**Instructions for how the AMP Guide template should be used**

**Note:** This template is only an example and a guide to how a work environment plan might look. Using this template does not release those responsible for the work environment from their liability to make assessments and decisions based on each situation and as necessary in order to fulfil their work environment responsibilities.

**Note:** Bear in mind that sanction charges may be imposed on the client, BAS-P and/or BAS-U

* if the work environment plan is not dawn up before the construction site is established.
* if the work environment plan is not available at the worksite.
* if everyone working at the construction worksite is unable to partake of the work environment plan.
* Read more about the work environment plan at: [**https://www.av.se/en/production-industry-and-logistics/building-and-civil-engineering-work/work-environment-plan/**](https://www.av.se/produktion-industri-och-logistik/bygg/arbetsmiljoplan/)

**Introduction pages 1-3**

* Fill in information about the project on pages 1-2 so that contact details for all actors are included.
* Fill in information on the work environment organisation on page 3.

**To note on pages 1-2**

If the parties to the contract agreement have agreed that the client retains overall liability for the project and the client therefore appoints one or more contractors/consultants as BAS-P and/or BAS-U, then the client holds during the entire project a so-called back-up responsibility to ensure that BAS-P/U’s tasks are performed. This means, amongst other things, that the client is jointly liable together with BAS-P/U for ensuring that the work environment plan is drawn up by BAS-P, handed over to BAS-U, and subsequently adapted and adjusted by BAS-U as work is performed. Hence it is important that the client also signs the boxes on page 1.

If the parties to the contract agreement have instead agreed that the client in accordance with Chap. 3, Section 7c of the Work Environment Act relinquishes all work environment responsibility for the project during the planning and design phase and/or the project execution stage to a contractor/consultant, it is important that this is stated in the special box designated for this purpose on page 1. The contractor and/or consultant that assumes the client’s work environment responsibility is then referred to as the “client’s delegee” in accordance with the Work Environment Act and has the same so-called back-up responsibility as mentioned above.

When the work environment plan is revised or augmented during the project, it is important that this revision or augmentation is specified and described clearly in the boxes for revision history on pages 1-2. The same applies if a new company is appointed as BAS-P/U during the project, and/or the BAS-P/U company internally chooses a new BAS-P/U administrator.

**To note on page 3**

The person(s) to be named administrator of BAS-P and BAS-U tasks on page 3 is the person(s) – employee(s) or hired labour – of the company that the client or the client’s delegee as above has designated as BAS-P/U and which the company has internally decided shall perform the tasks in practice. These persons shall, in accordance with Section 6 of AFS 1999:3 Building and Civil Engineering Work, be trained, experienced and competent to perform the duties.

The person(s) designated as contact person(s) for BAS-U administrator on page 3 has, unlike the BAS-U administrator as described above, no responsibility to perform any BAS-U duties, and therefore does not require the same training, experience or competence as the BAS-U administrator. The contact person’s/contact persons’ duty is to be the person at the worksite that one can turn to when the BAS-U administrator is not present, and this person should have current contact information for the BAS-U administrator.

The box on page 3 for “Work at a permanent worksite – responsibility for coordination of work environment questions” refers to cases where building and civil engineering work is performed at a permanent worksite where other undertakings are underway simultaneously

(e.g. at a school, hospital or shopping centre). The person who should be listed in this box is the co-ordinator for the permanent operation. In most cases, this is the employer's representative at the permanent worksite, for example the principal at a school.

**Rules of order and safety, page 5-7**

The rules of order and safety on pages 5-7 are general. Be sure to **customise** these for the current project and the specific worksite as follows:

1. Cross out parts which may not apply to the current worksite. Select the text and press Delete.
2. Add any specific rules that apply to the current worksite.

**Risk overview, page 8**

Select on page 8 which tasks with specific risks are present in the current project by clicking in the respective box under “Present” or “Not present”. Add any additional risks not included in the list of 14 by replacing the text "List of additional specific risks" with information on the specific risk.

N.B. If you indicate that a specific risk does not occur in the project, then the action page for that risk as listed below should not be included in the work environment plan - remove it. In the same way, you must add an additional action page to the one below if you have listed additional risks as being present in the project.

**Risks, pages 9-28**

Every risk shall be handled in the same way, i.e. the user shall indicate:

* Which company performs which tasks, and what risks these tasks entail, as well as where at the worksite the risks are present.
* Which risk reduction measures shall be taken in the project.

In the “**Company**” field, enter the names of those companies performing work involving the specific risks. One company per row. Note that several different companies can perform work where the same risk occurs. Enter all companies, one per row. To obtain more space to list additional companies and risks, hit the Enter key while inside the field, and the size of the field increases. In the field “**Work/activity and risk(s)**” provide information on which work and the particular risk the company is performing, what risk it entails, and where it occurs at the worksite.

Risk reduction measures should be provided in the “**Measures”** field. Initially, you will find some references to regulations and information on work with the relevant risks, including the Swedish Work Environment Authority’s Provisions (AFS), brochures (ADI), books (H) and pages with specific themes on the Swedish Work Environment Authority's website [www.av.se](http://www.av.se)

Each reference for additional information includes a link to the relevant document. To read, hold down the Ctrl key and click on the relevant document (requires internet connection). Please note that even though there are many information references, the list is not exhaustive and further information can be found elsewhere.

**Risk reduction measures**

Risk reduction measures are divided into two parts in the template:

* Examples of a number of general risk reduction measures which are normal in most types of projects where the risks are present. Any risk reduction measures from the general section that are not relevant are removed by selecting and pressing Delete. The general part is framed in green.
* A part where the work environment plan is adapted for the current project. This section consists of two parts, both framed in blue.
  + A part where you can choose from a number of commonly occurring risk reduction measures by ticking a checkbox. N.B. This part is about adapting the work environment plan to the project based on the work to be carried out at the specific worksite. For most building and civil engineering work, there are detailed regulations in the Swedish Work Environment Authority’s provisions. Many of the risk reduction measures in the template repeat these regulations and are therefore compulsory and must be applied to the relevant work or the actual protective device and cannot be deleted. The risk reduction measures in the template are not exhaustive; additional regulations for further measures can be found in the Swedish Work Environment Authority’s provisions.
  + A part where it is possible to list other measures which are not in the finished list.
* A number of measures presuppose that the type of protection, make, distance, etc., are specified. This is indicated in the template with TEXT IN CAPITAL LETTERS, HIGHLIGHTED IN YELLOW. This text should be replaced with information on the make, applicable safety clearances, etc.

**Risks, pages 29-31**

If there are risks in addition to the 14 listed on page 8, there is room to list 3 more risks and associated risk reduction measures on pages 29-31. Fill in the risk(s) and risk reduction measure(s) manually.

**Update Table of Contents page 4**

1. This is only done when the plan is ready to print. The table of contents, etc., can be updated as follows:
2. Right-click in the Table of Contents to see the menu.
3. Select “Update field”
4. If a question appears, select the alternative “Update entire table”.

**Save the work environment plan**

Save the work environment plan by selecting File, and then Save.

**Translation**

In the event of disagreement concerning the interpretation and content of this text, the Swedish version shall have priority.

