



EHS Regulations@ Operating site

siemens.com



Project/ Order/ Framework Contract: xy
Location(s): xy

We integrate outstanding performance in environmental protection, maximum occupational safety and innovative concepts to promote health into our business processes

EHS Regulations@Operating Site

The data on this page should be entered in full by the Project Manager/Demand Owner and should be kept updated throughout the course of the project.

These EHS Regulations must be handed over to every contractor together with the purchase order.

Location of construction site, scope

Project name/location

Street address

ZIP code, city

Addresses and phone numbers

Project Manager/ Demand Owner

Surname	First name	Phone no.

Contractor/ Responsible Contact Person(s)

Name	First name	Company	Phone no.

Local EHS Experts

Name	First name	Function	Phone no.
		EHS Coordinator	
		EHS MiP	

Emergency Call

Phone no. (Emergency Call)

EHS Regulations@Operating Site

Instructions for the use of this document:

All yellow highlighted passages should be adapted as necessary and kept updated by the Project Manager/
Demand Owner.

Introduction

Environmental protection, health and occupational safety are a top priority at Siemens. To enhance this message, the management has published a corporate initiative named Zero Harm Culture@Siemens, which is based on three principles:

1. **Zero incidents - it is achievable.**
2. **Health and safety - no compromises!**
3. **We take care of each other!**

We expect all companies which work for Siemens and/ or its affiliated companies or work on Siemens locations to comply with these principles.

Designed to protect all Siemens employees, contractors and other third parties, these **EHS Regulations** set out binding rules for ensuring a safe working environment.

The legal requirements, the principles of good engineering practice and other relevant regulations also apply.

This document does not affect the contractors' statutory environmental, health and safety obligations.

EHS Regulations@Operating Site

Contents

1. Environmental, Health and Safety Obligations	5
2. EHSMiP/EHS Coordinator	5
3. Personnel	5
4. Duty of notification	6
5. Reporting – not applicable	6
6. Briefings/instruction	6
7. Visitors and suppliers	7
8. Site facilities, site traffic	7
9. Site Access	7
10. Tidiness and cleanliness	8
11. Safety equipment	8
12. Permits to work	8
13. Personal protective equipment (PPE)	9
14. First aid/first aiders	9
15. Ban on alcohol, drugs and smoking	9
16. Restricted use of mobile phones	9
17. Machines, tools and equipment	10
18. Hazardous substances	10
19. Pressure vessels, work involving risk of fire and explosion	10
20. Assembling work (e.g. installing prefabricated components)	10
21. Demolition work	11
22. Earthworks	11
23. Electrical equipment and systems	11
24. Ladders/small and mobile scaffoldings	11
25. Scaffolding	12

Annexes

Annex 1: Penalty list for contractors – not applicable	13
Annex 2: Application form for permit to working at heights	13
Annex 3: Safety information sheet for suppliers – not applicable	13
Annex 4: Location-specific regulations	13

1. Environmental, Health and Safety Obligations



Contractors are obliged to comply with the following, in this order:

- the relevant contractual agreements
- the location-specific health and safety rules/ the health and safety rules for the Operating Site (Annex 4)

EHS Regulations@Operating Site

- these EHS regulations

and must ensure that all agency worker, permanent employees and subcontractors hired by them comply with these rules.

Each contractor has to draw up activity-related risk assessments for the personnel they deploy on site, including agency workers, and submit the documents to the Project Manager/Demand Owner **at least 14 days before work commences**. The contractors must also ensure that any subcontractors they hire do the same.

Any risks identified in the risk assessment should be minimized with a view to effectively prevent incidents from occurring. This can be done by providing suitable protective equipment, putting counter-measures in place and issuing instructions in line with accident prevention regulations and the generally recognized rules governing health and safety at work.

Particular attention should be paid to interactions between the various companies involved in the activities. Every contractor is also responsible for briefing, instructing and monitoring its subcontractors and the subcontractors' personnel.

If the requirements are changed or broadened in the latest version of the applicable legal provisions and official rules and regulations, these will continue to apply.

Furthermore the location specific regulations according to **Annex 4** must be observed.

2. EHSMiP/EHS Coordinator



If Siemens has appointed an EHSMiP/EHS Coordinator, this person will be responsible for monitoring the compliance with this document.

