a safe workplace should be provided for persons working at height (e.g. working platform). This must be equipped with a compliant guardrail from a fall height of 2 meters at the latest.

9.11.2 Safety harness (PPE against falls from a height)

Where it is not technically possible to install collective fall protection measures when working at height, the use of a safety harness and safety lines and/or anchor points may be required.

In this case, the executing unit must prepare a project-specific assembly and emergency concept and submit it to the management upon request. This should identify the specific positions and tasks that may only be carried out by appropriately trained personnel (work with climbing harness or work on the rope). The assembly concept should also include emergency measures such as rescue and recovery when working with PPE.

Management may require that work with PPE be subject to a permit to work system ("permit to work").

9.12 Ladders

If possible, platform ladders are to be preferred to lean-to ladders. Ladders shall be visually inspected for damage daily before starting work. The following points must be strictly observed:

- Work may only be carried out from portable ladders if no other work equipment is more suitable under the given safety aspects.
- Ladders must be suitable for their intended use in terms of load capacity and stability, and must be undamaged.

- Ladders must stand on a load-bearing base and be secured against slipping away, turning and tipping over
- The location must be chosen so that there is no risk of being hit by falling objects or materials.
- On single ladders, the top three rungs may only be climbed if there is a platform and a holding device at the exit.
- The top two rungs of trestle ladders must not be climbed. Stepladders may only be accessed and exited from the base of the ladder.
- From a fall height of more than 2 m, measures against falling must be taken when working from portable ladders.
- Ladders attached to a higher work location must extend at least 1 m above the edge and be secured.

Management may require that the use of ladders be subject to a permit to work system ("permit to work").

9.13 Cranes, lifting & hoisting

Crane operations, lifting and hoisting work must be planned so that it can be carried out safely, taking into account all foreseeable risks.

Crane operators must hold a valid crane operator's license for the type of crane used. They must be physically and mentally suitable for the task and have been designated for this function. All cranes and lifting equipment must be in technically perfect condition.

Valid evidence of maintenance, inspections, tests and checks must be kept available, including evidence concerning the stability of the crane.

The crane installation must not be manipulated by third parties at any time. Any modification measures may only be carried out by trained and designated specialist personnel and must be recorded in writing (in particular in the crane log book).

When multiple cranes and/or aerial obstacles are present, measures must be taken to avoid collisions and improper approaches, as well as to provide a reliable and efficient means of communication between crane operators.

Management may require that crane lifting and attachment work be subject to a permit to work system ("permit to work").

9.13.1 Slings

Slings must be visually inspected for integrity before each use.

Slings must not be knotted under any circumstances.

Defective slings must be disposed of immediately or rendered unusable on site.

Lifting gear must be labeled with information such as maximum load and the last test date in accordance with regulations.

It must be possible to provide evidence of the prescribed tests for each sling.

9.13.2 Slinging loads and directing the crane

Persons designated to carry out lifting or fastening work on crane hooks must be in possession of a valid certificate (load attachment operator, crane operator, etc.).

Guide ropes must be used to control loads during lifting operations. Reliable and effective means and methods of communication between persons on the ground and crane operators, including good knowledge and clear execution of command gestures, must be in place and used as intended.

9.13.3 Staying under loads, elevated working areas and in swivel areas

Standing under suspended loads is prohibited. Lifting work should be planned so that persons are not in the danger zone. This area is to be selected so that persons cannot be hit by falling loads. Danger areas may have to be cordoned off.

Where workplaces and traffic routes are located one above the other, measures must be taken to ensure that persons are not endangered by falling objects or materials.

9.14 Wall and floor openings

All wall and floor openings, holes and breakthroughs in floors, roofs and walkways must be immediately covered with suitably constructed covers. These covers must be secure against penetration and slipping. If the covers have to be removed for further activities, the approval of the management is required for this and the affected work area must be secured accordingly.

9.15 Machines and devices

9.15.1 State

Only CE-compliant machines and devices may be used, which have safety devices that correspond to the current state of occupational safety. The machines must be in a technically perfect condition and equipped with the necessary protective devices (housing, handles, covers, etc.). The machines must be used in accordance with the manufacturer's instructions and the protective devices must not be removed, disabled or modified under any circumstances.