**Work environment plan**

|  |  |
| --- | --- |
| Project name | Description of project and project delivery method |
|  |  |
| Client’s delegee: company name, corporate ID number | Contact person: name, telephone number and mail address |
|  |  |
| BAS-P: company name, corporate ID number | Contact person: name, telephone number and mail address |
|  |  |
| BAS-U: company name, corporate ID number | Contact person: name, telephone number and mail address |
|  |  |
| If work environment responsibility is transferred to a so-called client’s delegee as per Chapter 3, Section 7c of the Work Environment Act | |
| Client’s delegee; company name, corporate ID number. | Contact person for client’s delegee: name, telephone number, mail address |
|  |  |
| Work Environment plan’s period of validity | |
|  | |

### This work environment plan has been drawn up by the client/BAS-P

|  |  |  |
| --- | --- | --- |
| Date | BAS-P  Name and signature | Client/Client’s delegee  Name and signature |
|  |  |  |

### Revision history, BAS-P

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Supplements/revisions to the plan | Newly designated BAS-P (if applicable)  Company or administrator | Signature BAS-P |
|  |  |  |  |
|  |  |  |  |

### This work environment plan has been given to the BAS-U

|  |  |  |
| --- | --- | --- |
| Date | BAS-U  Name and signature | Client/Client’s delegee  Name and signature |
|  |  |  |

### Revision history, BAS-U

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Supplements/revisions to the plan | Newly designated BAS-U (if applicable)  Company or administrator | Signature BAS-U |
|  |  |  |  |
|  |  |  |  |

# Work environment organisation

### Building work environment co-ordinator planning and design “BAS-P”

|  |  |
| --- | --- |
| BAS-P company name | Name of contact person for BAS-P administrator(s) |
|  |  |
| Name of administrator for BAS-P information and telephone number | Name of contact person for BAS-P administrator(s) |
|  |  |

### Building work environment co-ordinator for execution “BAS-U”

|  |  |
| --- | --- |
| BAS-U company name | Name of contact person for BAS-U administrator(s) |
|  |  |
| Name of administrator for BAS-U information and telephone number | Name of contact person for BAS-U administrator(s) |
|  |  |

### Work at the permanent worksite – co-ordinator for the permanent operation.

|  |  |
| --- | --- |
| Name and company | Telephone |
|  |  |

### The person in charge of fire safety during the construction period

|  |  |
| --- | --- |
| Name and company | Telephone |
|  |  |

### The person in charge of issuing permits for hot work

|  |  |
| --- | --- |
| Name and company | Telephone |
|  |  |
|  |  |

### Contact person(s) for emergency preparedness and evacuation in the event of an accident or incident

|  |  |  |
| --- | --- | --- |
| Name and company (contact person for emergency preparedness at the construction site) |  | Telephone |
|  |  |  |
|  |  |  |
| Name and company (contact person for emergency preparedness at the permanent worksite) |  | Telephone |
|  |  |  |

### Person trained in first aid

|  |  |
| --- | --- |
| Name and company | Telephone |
|  |  |
|  |  |

### Safety delegates, as well as safety delegates with coordination responsibilities

|  |  |  |
| --- | --- | --- |
| Name | Company | Telephone |
|  |  |  |

### Safety inspection tours

|  |
| --- |
| At this worksite, safety inspection tours are conducted (provide time intervals, for example, once a week on Tuesday) |
|  |

### Contact persons for the contractor and at the construction worksite

|  |  |  |  |
| --- | --- | --- | --- |
| Name |  | Company | Telephone |
|  |  |  |  |
|  | |  |  |
|  | |  |  |
|  | |  |  |
|  | |  |  |
|  | |  |  |

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# Rules of order and safety at the worksite

### Order at the worksite

The worksite shall be kept in good order. This contributes to well-being and accessibility and can prevent many accidents.

* Upon arrival at the worksite, report to site management.
* The ID06 card should be worn visibly at the worksite; rules for ID06 must be followed.
* Materials should be placed in designated places. Ensure that transport routes are not blocked.
* Each contractor cleans the worksite after completion of their respective work.
* Take care of all waste materials - sort waste on an ongoing basis.
* Within the work area, parking is only allowed in designated areas.
* Escape routes, communication routes and transport routes should always be unobstructed.
* Rules to keep personnel areas in order, as well as maintenance instructions for same, shall be followed carefully.
* If you observe risky behaviour, intervene.
* Report all incidents, injuries and safety breaches to your immediate supervisor and the safety delegate.

### Personal protective equipment

Approved safety helmets and properly classified protective clothing, as well as safety shoes with penetration resistant soles and protective toe caps shall be worn by everyone at the worksite. Additional personal protective equipment shall be used in accordance with current risk assessments, work preparations, safety instructions or routines. Every contractor shall - unless otherwise agreed upon - provide his/her employees with protective equipment suitable for each individual as above, as well as any particular safety devices that a particular job might necessitate. They must also ensure that employees use protective equipment/devices and have the necessary competence for this, as well as ensuring that their own equipment/devices are inspected and maintained on an ongoing basis.

### Safety devices

Before work begins, always check that requisite safety devices are correctly and safely done. Work may entail that access to a worksite be temporarily restricted to prevent injuries. ***Please note:* if a protective device is removed in order to perform a task, putting the device back into position is obligatory.** If a protective device cannot be immediately restored, it must be reported to supervisory personnel and BAS-U (omission or negligence can entail penalties in accordance with Chapter 8, Section 2 of the Work Environment Act).

### Hot work, fire hazards and fire equipment

Hot work refers primarily to welding and cutting, work with grinders, soldering, and work with gas flames for heating or defrosting. No hot work can be initiated before the person in charge of issuing permits for fire protection has performed an inspection and issued a permit. Ensure that the Swedish Fire Protection Association’s Safety Regulations for Hot Work are met. Always inform the person in charge of fire protection if you intend to use flammable products. Everyone should familiarise themselves with the location of fire extinguishers. Gas and propane tanks shall, when not in use, be stored in specially designated areas with warning signs.

### Inspection and competence requirements, and operator licenses for equipment

Where operator licenses or competency certificates are required, these shall be shown to BAS-U, and for lifting appliances and trucks, an employer permit shall also be presented.

**Machines and devices subject to inspection**

Excavators, cranes, lifting appliances, lifts and other such equipment or vehicles must be inspected at regular intervals. Equipment or vehicles lacking an inspection certificate or which have received remarks in connection with an inspection shall not be used at the worksite. Inspection certificates must be presented to BAS-U before any work can begin.

### Noise, dust, smell and vibrations

In addition to various types of work, driving of vehicles within the worksite also gives rise to dust. Measures to reduce dust generation, noise, disturbing smells or vibrations shall be carried out by everyone who is active at the worksite. Firstly, machines and ways of working shall be chosen that give as little exposure as possible. Secondly, work that gives rise to noise and dust shall be screened off, and personal protection equipment against dust, noise and vibrations shall be used. Work that gives rise to dust, noise or disturbing smells shall be coordinated and planned together with BAS-U in order to minimise exposure to dust, noise and disturbing smells in the surrounding areas.

### Smoking

Smoking is only permitted outdoors and at designated places.

### Electrical safety

Only authorised fitters are permitted to perform procedures on power stations - temporary or permanent. Only changing of fuses may be performed by other personnel. Treat cables carefully - they are easily damaged. Do not allow cables to lie unprotected where there is risk of injury. Damaged electrical cables shall not be used under any circumstances. If damage is discovered on an electrical cable - inform supervisory personnel immediately. For work that can lead to contact with existing cables, e.g. excavation and digging work, drilling and demolition, always consult the BAS-U regarding cables present in the work area.

### Ergonomics

The risk of developing musculoskeletal and joint problems arises primarily when work entails demanding work positions and movements, manual handling or repetitive work. Organisational conditions, for example, time pressure, lack of control over the work situation and insufficient recovery time can also contribute to strain problems. Hence it is essential that all worksite jobs are planned and designed so they can be carried out as ergonomically as possible, including through provision of adequate work space, availability of requisite technical aids, the possibility for job rotation and recovery, and ensuring that workers have adequate knowledge about work techniques and aids to avoid the risk of strain injuries. Material and equipment should be chosen based on what allows for the best possible work environment conditions, such as manageability, weight, transportability, possible use of aids, etc.

### Chemical products and hazardous substances

BAS-U has in his/her possession a binder with safety data sheets/product information sheets of all chemical products used at the worksite. Subcontractors and complementary contractors shall provide BAS-U with safety data sheets/product information sheets of the chemical products that they handle at the worksite. If hazardous substances must be used – ensure that information is available on what risks each substance can entail and what protective measures need to be taken. If you suspect that undocumented hazardous materials are present (PCBs, asbestos, etc.), contact site supervisors immediately.