Contractors nonetheless remain fully responsible for complying with their obligations. Any instructions issued by the EHSMiP/EHS Coordinator with respect to environmental, health and safety must be followed. The EHSMiP/EHS Coordinator is authorized to issue instructions on EHS aspects and is entitled to apply the penalty rule, as well to remove parties which are breaking the rules from the construction site.

The actions of the EHSMiP/EHS Coordinator do not release contractors from their obligation to coordinate with other companies in accordance with the general legal requirements.

3. Personnel



Contractors' personnel must be capable of performing the tasks for which they have been hired. Any persons breaking environment, health and safety regulations or failing to follow instructions issued by Project Manager/Demand Owner or the representatives must be dismissed from the construction site and replaced.

Where personnel without a good working knowledge of the project defined language (usually English) are hired, a suitably qualified person who speaks both workers' language and project defined language must be present on site at all times to act as a contact person. Every worker hired by a contractor must be given a copy of the relevant environmental, health and safety requirements in a language which they can understand.

EHS Regulations@Operating Site

4. Duty of notification



Contractors must notify the EHS Coordinator/EHSMiP immediately of all work-related accidents, near misses and injuries. This applies over and above any statutory duty of notification and the provisions of the contract, which are not affected by this requirement.

In addition, contractors must instruct their agency workers, permanent staff and subcontractors to rectify any safety deviations on site immediately or, if they are unable to rectify the deviation properly, to report it to the relevant supervisor (foreman or site manager) or EHS Coordinator/ EHSMiP.

Faulty electrical devices must always be repaired by a qualified electrician. Hazardous zones must be cordoned off until the safety deviation has been corrected.

Contractors must agree to any safety measures that differ from the measures set out in their submitted risk assessment with the EHS Coordinator/EHSMiP before work commences.

Any new companies and subcontractors hired must be notified to Project Manager/ Demand Owner and his/her representatives along with the corresponding details (e.g. site manager, supervisor, first aider, environmental, health and safety officer). This does not affect the contractual requirements concerning the deployment of subcontractors or agency staff or any relevant consent requirements.

Furthermore, contractors must immediately inform Project Manager/ Demand Owner of any special events connected with building safety and order, such as imminent or actual damage or injury, accidents, criminal acts, fires, vandalism and death threats, of which they become aware during the course of their contractual services.

If the ordinary users of the operating site get affected by the works the contractor must coordinate the schedule with them and consider their legitimate interests during the execution of the works.

Additional notifications are to be given following the location-specific rules as set out in Annex 4.

5. Reporting – not applicable

6. Briefings/instruction



The contractor has to align the briefings with the Project Manager/Demand Owner or his/her representatives.

The instruction covers:

- The contents of these safety regulations at operating site
- Location-specific information
- Project-specific information
- Building-specific information

In addition, contractors must ensure that their staff is regularly instructed about the risks that may arise. In addition, contractors must ensure that their staff is regularly instructed about the risks that may arise during their work and the measures to be taken to mitigate such risks. All instructions given must be documented and proof thereof kept available on site.

Contractors are also responsible for briefing/instructing and monitoring their subcontractors and the subcontractors' personnel.

The location-specific rules as set out in **Annex 4** must also be observed

EHS Regulations@Operating Site

7. Visitors and suppliers



For visitors and suppliers, the location specific regulations according to Annex 4 have to be observed.

8. Site facilities, site traffic



Contractors must set up their site facilities in the areas allocated to them by Project Manager/Demand Owner, which must be identified and agreed in good time before work commences.



Contractors may only access and leave the site through designated access gates. Traffic areas must be specifically identified as such. Private passenger vehicles are not permitted to enter the site under any circumstances.



The general rules of the road apply on site and, unless otherwise indicated, a maximum speed limit of 10 km/h applies.

The location-specific rules onsite traffic as set out in **Annex 4** must also be observed.

Traffic areas must not be affected by construction or installation work. Exceptions must be agreed with the EHS Coordinator/EHSMiP in advance.

Reverse travel is only permitted in exceptional cases. Site vehicles must be equipped with an acoustic reversing alarm.

Use of a flagman during reversing operations is mandatory throughout the site despite the vehicles are equipped with reversing cameras

Access roads for emergency services, police and other auxiliary vehicles must be kept clear at all times.