9.15.2 Maintenance and maintenance record

All machinery, equipment and facilities brought onto the construction site must be serviced and maintained. The equipment must be clearly marked with the name of the company so that it can be clearly identified. Proof of maintenance must be presented upon request.

9.15.3 Construction machinery and transport vehicles

It must be ensured that no persons can be in the danger zone of means of transport and construction machines. If it is essential that persons are in the danger zone, the necessary technical means must be used, such as the use of cameras or the installation of mirrors, or a signaling device (person) must monitor the danger zone. The signaler (person) must not be in the danger zone in the process. Such work must be discussed in advance and at least on a daily basis with all parties involved, including the machine operator.

When the driver leaves the construction machine or the transport vehicle, the vehicle must be secured against unauthorized as well as unintentional movement (incl. removing the ignition key from the vehicle). Machine operators must be appropriately trained and, where applicable, have a valid identification card, which must be carried at all times.

9.15.4 Refueling

Refueling of machines and equipment may only take place in a non-hazardous area. Water protection zones must also be observed. Measures must be taken to prevent soil contamination in the event of fuel or hydraulic fluid leaks. Leaks of any kind are an incident and, according to sec. 6 must be reported immediately to the management.

9.16 Noise

If possible, noise should be minimized primarily at the source. This includes quieter equipment and sound-insulating measures. For all activities where the noise level is (permanently) above 85db(A), appropriate personal protective equipment must be used. For a peak sound pressure level (short-term) of > 120 dB(A), additional protective means must be used.

9.17 Electrical safety

9.17.1 Electrical installations

Changes to electrical equipment at the work site may only be made with the prior consent of management and only by qualified personnel designated for this purpose by management.

Before working on electrical equipment, de-energize it and lock it to prevent it from being switched on accidentally. Before starting work, check that the equipment is de-energized.

Before commissioning, electrical installations are subject to inspection in accordance with the Ordinance on Low-Voltage Electrical Installations (NIV). If electrical installations are realized by a subcontractor, the management must request a copy of the safety certificate for electrical installations (SiNa) from the subcontractor.

9.17.2 Electrical work equipment

Battery-operated electrical work equipment is to be preferred over those with mains operation. For charging, the battery or charging station must be placed on a non-flammable surface and at a sufficient distance from flammable and combustible materials.

Mains-operated work equipment must be either grounded (3-pole connections) or protective insulated (2-pole connections).

Mains-operated work equipment may only be connected to a power source which is equipped with a residual current circuit breaker.

Before each use, the electrical work equipment must be checked to ensure that it is intact. In case of visible damage or doubts, the work equipment must not be used.

Electrical work equipment may only be repaired by qualified personnel.

Obviously defective or unsafe electrical work equipment may be removed from the work site by management without notice.

9.18 Hot Work

Hot work is work that generates temperatures that can cause a fire or explosion: Welding, soldering, flame cutting, general work with open flames and spark-producing work such as grinding, cutting and sanding.

For all hot work, suitable extinguishing agents must be kept on hand in sufficient quantity and in expedient proximity.

Indoor or confined spaces where hot work is performed or hazardous fumes or vapors may be generated must be equipped with local exhaust ventilation (displacement exhaust).

After completion of the hot work, it must be ensured that no ignition of material, vapors or gas can take place. Depending on the risk assessment, a fire watch must be provided.

Management may require that hot work be subject to a permit to work system ("permit to work").

9.19 Scaffolding

The scaffold erector shall provide the management with a site-specific plan for the erection, use and dismantling of scaffolds. Scaffolds shall be inspected and logged by the scaffold erector at intervals not to exceed two weeks. Management shall review and file these logs.

Only qualified scaffolders in possession of a valid certificate may erect, modify or dismantle the scaffold at the construction site.

During erection, modification and dismantling of scaffolds, the scaffold erector shall ensure that the work area is cordoned off to prevent unauthorized access to a hazardous area. The management shall inspect these barriers.

The scaffold erector must ensure that where a scaffold is still incomplete, a warning sign regarding the hazard is posted.

Access ladders must be removed and barriers erected to prevent unauthorized access. Incomplete scaffolds shall be completed or dismantled as soon as possible.