### Sub- and complementary contractors

All sub- and complementary contractors shall ensure that the content of the work environment plan and the Rules of order and safety have been communicated to their workers in such a way that everyone understands. If necessary, sub- and complementary contractors shall provide translation or interpretation services in the languages that their workers understand. Sub- and complementary contractors are responsible as an employer for their respective employees, including any hired labour, to ensure that their organisation’s work environment efforts function and are systematic. This means that each respective sub- and complementary contractor’s scope of responsibility includes risk assessments and work preparations; informing their employees including any hired labour about the risks involved in the work and training them so that they know how they should protect themselves from these risks; familiarising all new personnel with the work; and collaborating on work environment efforts together with safety delegates and other worker representatives. Sub- and complementary contractors should submit the risk assessments relevant to their work to BAS-U. Staggering of work hours and/or accruing overtime is not allowed unless agreed upon with BAS-U.

### Emergency preparedness

The emergency preparedness plan to be used in the event of accidents has been communicated to everyone on the worksite and is displayed/distributed. Routines for emergency preparedness are available at the site office.

### Risk of falls

Only authorised personnel are allowed to build, significantly change or move scaffolding. Risk of falls is reduced in the first instance through use of guardrails, protective covering or other technical protective solutions. In the second instance, protective netting or some other solution to protect staff collectively should be used, and finally, personal fall protection equipment is used. Work requiring fall protection equipment shall never be performed as solitary work. A contingency plan for rescue shall be drawn up before work begins. When using mobile work platforms, e.g. boom lift or scissor lift, personal fall protection equipment is obligatory. All persons in the lift must be anchored at an anchor point designed for that purpose. Work on ladders should only take place as an exception, and then only provided the risks are deemed so small that the use of other, safer equipment is not warranted.

### Lifting operations

Slingers/signalmen should be able to present a diploma for Controlled Lifting Operations. Lifting over areas without restricted access is forbidden. It is crucial that everyone involved in the lifting can communicate with each other. Lifting appliances and lift equipment must be checked on a daily basis. A special lifting co-ordinator shall be appointed in connection with extra risky lifting operations.

### Alcohol and drugs

Alcohol and drugs are prohibited at the worksite. Persons under the influence shall be removed immediately from the worksite. It is the employer’s responsibility to ensure safe arrival home.

**Psycho-social work environment**

Bullying, discrimination and other offensive behaviour is forbidden at the worksite. We care about each other. Thus we are careful in how we behave toward each other.

### Under-aged workers/work-based learning (WBL)

Before an under-aged person can be hired to perform work at the worksite, a mentor/supervisor must be appointed and this mentor/supervisor must provide to BAS-U a special risk assessment of the under-aged person’s psychological and physical state relating to their capacity to perform the work safely. The mentor/supervisor must also demonstrate that the under-aged person has had the training and instruction required to be able to handle any tools or machines safely.

### Vigilance

Auditory entertainment systems (such as radios, headphones with built-in radio, MP3 players, etc.) can only be used if approved by the site supervisor.

### Disciplinary action

Those who violate these rules may be barred from the worksite and subject to labour law sanctions.

**N.B. Bear in mind that sanction charges may be imposed on respective employers, including but not limited to the following:**

* Violation of the Swedish Work Environment Authority's provisions on scaffolding (AFS 2013:4) relating to the requirement for documentation that workers who assemble or dismantle scaffolding and weather protection have completed the appropriate training to do so.
* Violation of the Swedish Work Environment Authority's provisions on lifting appliances and certain other technical devices (AFS 2014:16) relating to the requirement for approved inspections and valid inspection certificates when these devices are used.
* Violation of the Swedish Work Environment Authority's provisions on building and civil engineering work (AFS 2014:26) relating to the requirement to use and design fall protection where the risk for falls to a lower level exceeds two metres.
* Violations of the Swedish Work Environment Authority's provisions on asbestos (AFS 2014:27) including, but not limited to, the Swedish Work Environment Authority's permits for handling of asbestos and valid training certification for the person in charge and for those working with materials containing asbestos.
* Violation of the Swedish Work Environment Authority's provisions on the use of trucks (AFS 2014:20) relating to the requirement for a permit from the employer to use trucks.
* Violation of the Swedish Work Environment Authority's provisions on medical surveillance in working life (AFS 2014:23) relating to the requirement for fitness to work certificates, e.g. for working with asbestos.

# Risk overview (list any additional specific risks beyond those already listed

|  |  |  |
| --- | --- | --- |
| **N.B. This list of risks and the subsequent descriptions of safety measures must be kept current based on all work done at the worksite at all times**  **Work at the worksite which presents special risks** | **Present** | **Not present** |
| 1. Work entailing risk for falls to a lower level where the drop is two metres or more. |  |  |
| 1. Work entailing risk for being buried underground or sinking down into loose soil. |  |  |
| 1. Work that can entail exposure to chemical and biological substances. |  |  |
| 1. Work which exposes the workers to ionising radiation. |  |  |
| 1. Work near high voltage power lines. |  |  |
| 1. Work entailing the risk of drowning. |  |  |
| 1. Work on wells and tunnels and on underground works |  |  |
| 1. Work carried out underwater with diving equipment. |  |  |
| 1. Work carried out in a caisson with a compressed-air atmosphere. |  |  |
| 1. Work involving the use of explosives. |  |  |
| 1. Work involving the launching, assembly and dismantling of heavy prefabricated components or heavy shuttering elements. |  |  |
| 1. Work in a place or area with passing vehicular traffic. |  |  |
| 1. Demolition of load-bearing structures or health-endangering materials or substances |  |  |
| Work on work platforms shared with ongoing ordinary enterprises |  |  |
| Any additional risks, describe here |  |  |
| Any additional risks, describe here |  |  |
| Any additional risks, describe here |  |  |