Materials, machines and equipment may only be brought onto the site as and when needed to progress work. Site supplier traffic, in particular the method of delivery, the location and all loading and unloading work, must be agreed with the EHS Coordinator/EHSMiP in advance. This applies in particular to heavy loads.

The access of delivery areas follows the location-specific rules as set out in **Annex 4**.

Contractors must store all materials delivered for them securely. The site must be vacated immediately after completion of the works. Unless otherwise stated in the contract, areas used must be returned to their original condition after vacating the site.

Principal's lifts and hoists may only be used with prior consent.

9. Site Access



It must be ensured that the operating site is protected against unauthorized access. The contractors employees must only access and leave the operating site via the agreed access routes

The location-specific rules on site access as set out in **Annex 4** must also be observed.

EHS Regulations@Operating Site

10. Tidiness and cleanliness



Tidiness and cleanliness on site and/or in the contractors' individual areas of responsibility (workplaces and traffic routes) must be ensured in order to avoid tripping and falling hazards.

Low-dust working methods (e.g. with on-tool extraction, damping of surfaces) must be used. Dust formation should be avoided, particularly during cleaning work (e.g. by using extraction).

All waste should be removed from work areas and disposed of properly every working day.

All materials, tools and waste stored on site must be properly secured to prevent them from falling or blowing off.

11. Safety equipment



Safety equipment (e.g. barriers for fall protection, coverings over openings in the ground) must not be removed or modified. If it needs to be done due to the nature of the work to be performed, a permit to work in alignment with section 12 must be obtained from the EHS Coordinator/EHSMiP and alternative protective measures agreed.

Hazardous zones must be cordoned off, indicated and brought to the attention of the other disciplines. The safety equipment must be reinstated immediately on completion of the work.

12. Permits to work



If no location-specific regulations according to **Annex 4** are defined the contractor has to determine approval procedures for hazardous works. These procedures will be agreed with the EHS Coordinator/EHSMiP and validated on commencement of the assignment.

At minimum the following works shall be subject for permit to work:

- Work involving a risk of falling in accordance with the risk assessment or working at heights exposure to a risk of fall from ≥ 2 m height
- Hot works (e.g. welding and soldering)
- Work on electrical systems
- Work with lifting gear (e.g. cranes)
- Work in confined spaces (e.g. shafts)
- Work in zones at risk of fire and explosion
- Work in contaminated zones
- Work in zones with temporarily ineffective (e.g. removed) safety equipment

Siemens has the right to require other permit forms to be completed for hazardous work.

Contractors are obliged to ensure that the permit process is followed, including by any subcontractors hired by them and the subcontractors' personnel.

Contractors must provide the relevant documentation (permit forms) in the languages of the personnel carrying out the work on site. Contractors must keep full records of all permits issued on site for the entire duration of their contract.

The EHSMiP/EHS Coordinator and other persons authorized by Siemens are entitled to inspect these records at any time.

Attention must be drawn to the hazardous work permit processes to be complied with in the initial briefing.

Any changes or additional requirements that may arise during the contract term may lead to changes in the permit processes to be followed.

EHS Regulations@Operating Site

For work involving a risk of falling in accordance with the risk assessment or working at heights exposure to a risk of fall from ≥ 2 m height, the Siemens permit form (Annex 2) can be used.

13. Personal protective equipment (PPE)



All protective measures must be based on the hierarchy of control (eliminate, reduce/isolate, control, PPE) to prevent harm to personnel and environment

It is mandatory to wear safety vests and safety footwear. Helmets must only be worn in especially signed areas or as a result of the risk assessment.

Depending on the risk situation, other PPE may also be required (e.g. eye, face, hearing or breathing protection). Hazardous work zones must be identified with the appropriate understandable pictograms.

The use of safety ropes as sole protection is only permitted for short-term work (minor works) and must be reported to EHSMiP/EHS Coordinator in advance (permit to work). The line manager of the worker(s) concerned must determine the anchor points and the worker(s) must be instructed in the proper use of the safety harnesses

The location-specific rules on using the PPE as set out in **Annex 4** must also be observed.

14. First aid/first aiders



Every company must have sufficient first aid materials at their disposal on site.