The payload of scaffolds must be clearly indicated on a sign at each access point. The payload of material platforms must be clearly indicated at the access to the material platform.

Management may require that scaffolding work and the use of rolling scaffolds and mobile elevating work platforms be subject to a permit-to-work system ("permit to work").

9.19.1 Control and use

The scaffold must be visually inspected by the user before each use. If any defects are found, the corresponding scaffold areas must be closed off immediately and the defects reported to the management.

It is prohibited to enter incomplete or defective scaffolds. Only the intended accesses may be used. In particular, climbing on scaffold elements other than the intended steps or rungs is prohibited.

No lifting devices may be attached to it without the consent of the scaffold erector. No materials may be leaned on the scaffold or against the guardrails. Construction debris, snow and ice must be removed from the scaffold decks and accesses before work begins. Material may only be delivered via cantilevered working platforms provided for this purpose. These must be mounted in accordance with regulations (ceiling supports/floor anchors).

9.19.2 Mobile scaffolds

Mobile scaffolds must be erected in accordance with the manufacturer's instructions. Mobile scaffolds may only be placed on surfaces that are level and load-bearing. They may only be used when the roller brakes provided for this purpose are locked. The designated access ladder must be used. Mobile scaffolds may only be moved when no one is on them.

9.19.3 Mobile elevating work platforms and pedestals

Operation and maintenance manuals of each unit must be available on site.

Operators must be trained regarding the use of their equipment (e.g. IPAF) and be informed about the specifics of the equipment.

Persons in the work cage of a working platform must wear a restraining device attached to an anchorage, if specified by the manufacturer.

Under no circumstances may a person get out of a work cage when the cage is in an elevated position.

Before a working platform is moved horizontally to a new work site, it must be lowered to the basic position.

Employees working in the work cage shall not use the cage railings, boards between the railings, ladders or other such objects to gain additional height from the cage.

The presence of persons underneath working platforms must be avoided, e.g. by closing off the working area.

9.20 Roofing and covering activities

Roofs and covers must not be overloaded. The resistance to breakage must be checked prior to work and, if necessary, resistant passage and traffic areas must be marked and protected or equipped (set up walkways with railings) and warning signs placed on non-resistant surfaces.

Access points to unfinished roof sections must be firmly cordoned off and marked with warning signs.

All loose flashing and roofing materials must be secured prior to work stoppages and at the end of each shift. During windy weather, such materials must always be secured.

Management may require that roof and deck activities be subject to a permit to work system ("permit to work").

9.21 Excavation and earthworks

Ditches, shafts and excavations of more than 1.5 m depth that are not sprinkled must be filled in or secured by other suitable measures.

Excavations deeper than 1.5 meters must be shored, sloped, or stepped. In certain cases, e.g. if identified in the risk assessment, measures such as propping, beveling or stepping must also be taken for depths less than 1.5 meters. Safe and adequate access and egress must be provided.

Trenches and shafts must be constructed in such a way that the clear width, measured at the bottom, ensures safe working (BauAV Art. 69 ff.).

All excavations must be secured with barriers. Night lights (flashing lights) must be set up in the dark.

Management may require that excavation and earthwork activities be subject to a permit-to-work system ("permit to work").

9.22 Deconstruction and demolition work

9.22.1 General deconstruction work

Before work may begin, the safety and health risks must be clarified and an appropriate dismantling and demolition concept drawn up.

The necessary measures must be taken to prevent:

- Workers crash;
- Components collapse unintentionally;
- Workers come into contact with substances such as dust, asbestos, polychlorinated biphenyls (PCBs), gases or chemicals and radiation in a manner that is hazardous to their health;
- Workers being hit by flying, falling and collapsing material;
- Workers are endangered by the instability of neighboring structures, by existing installations, by damaged work lines, or by the sudden breakage of traction cables.
- Workers are endangered by fires or explosions.

Entry into danger zones must be prevented by protective walls, barriers or warning posts.

The work may only be carried out under constant expert supervision. The contractor must assign a competent person for this purpose.

Management may require that deconstruction and demolition activities be subject to a permit-to-work system ("permit to work").

9.22.2 Components contaminated with pollutants

Prior to demolition work, the contractor must check the object for building materials containing hazardous substances (e.g. asbestos). If activities on the object are required due to such materials, these are to be carried out by certified pollutant cleanup companies.