# 1. Measures to prevent risk for falls to lower levels where the drop is two metres or more

|  |  |  |
| --- | --- | --- |
| **Company** | **Work/activity and risk(s): provide information on what and where** | |
|  | **Examples of work entailing risk for falls: work on roofing, facades and ladders; in holes, e.g. in joists or ground; in assembly of prefabricated elements, on the edges of excavations; rock work** | |
| **Measures** **See also** [**AFS 1981:14,**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/skydd-mot-skada-genom-fall-foreskrifter-afs1981-14.pdf) [**AFS 1999:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/byggnads-och-anlaggningsarbete-foreskrifter-afs1999-3.pdf)**,** [**AFS 2001:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/anvandning-av-personlig-skyddsutrustning-foreskrifter-afs2001-3.pdf)**,** [**AFS 2004:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/stegar-och-arbetsbockar-foreskrifter-afs2004-3.pdf)**,** [**AFS 2013:4**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/stallningar-foreskrifter-afs2013-4.pdff)**,** [**H 456**](https://www.av.se/globalassets/filer/publikationer/bocker/sakra-stallningar-bok-h456.pdf)**,** [**ADI 511**](https://www.av.se/globalassets/filer/publikationer/broschyrer/stegar-rad-for-steganvandning-broschyr-adi511.pdf)**,** [**ADI 512**](https://www.av.se/globalassets/filer/publikationer/broschyrer/byggnadsstallningar-broschyr-adi512.pdf)**,** [**ADI 539**](https://www.av.se/globalassets/filer/publikationer/broschyrer/sakrare-bygg-och-anlaggningsarbete-broschyr-adi539.pdf)**,** [**ADI 583**](https://www.av.se/globalassets/filer/publikationer/broschyrer/checklista-for-projekteringsansvar-broschyr-adi583.pdf) **and** [**the Swedish Work Environment Authority's information page on the internet**](https://www.av.se/produktion-industri-och-logistik/bygg/risker-vid-byggnad--och-anlaggningsarbeten/arbetsmiljoplan-och-dess-risker/fall---arbete-som-utfors-pa-hojd-over-2-meter/)**,** [**and the Swedish Work Environment Authority's information page on scaffolding**](https://www.av.se/produktion-industri-och-logistik/stallningar/)**.** | | |
| Preparatory methods based on selected production methods and materials If a fall risk is present, permanent safety devices shall be used in the first instance. Examples of permanent safety devices:  •fall protection guardrails  •scaffolding  •work platforms and work baskets  •safety nets  Personal fall protection equipment should only be used in exceptional cases where it is not possible to use permanent safety devices, or when the time required to install permanent safety devices takes significantly longer than what it takes to perform the actual work.   |  |  | | --- | --- | |  | Not applicable | |  | Prefabricated structural elements are used | |  | Windows are pre-mounted in wall elements | |  | Attachments have been prepared in facades for scaffolding | |  | Attachments have been prepared for guardrails in joists, roofing, shafts and stairwells. | |  | Attachments have been prepared on roofing and on the edges of joists to be used with personal fall protection equipment |  Work on work platforms and work baskets (e.g. aerial platforms)  |  |  | | --- | --- | |  | No work is performed on work platforms or in work baskets. | |  | Lifting operation training for those who lead and those who perform lifting of persons. | |  | Work platforms and work baskets shall be inspected and approved before they are put into service. | |  | Work platforms shall be chosen and adapted for existing surfaces. Requisite support shall be used for work platforms. | |  | Work platforms and work baskets shall be checked on a daily basis by an authorised person. | |  | Surfaces for work platforms shall be checked for stability, gradient and unevenness before work begins. When using work platforms, risks in the area surrounding the work platform’s utilisation area shall also be risk assessed, for example, from traffic, getting crushed, or for electrical safety. | |  | For work on platforms and in work baskets, safety lines should be used and an impact barrier in place. See the emergency rescue plan when using harnesses and safety lines for more detailed instructions. |  Work on ladders:  |  |  | | --- | --- | |  | There is no work on ladders. | |  | Work on ladders is prohibited. Scaffolding or a lift shall be used. | |  | Work on ladders without personal fall protection equipment is allowed, *but only for* single tasks which take less than 15 minutes to perform and which can be performed with one hand so that the other hand can hold the ladder, and the length of the ladder must not exceed 5 metres and the drop must not exceed 4 metres. |  Work on scaffolding  |  |  | | --- | --- | |  | There is no work on scaffolding. | |  | The planned scaffolding is appropriately designed for the work. | |  | Selected prefabricated scaffolding is checked for approval according to industry standards, any pipe scaffolding is erected according to documentation specific to the particular make, and instructions are provided to BAS-U. | |  | Only contractors with authorised scaffolding training can be brought into a project for assembling, dismantling or changing scaffolding at the worksite. Such contractors must present their training certification to BAS-U before scaffolding is assembled, dismantled or changed. | |  | Before scaffolding can be brought into use, there must be an inspection followed by a handover to BAS-U. There is documentation that the scaffolding has been erected correctly and that it is appropriate for the work. Copies have been provided to BAS-U. | |  | Every contractor who uses the scaffolding must always check that it is in good condition and report any deficiencies to BAS-U before using it, and on an ongoing basis thereafter for the duration of use. | |  | All wheels on rolling scaffolding must be locked before work begins. | |  | Guardrails shall be of appropriate strength and height and have at least one principle guardrail, intermediate guardrail and a toeboard. Especially for work on eaves or other roof edges, scaffolding and guardrails must be fitted to take into account the pitch of the roof and the type of work to be done so that the risk of falls is properly prevented. The distance between the scaffolding stage and the facade must be less than 30 cm. There must be stairs as access routes to and within the scaffolding. | |  | See Rules of order and safety for information on temporary removal of guardrails and work platforms. | |  | BAS-U shall perform safety inspection tours more frequently on scaffolding XX interval. |  Shafts and openings: Shafts and openings in facades and joists, as well as ground/line shafts and wells, shall be equipped with strong, clearly marked protective devices for prevention of falls and tripping, e.g. guardrails, a cover, or access restriction.   |  |  | | --- | --- | |  | Selected protective device is: PROVIDE INFORMATION ON PROTECTIVE DEVICE | |  | A minimum of 2 metres safety clearance if personal fall protection equipment is not used. |  Use of personal fall protection equipment:  |  |  | | --- | --- | |  | Personal fall protection equipment is not used. | |  | Personal fall protection equipment can be used as a last resort, but only under the following conditions  • Equipment should be fitted personally for the individual using it, used by personnel who are trained in its use, and checked by an authorised person. Documentation on inspection of equipment is obligatory.  • Equipment should break and stop a fall, and prevent risky swing falls.  • Equipment shall consist of a full body harness and connecting lanyard with energy absorber. The lanyard shall be anchored. There are four different types of lanyard systems with energy-absorbing mechanisms to use with a full body harness: a lanyard; an energy absorber with a function that damps a fall; a retractable type fall arrester; a guided type fall arrester including an anchor line.  • Equipment should have the right lines/cables, e.g. can tolerate sharp edges.  • planned anchorage points shall be checked and approved and be capable of sustaining any anticipated loads.  • Solitary work shall not be undertaken when personal fall protection equipment is being used. Help shall be available quickly, within 10-15 minutes, in the event someone is hanging in a harness.  • An emergency rescue plan with instructions on quick help for someone hanging in a harness must be drawn up before work begins. The emergency rescue leader of a rescue operation shall have specific training. |  Roof work (protective measures in addition to above):  |  |  | | --- | --- | |  | No additional protective measures are applicable for work on roofs. | |  | Double safety devices shall be used when the pitch is steep (e.g. personal fall protection equipment and roof protection) | |  | Determine the need for and, if possible, mount a horizontal work platform on sloping roofs. | |  | Work on roofs is discontinued if weather conditions become unsuitable (strong wind, snowfall, rain, ice/snow on the roof). | |  | Before work on a roof begins, its load-carrying capacity and surface roughness shall be checked. | |  | Material and tools present on the roof should be placed in such a way that they cannot slide down. If necessary, materials shall be fastened in an appropriate manner. | |  | When moving about on the roof, it must be possible to continuously anchor personal fall protection equipment. |  Other measures | | |
| Work with the above risks completed on: | | Signature BAS-U |
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# 2. Measures to mitigate risk of burial under earth falls or engulfment in loose soil

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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
|  | **Example: Work entailing a risk of burial under earth falls (excavation, piling, dumping/moving earth)** | |
| **Measures** **See also**[**AFS 1981:15**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/skydd-mot-skada-genom-ras-foreskrifter-afs1981-15.pdf)**,** [**AFS 1999:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/byggnads-och-anlaggningsarbete-foreskrifter-afs1999-3.pdf)**,** [**ADI 539**](https://www.av.se/globalassets/filer/publikationer/broschyrer/sakrare-bygg-och-anlaggningsarbete-broschyr-adi539.pdf) **and** [**the Swedish Work Environment Authority’s information pages on the internet**](https://www.av.se/produktion-industri-och-logistik/bygg/risker-vid-byggnad--och-anlaggningsarbeten/arbetsmiljoplan-och-dess-risker/schaktningsarbete-med-risk-for-ras/)**.** | | |
| Preliminary investigations A geotechnical survey has been performed and is available at the site office.   |  |  | | --- | --- | |  | Depth to the water table has been investigated. | |  | No excavation shall be deeper than what is prescribed in geotechnical surveys as the maximum depth for excavation. |  Transport and storage Transport routes are designed and marked in such a way so that there is no risk that excavation is affected by traffic.  Hardened or otherwise reinforced surfaces are used for transport of heavy vehicles and equipment to and from excavations.  Excavated material is piled at an authorised distance from the excavation; clearance shall be XX metres.  Safety barriers shall prevent vehicles from falling down into an excavation.  There must be safe access routes to and from excavation for personnel. Shall normally consist of stairs.   |  |  | | --- | --- | |  | If trucks pulling trailers are used, there shall be personnel available to guide. |  Work - methods and equipment  1. The following person is responsible for excavation work NAME AND TELEPHONE NUMBER 2. If there is any risk for collapse of earth, then the area should be closed and permanently marked. 3. Edges, slopes or other level differences where there is a risk that vehicles, personnel or third parties can fall to a lower level shall be provided with protective covering or closed off by guardrails.  |  |  | | --- | --- | |  | Proof of competency for the person in charge of excavation must be available for examination by BAS-U (BAM/Introductory course Swedish Work Environment Authority, course “Safe Excavation” or the equivalent). | |  | The pitch of slopes is based on geotechnical surveys and in close consultation with geotechnicians. | |  | Special work preparations and checks are performed in accordance with “Safe Excavation” or an equivalent training. | |  | Support structures/collapse protection systems are used when excavating. | |  | Solitary work when excavating is forbidden. | |  | If necessary, a decision is taken on any banning solitary work on excavations. | |  | If possible, no excavation should be deeper than 1.5 metres. | |  | Excavation and digging of holes - checks should be performed before production start-up, as well as daily checks to monitor changes due to load, vibration, degree of moisture, weather conditions, etc. | |  | Drainage of water from excavations (depth to the water table has been investigated). | |  | Special work preparations and checks when work entails sheet-piling. |  Other measures | | |
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| Work with the above risks completed on: | | Signature BAS-U |
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# 3. Measures to prevent exposure to chemical and biological substances