In addition, every discipline should have an adequate number of trained first-aiders on site (10% of personnel present). One first-aider is sufficient for teams of up to 20 workers.

For the rest, the relevant national requirements apply.

15. Ban on alcohol, drugs and smoking



The consumption of alcohol and the use of other intoxicating substances on site are prohibited.

Smoking is prohibited in the entire site, excepted in the areas designated for it. The Contractor shall define the smoking areas considering the site occupation, risk areas, workplaces and all other relevant data.

16. Restricted use of mobile phones



To ensure that workers' attention is not distracted while working, the use of mobile devices in work zones is prohibited throughout the site. Site managers and foremen are the exception from this rule, as are calls to the emergency services.

Site managers and foremen shall avoid the use of mobile in hazardous zones.

EHS Regulations@Operating Site

17. Machines, tools and equipment



Contractors may only use safe, tested machines, devices and work equipment on site. Test certificates must be available before work commences and must be shown to the EHS Coordinator/ EHSMiP on request before the equipment is used for the first time. In addition, contractors are obliged to keep all relevant proofs, assembly instructions, certificates of approval, permits, testing and inspection logs on site.

Cranes, diggers, earth-moving equipment, lifting platforms and forklift trucks may only be operated by persons of at least 18 years of age who have received training on these types of equipment, are physically and mentally capable of operating them and who have been instructed in writing by the contractor to use them. These documents must be kept available for inspection on site.

Hazardous zones must be cordoned off. Entry to these areas is prohibited..

18. Hazardous substances



Handling and storage of hazardous substances (e.g. adhesives or paint containing solvents, gases) and work processes in which hazardous substances are released (e.g. grinding dust, diesel emissions) must be notified to the EHS Coordinator/EHSMiP.



The safety data sheets and instructions for using these hazardous substances must be kept available on site and the safety precautions described (e.g. ventilation/breathing protection, no smoking) must be observed. Personnel must be trained before handling hazardous substances.

Highly flammable substances may only be kept available at the workplace in quantities required to enable work to progress and must be properly stored. Contractors must provide suitable firefighting equipment at these locations.

The location-specific rules on handling hazardous substances as set out in **Annex 4** must also be observed.

19. Pressure vessels, work involving risk of fire and explosion



Pressure vessels (e.g. gas cylinders) must not be stored in traffic routes and must always be secured to prevent them from falling over or rolling away. They must be protected with valve caps. Fuel gases and oxygen must always be stored separately.



A permit to work (see section 12) is required for work involving open flames or sparks (e.g. cutting, angle grinding) and suitable fire protection measures must be taken (e.g. fire extinguisher to hand).

The location-specific rules on handling pressure vessels and fire and explosion hazards as set out in **Annex 4** must also be observed.

20. Assembling work (e.g. installing prefabricated components)



Where assembling work is carried out, a detailed assembling instruction must be provided. This instruction must contain all necessary safety information (sequence of work, any hazards arising, e.g. risk of falling from heights or falling objects, along with corresponding safety measures, e.g. use of cranes, platform lifts, mobile scaffolds, safety ropes, and barriers where necessary) and it must be submitted to the EHS Coordinator/EHSMiP at least 14 days before commencement of work.

Assembly instructions must be kept available on site while works are ongoing.

EHS Regulations@Operating Site

21. Demolition work



Where demolition work is carried out, a detailed demolition instruction must be provided. This instruction must contain all necessary safety information (sequence of work, any hazards arising, e.g. risk of falling from heights or falling objects, along with corresponding safety measures, e.g. use of cranes, platform lifts, mobile scaffolds, safety ropes, and barriers where necessary) and it must be submitted to the EHS Coordinator/EHSMiP at least 14 days before commencement of the work.

Demolition instructions must be kept on site while works are ongoing.

If contamination or hazardous substances (e.g. asbestos, artificial mineral fibers) are encountered, all work must stop immediately. The EHS Coordinator/EHSMiP must be informed without delay.

22. Earthworks



Unplanned excavations of pits and trenches and driving of piles and metal rods are not permitted. Any such work must be approved by the EHS Coordinator/EHSMiP in advance.

23. Electrical equipment and systems



Contractors may only connect their own electrical systems and equipment to power sockets that are fitted with a RCD (residual current device). If there is no power distributor with a RCD available, contractors should provide and use mobile safety distributors/safety devices.