9.23 Confined spaces

Confined spaces are defined as rooms:

- which are completely or partially closed and are not intended for the permanent residence of people
- With limited or restricted access or egress opportunities.

Examples: Tanks, silos, pits, bunkers, shafts, etc.

Work in confined spaces must be identified as such, the associated risks assessed and measures implemented. This may include testing the atmosphere (flammable substances, toxins, oxygen content) and a rescue plan.

Management may require that excavation and earthwork activities be subject to a permit-to-work system ("permit to work").

9.24 Chainsaws

For the use of chainsaws for simple activities such as working on boards and squared timber, a minimum of one-day course on the handling of the chainsaw must be completed.

The use of chainsaws for cutting bushes and felling trees may only be performed by properly trained specialists.

Management may require that the use of chainsaws be subject to a permit to work system ("permit to work") or prohibit them completely.

9.25 Hazardous substances

Hazardous substances are substances or mixtures that can cause harm to humans, animals or plants during storage, use or disposal. They must be stored and labeled in accordance with regulations.

The management may request to be informed prior to the use of hazardous substances. The persons working with the hazardous substances must be instructed or trained in the use of these substances and have the specified protective equipment (protective mask, gloves, etc.).

9.25.1 Storage

The management may require that the type and location of storage of hazardous substances must be approved (by the management). Liquid hazardous substances must be stored in drip pans with sufficient capacity. It must be ensured that the hazardous substances are protected from the weather and storage locations are sufficiently ventilated. The user ensures that the regulations regarding storage and labeling are observed.

9.25.2 Safety data sheets

It must be ensured that the safety data sheets are immediately available when required, including in an emergency, and that their contents have been communicated to the users.

9.25.3 Pressure vessels (gas cylinders)

Gas cylinders must be stored upright and secured against overturning (with chains or straps or with appropriate baskets or trolleys). The valves must be protected from damage with a cap. Gas cylinders must be stored either in well-ventilated containers (ventilation at the bottom and top) or outdoors. The storage location must not be near flammable materials. Users must be oriented about the hazards and safety precautions associated with gas.

9.26 Fences

Fences or fence elements that are closed, i.e. impermeable to wind, must be installed in such a way that they cannot be blown over by wind. Anchoring in the ground is mandatory. If anchoring is not prescribed in accordance with the client's specifications, it must nevertheless be installed after consultation with the client. If, for any reason, anchoring is not possible, suitable measures such as proof of stability with regard to wind forces must be provided by specialists to rule out any danger from falling construction fences and walls.

This regulation applies to all types of closed fences or fence elements such as construction fences, noise barriers, hoarding, mesh fences covered with tarpaulins, etc.

10 Environment and sustainability

10.1 Implenia environmental standard



OUR ENVIRONMENTAL STANDARD

Our environmental standard is derived from the Implenia sustainability strategy and the focus topic "Respect for the environment". It defines the minimum requirement in terms of environmental protection on construction sites for the topics of water, soil, energy, air, noise and waste. These requirements address all operative business units. The respect of local environmental regulations is always to be treated with priority.

ENVIRONMENTAL INCIDENTS

- Emergency measures for the prevention of environmental incidents and measures for the restoration of proper operation must be laid down according to risk evaluation (emergency concept). The construction site is to be equipped and the construction personnel to be trained accordingly.
- In case of any contamination, an environmental specialist must be consulted.
- Environmental incidents (as well as personal incidents) and non-conformities must be reported as quickly as possible and recorded in the group-wide reporting system.



WATER

- If water is contaminated on the construction site (sediments, alkaline water), it must be treated in a sewage treatment plant with regard to turbidity and pH before being discharged into an on-site prefilter. The choice of prefilter is made in consultation with the responsibilities. It is always necessary to comply with the applicable regulations of the discharge permit.
- Contaminated demolition materials, including reclaimed asphalt, should be disposed of promptly and in accordance with applicable regulations. They may only be stored on solid, impermeable or covered surfaces. Any water that comes into contact with these materials must be collected, treated and drained in accordance with legal requirements.
- The cleaning of construction machines and vehicles takes place over a sealed wash zone. If required by legislation, the wash zone must also be equipped with an oil, gasoline or coalescence separator.
- The refueling of vehicles and machines must be carried out in accordance with regulations.
- Water polluting chemicals and substances must be stored in a sealed, marked and weatherprotected container with collecting basin (IBC container). Prohibition of combined storage must be respected. The corresponding PSE (personal safety equipment) and emergency equipment must be provided.
- To reduce water consumption, water-saving technologies must be used, staff must be trained in efficient water management and water consumption must be monitored regularly.