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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
|  | **Examples of substances which can be present in the ground, buildings or building materials, or which can occur in connection with the work itself:**  **Asbestos, PCBs, mercury, heavy metals/lead, dust, mould, quartz, thermosetting plastics (isocyanates). Special health and safety hazards and the need for medical surveillance are present when there is a risk that hygienic air quality limits are exceeded.** | |
| **Measures See also AFS 1992:16, AFS 1999:3, AFS 2005:6, AFS 2006:1, AFS 2014:43, ADI 296 andthe Swedish Work Environment Authority's information page on the internet.** | | |
| **Important considerations for work involving asbestos, PCBs and thermosetting plastics:**   * Materials containing asbestos can only be demolished, handled and transported by personnel from authorised companies which have permits from the Swedish Work Environment Authority. * Materials containing PCBs can only be demolished, handled and transported by personnel from authorised companies. * Personnel who work with thermosetting plastics must have the required training.  Preliminary investigations The types of chemical and/or biological substances that occur at the worksite have been investigated, as well as where they are found and to what extent. This inventory is available at the site office.  Alternatives to exclude or reduce use of chemical substances have been investigated.   |  |  | | --- | --- | |  | Water locks have been examined for the presence of mercury or biological waste products. |  Work - methods and equipment Building materials which contain hazardous chemical or biological substances are clearly marked pending demolition.  Placement/location of equipment that can spread hazardous substances (waste containers as needed, any gas bottles are stored separately from chemicals and flammable substances)  There are documented routines for which types of protective equipment should be used for the various stages of work. ASBESTOS  |  |  | | --- | --- | |  | There is no work with materials containing asbestos. | |  | Materials containing asbestos can only be demolished, handled and transported by personnel from authorised companies which have permits from the Swedish Work Environment Authority. A copy of this permit with associated appendices/documentation shall be available at the site office.  PROVIDE COMPANY’S NAME  PROVIDE NAME AND TELEPHONE NUMBER FOR THE COMPANY’S CONTACT PERSON AT THE WORKSITE |  PCBs  |  |  | | --- | --- | |  | There is no work with materials containing PCBs. | |  | Materials containing PCBs can only be demolished, handled and transported by personnel from authorised companies.  PROVIDE COMPANY’S NAME  PROVIDE NAME AND TELEPHONE NUMBER FOR THE COMPANY’S CONTACT PERSON AT THE WORKSITE |  QUARTZ  |  |  | | --- | --- | |  | There is no work exposing persons to quartz dust. | |  | The technical equipment used for handling of materials containing quartz (when grinding, drilling, breaking of concrete, etc.) must include a localised ventilation system or similar to prevent dust from spreading. | |  | Handling of materials containing quartz is isolated from other work at the worksite and dust is limited from spreading through use of water spray. | |  | Respiratory protection - half-mask with filter P3 - is worn during work that generates dust. |  DUST  |  |  | | --- | --- | |  | There is no dust-creating work. | |  | A localised ventilation system is used during dust-generating work. | |  | Respiratory protection - half-mask with filter P3 - is worn during dust-generating work. | |  | Dust-generating work has been coordinated with other work. | |  | Premises where dust-generating work takes place should be cleaned every week. |  THERMOSETTING PLASTICS  |  |  | | --- | --- | |  | There is no work involving thermosetting plastics. | |  | Personnel working with thermosetting plastics have received the training required for the work. |  Special technical or organisational safety measures There are routines for how undocumented materials encountered should be handled, where there is suspicion that they may hazardous.  Affected workers are informed about health and fall risks associated with the materials and substances handled, and how these risks shall be prevented.  Safety data sheets for all chemical substances used at the worksite are available at the site office.  There are documented handling and protection instructions for work at the worksite which can entail exposure to hazardous chemical substances. BAS-U has coordinated these types of work to minimise the risk of spreading to the extent possible.  Those persons performing such work or handling such materials as require medical surveillance can produce a certificate when going through checks.   |  |  | | --- | --- | |  | Affected workers are informed about which stages of the work can only be performed by authorised companies. | |  | Authorised company permits and employee training certificates, as well as other documentation relevant to the described stage of work, have been checked. | |  | Coordination with operations in close proximity has taken place. | |  | Some parts of the work have been scheduled outside of normal working hours to reduce the number of persons present at the worksite. | |  | There is a contingency plan for any accidents involving chemical substances. |  Other measures | | |
| Work with the above risks completed on: | | Signature BAS-U |
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# 4. Measures to prevent exposure to ionising radiation

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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
|  |  | |
| **Measures See also**[**AFS 1987:2**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/hogfrekventa-elektromagnetiska-falt-foreskrifter-afs1987-2.pdf)**,** [**AFS 1999:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/byggnads-och-anlaggningsarbete-foreskrifter-afs1999-3.pdf) **and** [the **Swedish Work Environment Authority's information page on the internet**](https://www.av.se/produktion-industri-och-logistik/bygg/risker-vid-byggnad--och-anlaggningsarbeten/arbetsmiljoplan-och-dess-risker/arbete-med-joniserad-stralning/)**.** | | |
| Preliminary investigations  |  |  | | --- | --- | |  | Not applicable | |  | Preliminary investigations of radiation levels have been conducted. | |  | Radon content has been measured. |  Special technical or organisational safety measures Affected workers are informed about health and fall risks associated with the materials, substances, and machinery involved, and how these risks shall be prevented. Special coordination measures to prevent a risk from spreading shall be taken.   |  |  | | --- | --- | |  | There are secure storage possibilities for measuring apparatus that emit ionising radiation. | |  | Special regulations for the use of measuring apparatus that emit ionising radiation are documented. |  Other measures | | |
| Work with the above risks completed on: | | Signature BAS-U |
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# 5. Measures to reduce risk when working near high voltage power lines

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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
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| **Measures See also**[**AFS 1999:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/byggnads-och-anlaggningsarbete-foreskrifter-afs1999-3.pdf) **and**[the **Swedish Work Environment Authority's information page on the internet**](https://www.av.se/produktion-industri-och-logistik/bygg/risker-vid-byggnad--och-anlaggningsarbeten/arbetsmiljoplan-och-dess-risker/arbete-vid-hogspanningsledningar/)**.** | | |
| Preliminary investigations Power line owner and contact person: PROVIDE COMPANY, NAME AND TELEPHONE NUMBER  Survey of the placement of high voltage power lines within the planned construction area has been done.  Supporting documentation in the form of maps and drawings have been requested from the power line owner.  Information about power cables with voltage carrying cables marked has been requested.  The exact location of high voltage power lines/cables has been documented in a map which is available at the worksite.  All affected contractors have been informed about the high voltage power lines/cabling.  Safety clearances are established and documented: PROVIDE SAFETY CLEARANCES Transport operations Access and communication routes are laid out so as to prevent risk of impact to cabling, foundations and posts.   |  |  | | --- | --- | |  | Physical barriers are used to prevent machines from coming into contact with cabling. |  Work, methods and equipment Only manual digging is permitted in close proximity to cabling in the ground.  Solitary work shall not be undertaken within a safety clearance area.  Permanent construction cranes are located at the required distance from high voltage power lines.   |  |  | | --- | --- | |  | Alternative lifting appliances are used. | |  | Special work methods are applied for work under currency-bearing cables. | |  | Blasting and crushing of rock materials is conducted at the required distance from power cables. | |  | Electrical cabling and electrical equipment at the worksite must be protected from mechanical impact and checked regularly; main circuit breakers shall be clearly marked with signs; coils of cable shall be equipped with heat protection; aerial cables should leave enough distance for passing underneath and for work with cranes. | |  | For every aspect of work where electricity poses a danger, there must be an electrical safety plan. | |  | When working in close proximity to areas with rail tracks, special measures have been taken in the form of PROVIDE INFORMATION ON MEASURES |  Special technical or organisational safety measures Established in consultation with the power line owner.   |  |  | | --- | --- | |  | High voltage power lines must be moved – application to move power lines has been made to the power line owner. | |  | High voltage power lines should be de-energised (turned off) when worked on – application to disconnect power lines has been made to the power line owner. |  Other measures | | |
| Work with the above risks completed on: | | Signature BAS-U |
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# 6. Measures for work entailing a risk of drowning