Power distributors provided by contractors must be clearly allocated to the contractors concerned and must comply with all relevant electrical regulations. Contractors must have their RCD switch triggered by a trained member of staff every working day. They must have their power distributors checked by a qualified electrician once a month and the inspection must be logged. Inspection stickers in table format must be affixed to the power distributors and must state clearly when the inspections took place.

Test certificates must be available before work commences and must be shown to the EHS coordinator/EHSMiP on request before the equipment is used for the first time.

All other electrical systems and equipment used by contractors must likewise comply with the relevant electrical regulations and must have been demonstrably checked to ensure they are in proper working order and provided with a sticker.

All electrical extension cords must be suitable for use on a construction site (rubber sheathed cables). Damaged cables (e.g. insulators, plugs, strain relief cleats) must be taken out of service immediately and must be repaired by a qualified electrician before reusing.

The location-specific rules as set out in **Annex 4** must also be observed.

24. Ladders/small and mobile scaffoldings



Working from ladders should be avoided.

In justified exceptional cases, work can be carried out from a ladder providing it is short-term (no more than ≤ 2 hours/day in total) and non-hazardous (i.e. can be performed with one hand). One hand must always be free for holding onto the ladder (e.g. during painting or cleaning). Activities such as welding or soldering or working with a demolition hammer must never be performed from a ladder.

Small or mobile scaffoldings must be provided and used for longer-term and hazardous overhead work.

EHS Regulations@Operating Site

Small or mobile scaffoldings must be clearly allocated to the contractor concerned. In addition, care must be taken to ensure that small and mobile scaffoldings are single units from one manufacturer; they have three-part protection (Guardrails, mid-rails and toe boards) **on all sides** and are correspondingly stable.

It is strictly forbidden to move mobile scaffoldings while persons are on the working platform. Instructions for assembly and use must be kept on site. All scaffoldings must be approved by a qualified and authorized person before usage.

25. Scaffolding



The scaffolding contractor must provide proof of the serviceability and safety of the working, safety and shoring scaffolding installed by it and must monitor its safety during use. After completion of the scaffolding, the scaffolding contractor must record the fact that it is in good working condition in an approval document.

In addition, the scaffolding must be clearly identified with the following information:

- Standard...
- Width class...
- Load class...
- Evenly distributed load max... kN/m²
- Scaffolding contractor...
- Approval date

Contractors must instruct personnel working on their behalf (including agency or permanent personnel, subcontractors) in the proper use of the scaffolding. In particular, this includes performing a visual inspection of the scaffolding before accessing it in order to ensure it is in good working condition.

It is not permitted to make any changes to the scaffolding (e.g. removing side rails, toe boards, connectors, anchoring points); such changes may only be carried out by the scaffolding contractor.

A permit to work at heights of $\geq 2\text{m}$ as per the procedure described in section 12 must be obtained prior to commencement of erecting, disassembling or working on scaffoldings.

If safety deviations are discovered at the scaffolding or a section of, it must not be accessed and must be blocked off to prevent others from accessing it. The contractor's site management and the EHS Coordinator/ EHSMiP must be informed about the deviations immediately.

The attachment of scaffolding hoists, lifts or similar devices as well as banners must be agreed with the scaffolding contractor, the construction contractor's site management and the EHS Coordinator/ EHSMiP in advance.

To ensure safe delivery of equipment, appropriate installation platforms must be planned in advance and attached when the scaffolding is erected or at the appropriate time.

EHS Regulations@Operating Site

List of annexes

- Annex 1: Penalty list for contractors – not applicable
- Annex 2: Application form for permit to working at heights
- Annex 3: Safety information sheet for suppliers – not applicable
- Annex 4: Location-specific regulations

Stamp of the contractor's company	Permit to Work (PtW)	Vers. 2.1
	Work at Heights*	Nr. DE2016-01

Permit No.: _____ Date: _____

Site: _____

Location: _____

Contractor: _____ Phone: _____

This permit is valid from: _____ am/pm on: _____

This permit is valid until: _____ am/pm on: _____

Description of works: _____

Risk Assessment (RA), Safe Work Method Statement (SWMS) or Safe Work Procedure (SWP) must be attached to this 'permit'

Note: The following sections of this permit must be completed and signed by the contractor's safety expert/ contractor and in addition it must be approved by the contractor's project manager before the work is to start. In case of hazard-raising changes of the evaluated parameters, the works must be stopped immediately and a new permit to work must be requested.