SOIL

- Whenever possible, check the re-use of material on own or adjacent construction sites to avoid unnecessary transport.
- The removal and installation of individual soil layers must be carried out for each layer separately, with a minimum damage to the soil and soil consolidation. Example: The topsoil must be removed and stored so that it retains its physical and biological properties.



ENERGY

- When purchasing new or used construction machines, low energy consumption is taken under consideration for the purchasing decision.
- Wherever possible and reasonable measures are taken to reduce energy consumption.



AIR

- Construction machines and equipment with diesel combustion engines have to have a particle filter, are to be regularly maintained and have to meet the applicable emission values. Corresponding proofs can be provided if requested.
- Dust is reduced with appropriate measures (for example, moistening, machines with suction, driver's cabins with protective ventilation, wheel washers, low discharge height, lower driving speed on the construction site).
- Wherever possible, solvent-free products (with low VOC content) are to be used.



NOISE

- Applicable working hours and operating restrictions for the construction are to be strictly followed.
- Noise-intensive activities are, if possible, carried out simultaneously and are adapted to local residents' needs. The local residents are informed accordingly by the project managers.
- Motors are switched off when not in use.
- Where possible, low-noise construction machines and equipment are used. These are equipped with a noise tag and the maintenance papers.
- If required and possible noise-absorbing walls, noise enclosures or noise shadows (containers or material storage) are to be used.



CONSTRUCTION WASTE

- Construction waste is not burnt on the construction site.
- Construction site waste is collected and correctly sorted on the construction site, except if it's technically impossible (because of poor space conditions or accessibility) or if excessively high additional costs incur.
- Special waste (e.g. waste oil, foams, spray cans, residual colors, glues and so forth) must always be collected separately and disposed of according to the applicable regulations and with the necessary caution. The documents regarding control and traceability must be kept in accordance with local regulations.
- Various well-marked containers are provided. The construction site personnel are trained and regular inspections of the waste separation are carried out.
- If possible, an authorized disposal company with a near-by disposal site is selected.
- If there is a risk due to hazardous substances, specialists are to be consulted.



Implenia, January 2024

10.2 Measures against neighbors

All persons working on the construction site must respect neighbors of the construction site and show appropriate consideration. This applies in particular in connection with private and company vehicles.

If possible, public transport is to be used. Further measures in the interest of good neighborly relations are to be examined and, if necessary, implemented. These include, among others, the measures mentioned in the environmental standard.

10.3 Waste water

All necessary measures must be taken to prevent construction site wastewater from entering the soil and/or the sewage system. Regardless of the planned precautions, the construction management must be informed as early as possible about the planned measures. A collection tray must be placed under each silo (mortar, insulation material, plaster, gypsum, etc.) to prevent these substances from entering the soil.

11 Site meetings

During the construction meetings, a current agenda item of the current construction site safety situation must be conducted with the contractors and suppliers (including anticipation of measures via safety concepts and work instructions). This agenda item should cover the current safety situation and also reports on incidents including near misses and dangerous situations. Measures or the further, binding procedure are to be determined in order to prevent a recurrence. All participants of the meeting are invited to contribute their situation and point of view.

The status of safety, health and environmental protection measures is also discussed with employees and their supervisors. An information board with the relevant information is set up, and the content is regularly checked and updated if necessary.

12 Abbreviations

Abbreviation	Description
BauAV	Construction Work Ordinance (fedlex.admin.ch: SR 832.311.141)
HSE	Health, Safety & Environment (Occupational Safety, Health & Environment)

13 Version history

Date	Version	Modified content	Released by
13.02.2024	1.0	Initial creation	Akeret Felix
21.05.2024	1.1	Section «fences» added	Akeret Felix
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