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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
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| **Measures** **See also** [**AFS 1999:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/byggnads-och-anlaggningsarbete-foreskrifter-afs1999-3.pdf)**,** [**AFS 2010:16**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/dykeriarbete-foreskrifter-afs2010_16.pdf) **and** [**the** **Swedish Work Environment Authority's information page**](https://www.av.se/produktion-industri-och-logistik/bygg/risker-vid-byggnad--och-anlaggningsarbeten/arbetsmiljoplan-och-dess-risker/arbete-med-drunkningsrisk/)**.** | | |
| Preparatory measures, production methods and materials  |  |  | | --- | --- | |  | Not applicable | |  | Use of prefabricated elements that reduce the necessity of working near water. | |  | Attachment devices for guardrails, safety nets, etc. | |  | Attachment devices for permanent ladders or other solutions to make it easy to climb up in an emergency situation. |  Work, methods and equipment Access to excavation or openings in the ground, facades, joists, etc., shall be prevented through the use of guardrails. PROVIDE MAKE:  Life jackets are obligatory when working on, over or in proximity to water.  There is emergency rescue equipment at the worksite.  Safety nets, fall screens, or other fall or collapse prevention measures have been taken. PROVIDE MAKE:  There are devices for safe descent into and ascent from water at the worksite.   |  |  | | --- | --- | |  | Measures to prevent slipping and tripping have been taken, PROVIDE INFORMATION ON MEASURES: | |  | Work during the winter requires specific equipment, PROVIDE INFORMATION ON TYPE OF EQUIPMENT: | |  | When personal fall protection equipment is used, the same rules apply as listed under Risk 1 (Measures to prevent risk for falls to lower levels where the drop is two metres or more.) |  Special technical or organisational safety measures Routines and devices for safe emergency rescue from the water is available at the worksite.  Routines have been drawn up for emergency situations and accidents.  Solitary work is prohibited in work entailing the risk of drowning.   |  |  | | --- | --- | |  | There are life boats and mooring for a lifeboat. |  Other measures | | |
| Work with the above risks completed on: | | Signature BAS-U |
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# 7. Measures for work on wells and tunnels and on underground works

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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
|  | **Example: Risk for being buried underground, sinking down into loose soil, or drowning. Risk for inadequate ventilation, e.g. exhaust fumes, gas leaks, and/or oxygen deficiency. Risk for high air pressure.** | |
| **Measures** **See also** [**AFS 1999:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/byggnads-och-anlaggningsarbete-foreskrifter-afs1999-3.pdf)**,** [**AFS 2010:1**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/berg-och-gruvarbete-foreskrifter-afs2010_1.pdf)**,** [**AFS 2011:18**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/hygieniska-gransvarden-foreskrifter-afs2011-18.pdf) **and** [**the Swedish Work Environment Authority's information page on the internet**](https://www.av.se/produktion-industri-och-logistik/bygg/risker-vid-byggnad--och-anlaggningsarbeten/arbetsmiljoplan-och-dess-risker/arbete-under-jord--tunnlar-brunnar-ror/)**.** | | |
| Preparatory measures A geotechnical survey has been performed and is available at the site office.  Personnel have the required amount of work space.  Measuring of radon levels has been conducted.  The required evacuation routes are in place.  Necessary re-enforcement of ceilings and walls has been done.  Material storage, parking, and transport routes are planned with consideration given to the risk of fire and evacuation plans.   |  |  | | --- | --- | |  | There is a rescue chamber. |  Work, methods and equipment Only diesel-driven motors are permitted underground. Vehicles’ exhaust cleaning systems are examined regularly.  For stationary work, electrically-powered machines are used in the first instance. If, for example, a crane is used regularly, it should be possible to power it electrically when it is being used stationarily.  Equipment for measuring oxygen and air quality is used; most recent check of instruments PROVIDE DATE.   |  |  | | --- | --- | |  | Work rotation takes place, and every worker’s time is limited to:PROVIDE TIMES. | |  | There are a sufficient number of escape masks in underground spaces. | |  | Cabin air filters are installed in certain work vehicles LIST WHICH. | |  | Excavation and loading machines used for clean-up have been equipped with extra protective glass and re-enforced roofs. | |  | Checks and rock removal is performed by persons with special competence. | |  | All vehicles are equipped with fire extinguishing equipment. | |  | Dust-reduction measures are taken. |  Transport operations  |  |  | | --- | --- | |  | Measures have been taken to stabilise surrounding land and rock. | |  | Surrounding ground has been examined for load-bearing capacity of heavy equipment. | |  | Measures to prevent downhill movements of soil have been taken. | |  | When working on existing storm drains in streets and roads, traffic to the area is closed off. The area is closed off so that vehicles cannot accidentally expose workers to risk. |  Special technical or organisational safety measures A system is in place so it is always clear who is present in underground spaces and where they are.  There is an evacuation plan.  New workers are not permitted to start doing underground work before they have completed a safety introduction.  Ventilation has been adjusted so that hygienic air quality limits are not exceeded.   |  |  | | --- | --- | |  | There are routines to indicate when respiratory protection or air pressure equipment shall be used. | |  | Evacuation drills have been conducted DETAILS OF HOW OFTEN. | |  | Storage areas for flammable materials and vehicular fuel systems are checked PROVIDE INFORMATION ON HOW OFTEN. | |  | There are resources for bilge pumping at the worksite. | |  | Underground work has been coordinated with local emergency rescue services. |  Other measures | | |
| Work with the above risks completed on: | | Signature BAS-U |
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# 8. Measures relating to diving work

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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
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| **Measures** **See also** [**AFS 1999:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/byggnads-och-anlaggningsarbete-foreskrifter-afs1999-3.pdf)**,** [**AFS 2010:16**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/dykeriarbete-foreskrifter-afs2010_16.pdf) **and** [**the Swedish Work Environment Authority's information page on the internet**](https://www.av.se/produktion-industri-och-logistik/bygg/risker-vid-byggnad--och-anlaggningsarbeten/arbetsmiljoplan-och-dess-risker/arbete-med-dykarutrustning/)**.** | | |
| Preparatory measures, production methods and materials  |  |  | | --- | --- | |  | Not applicable | |  | Use of prefabricated elements which reduce the need to work in water. |  Preliminary investigations Surveys have ben conducted of water current conditions and the presence of diving hazards, e.g. shipping traffic or submerged timber at the worksite. Work, methods and equipment Companies/personnel employed to perform the work have diving certification corresponding to the Swedish commercial diving certification.  The diving team consists of at least three persons: The diving leader, the diver and the back-up diver.  Devices for safe descent and ascent in the water are available at the diving site.  Equipment for first aid is available at the diving site.  Devices for safe emergency rescue from the water is available at the worksite.   |  |  | | --- | --- | |  | There are life boats and mooring for a lifeboat. |  Special technical or organisational safety measures There are routines for restricting diving under certain conditions (weather, currents, ice, water control, etc.)  Routines are in place for emergency situations and accidents.   |  |  | | --- | --- | |  | A hyperbaric chamber can be reached in 4 hours or less. | |  | Work that involves diving has been coordinated with local emergency services. |  Other measures | | |
| Work with the above risks completed on: | | Signature BAS-U |
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# 9. Measures for work carried out in a caisson