The following equipment will be used during the works (all equipment to be used is in good working order and is fit for use):

<input type="checkbox"/> Elevated work platform (e.g. scissor lift)	<input type="checkbox"/> Cherry Picker (e.g. boom lift)	<input type="checkbox"/> Scaffolding
<input type="checkbox"/> Mobile scaffold	<input type="checkbox"/> Step ladder ¹⁾	<input type="checkbox"/> Extension ladder ¹⁾
<input type="checkbox"/> Edge protection	<input type="checkbox"/> Safety net	<input type="checkbox"/> Full body harness, ropes and lifeline
<input type="checkbox"/> Solid anchor points are defined	<input type="checkbox"/> Appropriate PPE ²⁾	

Other (please specify): _____

In case of working at heights please be aware, that a high angle rescue plan must be in place prior start of work.

Describe the rescue process: _____

¹⁾ The usage of ladders must be avoided and should only be accepted in educated exceptional cases
²⁾ Appropriate PPE contains at least safety helmet, safety vest, safety shoes and (in some countries) safety glasses – deviations are only possible on basis of a risk assessment

* At what height this PtW should be implemented depends basically on the risk assessment. From a height on, which is defined within your country as working at height, but at the latest from 2 m fall-off height, this PtW is binding.

The following services have been isolated for the duration of the works:

- Smoke/ thermal detectors ¹⁾
 Pipes, tanks and valves
 Electrical outlets / appliances
 High voltage systems
 Bridge cranes
 Hot components

Other (please specify): _____

¹⁾ In this case the fire safety expert must be involved prior to start of works

The following protection measures against falling objects have been implemented for the duration of the works:

- Safety net
 Appropriate cordoning off of the corresponding area below the working site

Other (please specify): _____

The following control measures have been implemented for the duration of the works:

- Barricades
 Signage/ warning labels
 Spotter

Other (please specify): _____

The following environmental factors have been assessed and are suitable for the works:

- Weather/ wind
 Weather/ rain
 Stored material / vegetation

Other (please specify): _____

**Every worker must carry a copy of the PtW during working at heights!
 It is possible to have the PtW in digital form on the smartphone.**

Authorisation

Permit issued to: _____
 ((Print name of foreman) (Signature) (Date))

Permit valid for (workers):	Name		Date	
	Name	Date	Name	Date
1.	_____	_____	9.	_____
2.	_____	_____	10.	_____
3.	_____	_____	11.	_____
4.	_____	_____	12.	_____
5.	_____	_____	13.	_____
6.	_____	_____	14.	_____
7.	_____	_____	15.	_____
8.	_____	_____	16.	_____

Please add further persons on an extra sheet!

Above-mentioned persons (and maybe on an attached extra sheet added persons) are fit and qualified for working at heights. They have been instructed especially for these works hazards. The defined safety measures have been explained to them. They have got the necessary PPE for these works and they have been trained in the right use of this PPE.

Permit issued by: _____
 (Print name of the contractor's safety expert/ contractor) (Signature) (Date)

Approved by: _____
 (Print name of the contractor's Project Manager) (Signature) (Date)

Cancellation / completion of permit

Permit cancelled/returned by: _____
 (Print name of the contractor's safety expert/contractor) (Signature)

Cancelled/returned at: _____ am/pm on: _____
 (Time) (Date)

Reason for cancellation: _____

Final sign off after completion of works

The worksite has been inspected at the cancellation/completion of the work at heights and declared safe for normal operations to resume.

 (Print name of the contractor's safety expert/contractor) (Signature) (Date)

 (Print name of the contractor's Project Manager) (Signature) (Date)

Internal SIEMENS notation

Herewith I declare that the above mentioned permit to work has been discussed with me on at
 o'clock and it has been explained to me by
 (Date) (Time)
 (Name)

In this context I have pointed to the fact that the responsibility regarding a qualified and safe performance of the works remains with the contractor.

 (Print name of the Project Manager/ Location Manager) (Signature) (Date)