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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
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| **Measures See also** [**AFS 1999:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/byggnads-och-anlaggningsarbete-foreskrifter-afs1999-3.pdf) **and** [**the** **Swedish Work Environment Authority's information pages on the internet**](https://www.av.se/produktion-industri-och-logistik/bygg/risker-vid-byggnad--och-anlaggningsarbeten/arbetsmiljoplan-och-dess-risker/arbete-i-kassun/)**.** | | |
| Preliminary investigations: A geotechnical survey has been performed and is available at the site office.   |  |  | | --- | --- | |  | Drawings have been reviewed, e.g. extent of access and communication routes. |  Special technical or organisational safety measures  |  |  | | --- | --- | |  | Not applicable | |  | A hyperbaric chamber can be reached in 4 hours or less. | |  | Documented routines have been drawn up for emergency situations and accidents. | |  | There are documented routines for how to enter and exit the caisson. | |  | There is enough capacity to pump out any water. |  Other measures | | |
| Work with the above risks completed on: | | Signature BAS-U |
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# 10. Work involving the use of explosives

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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
|  | **Example: Risk for flyrock, undetonated explosives (when drilling and loading), unauthorised persons within restricted areas, gases from blasting (in underground environments)** | |
| **Measures** **See also**[**AFS 1999:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/byggnads-och-anlaggningsarbete-foreskrifter-afs1999-3.pdf)**,** [**AFS 2007:01**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/sprangarbete-foreskrifter-afs2007-1.pdf) **and**[the **Swedish Work Environment Authority's information page on the internet**](https://www.av.se/produktion-industri-och-logistik/bygg/risker-vid-byggnad--och-anlaggningsarbeten/arbetsmiljoplan-och-dess-risker/sprangning-och-arbete-med-sprangamnen/)**.** | | |
| Preparatory measures, production methods and materials  |  |  | | --- | --- | |  | Not applicable | |  | The construction object has been placed so as to eliminate or minimise blasting. |  Preliminary investigations Inspection of nearby buildings has been done.  Cables in the ground have been examined.  The explosive charge has been adapted to surrounding property and buildings.  A geotechnical survey has been conducted.   |  |  | | --- | --- | |  | Consultation has been done with the owner of power lines near the worksite. | |  | Measuring equipment for vibration has been set up in nearby buildings. | |  | A safety clearance of XX metres for surrounding property and buildings has been decided. |  Work, methods and equipment All affected workers are informed about the risks involved in blasting, how evacuation of the worksite should take place before blasting, where it is permitted to be during blasting, and how a return to the worksite after blasting should take place.  All affected workers have been informed about how to react if undetonated explosives are encountered. The contact person is: PROVIDE NAME, COMPANY AND TELEPHONE NUMBER  Blasting and handling of explosive substances should be done by authorised companies only. PROVIDE COMPANY, CONTACT PERSON AND TELEPHONE NUMBER  The authorised company’s permits have been checked.  The blast site has been selected.  A blasting scheme detailing how the blasting work will take place should be drawn up for every blast object before the blasting is done.   |  |  | | --- | --- | |  | Equipment for measuring air quality is used; instrument checked most recently on PROVIDE DATE. | |  | Excavation and loading machines used for clean-up have been equipped with extra protective glass. | |  | The blast area is covered in connection with blasting. |  Special technical or organisational safety measures A police permit has been obtained for storage and transport of explosives.  Blasting has been coordinated with other operations in close proximity.   |  |  | | --- | --- | |  | A drilling plan has been drawn up. | |  | Necessary distances between ongoing drilling of holes for blasting and other work is documented and communicated. | |  | There are instructions on time restrictions when blasting can be done. PROVIDE TIMES. |  Other measures | | |
| Work with the above risks completed on: | | Signature BAS-U |
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# 11. Measures for working with heavy elements

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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
|  | **Example: Loading, unloading, assembly and dismantling of heavy construction elements, laying of heavy stone slabs, etc.** | |
| **Measures** **See also** [**AFS 1999:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/byggnads-och-anlaggningsarbete-foreskrifter-afs1999-3.pdf)**,** [**AFS 2003:6**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/besiktning-av-lyftanordningar-och-vissa-andra-tekniska-anordningar-foreskrifter-afs2003-6.pdf)**,** [**AFS 2006:6**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/anvandning-av-lyftanordningar-och-lyftredskap-foreskrifter-afs2006-6.pdf)**,** [**ADI 583**](https://www.av.se/globalassets/filer/publikationer/broschyrer/checklista-for-projekteringsansvar-broschyr-adi583.pdf) **and** [**the** **Swedish Work Environment Authority's information page on the internet**](https://www.av.se/produktion-industri-och-logistik/bygg/risker-vid-byggnad--och-anlaggningsarbeten/arbetsmiljoplan-och-dess-risker/arbete-med-tunga-byggelement-och-formbyggnadselement/)**.** | | |
| Preliminary investigations  |  |  | | --- | --- | |  | Not applicable | |  | The location for deployment of lifting appliances has been surveyed with regard to turning radius, how level the ground is and how much weight it can bear, as well as other activities or buildings/construction/machines in near proximity to the location. | |  | Documentation of weight and lifting points is available at the site office. | |  | The location for deployment of lifting appliances has been provided in the APD plan. | |  | Attachments for lifting and mounting have been examined. |  Work, methods and equipment The risk area associated with the lifting is fenced off with signage or in some other way restricted to ensure that no one can get inside the area.  In addition to the inspections required in the provisions, lifting appliances and lifting equipment shall also be checked regularly.   |  |  | | --- | --- | |  | When more than one crane is in use, each crane should have its own radio channel. |  Transport operations  |  |  | | --- | --- | |  | Not applicable | |  | Place for reception of heavy elements – See APD plan. | |  | Place for storage of heavy elements – See APD plan. | |  | When unloading from trucks, checks are made regarding the competence of the respective drivers and fall protection measures are taken to mitigate the risk of falls from the truck. |  Special technical or organisational safety measures A dated and signed assembly plan has been drawn up and is available at the site office, and contains:   1. A description of the project with information on who has overall responsibility for assembly and who is responsible for the various parts of the assembly. Information on the various suppliers and contact persons should also be available. 2. A description of the assembly site with a description of access restriction, storage areas, transports, etc. Vehicle parking areas must be flat so that vehicles, including any trailers, do not lean and risk rolling or tipping. 3. An indication of the order in which the element should be assembled, marking of elements and their weight. 4. Description of lifting. Everything from embedment equipment and how to lift the element to choice of lifting equipment for various elements. 5. Description of how the lifting equipment should be checked, who can perform the connection and their documented training. 6. Detailed description of how the assembly shall be done. 7. Stabilisation measures relating to the temporary construction. 8. How and where temporary storage of elements is possible. 9. The actual assembly execution is done in clear language so that all involved workers can communicate and understand each other without the risk of misunderstanding 10. The person who has drawn up and approved the assembly plan, as well as the persons responsible for design and assembly and their contact details.   The work can only start and be executed under the supervision of competent persons with the proper training certification, e.g. Safe Lifting, Operator License Lifting Appliances.   |  |  | | --- | --- | |  | Before lifting starts, lifting appliance capacity should be checked against the weight of the element to be lifted and the actual lift drop. | |  | All affected workers are informed about restrictions on lifting due to weather conditions which jeopardise safety. | |  | The lifting co-ordinator, slinger and signalman have been appointed. | |  | There are technical or organisational measures in place to ensure safe lifting or restrictions to prevent people from entering specific risk areas | |  | Coordination with nearby operations is carried out through, for example, radio communications and other regular contacts to prevent crashes. |  Other measures | | |
| Work with the above risks completed on: | | Signature BAS-U |
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# 12. Measures for passing vehicular traffic

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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
|  | **Example: Risk for being hit by passing vehicles in construction and land, road and rail work at the worksite (deliveries, earthworks, etc.) and outside the worksite (traffic on roads open to the general public).** | |
| **Measures** **See also** [**AFS 1999:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/byggnads-och-anlaggningsarbete-foreskrifter-afs1999-3.pdf)**,** [**ADI 539**](https://www.av.se/globalassets/filer/publikationer/broschyrer/sakrare-bygg-och-anlaggningsarbete-broschyr-adi539.pdf)**,** [**the** **Swedish Work Environment Authority's information page on the internet**](https://www.av.se/produktion-industri-och-logistik/bygg/risker-vid-byggnad--och-anlaggningsarbeten/arbetsmiljoplan-och-dess-risker/arbete-intill-vagar-och-jarnvagar/) **and** [**Swedish Transport Administration's tools to help with BAS-P**](http://www.trafikverket.se/Foretag/Bygga-och-underhalla/Vag/System-och-verktyg-for-vagprojekt/BAS-P-hjalpverktyg/) **and** [**special regulations for road and rail work from their internet information pages**](http://www.trafikverket.se/for-dig-i-branschen/vag/arbete-pa-vag/)**.** | | |
| Preparatory measures relating to transport operations and work Transport routes at the worksite have been planned so that backing up in vehicles can be avoided; see ADP plan.  Parking for machines has been planned so that emergency rescue vehicles can get through unhindered; see ADP plan.  Vehicles used at the worksite must be properly inspected and approved.  Investigation of risk reductions measures to reduce the risk of being hit by traffic from outside the worksite through traffic reversal or closing off streets/roads has been completed.   |  |  | | --- | --- | |  | Walkways at the worksite have been clearly distinguished from transport routes; see ADP plan. | |  | Construction objects have been placed so as to minimise or eliminate work near passing vehicular traffic. | |  | Traffic inside the worksite has been separated from work by traffic barriers as per the APD plan. | |  | During safety inspection tours, the condition of vehicles used at the worksite is also checked. | |  | Driving licenses for those who drive vehicles at the worksite are checked regularly to ensure validity. |  Traffic arrangement plan/Permits  |  |  | | --- | --- | |  | Not applicable. | |  | Application for approval of the traffic arrangement plan (TA Plan) has been completed. | |  | A traffic arrangement plan has been drawn up and approved (TA Plan) describing the worksite with safety barriers, speed limits, traffic signs and specified distances, as well as diversions or closures of streets/roads. |  Work, methods and equipment All rail and road repairs and maintenance is started and led by a person with special knowledge.  Vehicles should be equipped with acoustic warning signals that start when the vehicle is backing up. Special technical or organisational safety measures  |  |  | | --- | --- | |  | Not applicable | |  | Traffic is diverted so that vehicles do not pass the work area; application for traffic diversion has been done. | |  | Traffic is diverted so that vehicles pass at a safe distance; application for traffic diversion has been done. | |  | Traffic is directed by traffic control devices or a signalman. | |  | The speed of traffic past the worksite is reduced by means of road signs and/or other appropriate measures; application for speed limits has been done. | |  | Street/roads are closed off; application for traffic closure has been done. | |  | Passing vehicular traffic speed is maximum 30 km/hour in places where unprotected personnel can be found in immediate proximity to traffic. | |  | The speed limit for passing vehicles is maximum 50 km/hour in areas where personnel are present more than 2.5 metres from traffic, . | |  | In places where there is a barrier, with approved design and approved clearance, as a separation device between passing vehicular traffic and workplace personnel in accordance with the applicable installation instruction, the speed limit shall not exceed 70 km/hour. | |  | Traffic signs are deployed to draw the attention of passing vehicular traffic to ongoing work. | |  | Affected workers meet the special requirements of the municipality, the Swedish Transport Administration, the Swedish Transport Agency or any other clients requesting road or rail work. |  Other measures | | |
| Work with the above risks completed on: | | Signature BAS-U |
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# 13. Measures for demolition work

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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
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| **Measures** **See also** [**AFS 1999:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/byggnads-och-anlaggningsarbete-foreskrifter-afs1999-3.pdf)**,** [**AFS 2006:1**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/asbest-foreskrifter-afs2006-1.pdf)**,** [**AFS: 2011:18**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/hygieniska-gransvarden-foreskrifter-afs2011-18.pdf) **and** [**the** **Swedish Work Environment Authority's information page on the internet**](https://www.av.se/produktion-industri-och-logistik/bygg/risker-vid-byggnad--och-anlaggningsarbeten/arbetsmiljoplan-och-dess-risker/rivning-av-barande-konstruktione/)**.** | | |
| **Important to consider during demolition:**   * Materials containing asbestos can only be demolished, handled and transported by personnel from authorised companies which have permits from the Swedish Work Environment Authority. * Materials containing PCBs can only be demolished, handled and transported by personnel from authorised companies. * The stability of objects to be demolished must be thoroughly investigated so that stabilisation measures can be taken.  Preliminary investigations The extent of installations and cabling in the ground has been investigated.  It has been ascertained which activities were conducted previously in the building.  A demolition description has been drawn up that includes:   * the object’s construction * a material inventory of the object * the order of demolition * special protective and stabilisation measures in different demolition phases * special descriptions for the work with materials dangerous to health, e.g. asbestos, PCBs, autoclaved aerated concrete (known in Sweden as “blue concrete”), lead, etc., and how the materials are handled from a work environment perspective. * work that can entail a risk for infection * what personal protective equipment should be used for different types of work * description of how the work should be done to prevent risks with dust, strain ergonomics, noise and vibrations.  |  |  | | --- | --- | |  | The presence of mould has been investigated. | |  | The presence of microbiological substances which can spread, such as bird droppings, has been investigated (often present in churches, under bridges, or in other recesses which can provide a habitat for birds. | |  | Water locks have been examined for the presence of mercury. | |  | The location for deployment of lifting appliances has been surveyed with regard to ground stability, how level the ground is and its load-bearing capacity. |  Work, methods and equipment Solitary work is prohibited for demolition work.   |  |  | | --- | --- | |  | Materials containing asbestos can only be demolished, handled and transported by personnel from authorised companies which have permits from the Swedish Work Environment Authority.  PROVIDE COMPANY’S NAME  PROVIDE NAME AND TELEPHONE NUMBER FOR THE COMPANY’S CONTACT PERSON AT THE WORKSITE | |  | Materials containing PCBs can only be demolished, handled and transported by personnel from authorised companies.  PROVIDE COMPANY’S NAME  PROVIDE NAME AND TELEPHONE NUMBER FOR THE COMPANY’S CONTACT PERSON AT THE WORKSITE | |  | Materials hazardous to health and the environment can be transported away from the worksite without impacting others at the worksite or any third parties. | |  | All packaging containing materials hazardous to health and the environment are clearly marked and placed in special containers. | |  | Construction materials and construction elements containing substances which affect health or the environment are clearly marked pending demolition. | |  | Before lifting of heavy elements starts, lifting appliance capacity should be checked against the weight of the element to be lifted and the actual lift drop. | |  | Affected workers are informed about which personal protective equipment should be used for the various stages of work. | |  | Affected workers have adequate training to use the personal protective equipment that should be used during various stages of work. |  Special technical or organisational safety measures There are routines for how undocumented but suspicious materials encountered should be handled.  Affected workers are informed about health and fall risks associated with the materials and substances handled, and how these risks shall be prevented.  Affected workers are informed about which stages of the work can only be performed by authorised companies.   |  |  | | --- | --- | |  | The authorised company’s permits have been checked. |  Other measures | | |
| Work with the above risks completed on: | | Signature BAS-U |
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# Work on work platforms shared with ongoing ordinary enterprises

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| **Company** | **Work/activity and risk(s):** | |
|  | **Example: Risk for collisions between people and vehicles and through the work itself, if there is no effective coordination between the construction works and the ongoing permanent operations in the area.** | |
| **Measures See also** [**AFS 1999:3**](https://www.av.se/globalassets/filer/publikationer/foreskrifter/byggnads-och-anlaggningsarbete-foreskrifter-afs1999-3.pdf) | | |
| Preparatory measures  |  |  | | --- | --- | |  | Not applicable | |  | During the planning and design phase for the building and civil engineering work, BAS-P (and when applicable BAS-U if already appointed) and the co-ordinator for the ongoing permanent operations have discussed and identified critical intersections and risks of collisions between the two operations. |  Special technical or organisational safety measures BAS-U and the person in charge of co-ordination for the ongoing permanent operations at the worksite meet and are in touch regularly on specific days/times to discuss ongoing measures to prevent collisions between the two operations. Other measures | | |
| Work with the above risks completed on: | | Signature BAS-U |
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# Describe any additional risks here

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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
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| **Measures** | | |
| Measures provided here | | |
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# Describe any additional risks here

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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
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| **Company** | **Work/activity and risk(s): provide information on what and where** | |
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