



# Toolbox

## Electrical systems

Schiphol wants to be a safe place for everyone. It makes no difference if you are here as a passenger, a visitor or to do your work. However, safety cannot be taken for granted. That is why we have prepared the Golden Rules of Safety. The rule below relates to the release of electrical systems.

Working with electricity is a high-risk activity. If anything goes wrong, the consequences are almost always serious. You could suffer serious injury, or even die. How do we prevent this from happening? You can avoid injury by knowing exactly which electrical work you are and are not permitted to carry out. It is quite literally a matter of life and death. You must be aware of the risks and understand how you recognise dangerous situations. That is why we have introduced the following Golden Rule of Safety:

### ELEKTRISCHE INSTALLATIES

#### Why electrical work is a high-risk activity

Electricity can be deadly because:

- it is invisible
- it is odourless
- it is inaudible, and
- once you feel it, it may be too late!

#### Electricity is dangerous both to people (life-critical) and to Schiphol operations (process-critical)

Any wrong move with electricity can have major consequences both for yourself (life-critical) and for operations at Schiphol (process-critical):

- electrocution
- severe burns
- falling or tripping as a result of shock
- fire
- explosion
- outage of (parts of) Schiphol
- damage to system (components), materials and tools

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Do you have any hints or remarks to make this a better toolbox? Or do you want to share your opinion with us? We like to hear from you via:  
[safe\\_office@schiphol.nl](mailto:safe_office@schiphol.nl).

## Strict rules, certainly at Schiphol

At Schiphol, you never work alone, and the working conditions are always out of the ordinary. Particularly when dealing with electricity, because electricity is so safety-critical, we at Schiphol work in accordance with the Safety Management System Electrical Engineering (in Dutch: Veiligheid Management Systeem Elektrotechniek - VMSE). The VMSE system provides rules and requirements for working on or near electrical engineering systems. The only way to guarantee your safety and that of your colleagues, users, passengers and visitors is to strictly apply the rules and regulations.

### ATTENTION

Request permission from the owner of the system (Schiphol) before you start any work on or near an electrical system.

### How to obtain permission

To obtain permission to start work, first draw up a work plan in accordance with the VMSE. Submit this work plan no later than fourteen days before you want to start work to the person responsible for the system (RS)/ the person responsible for the work (RW) or the responsible expert (RE) at the department where you want to carry out the work.

On the basis of the information you provide, one of these people will determine whether you can start the work or if you still need to take additional measures. You may also have to obtain verbal permission from one of these people before you can actually start work.

Always follow the instructions in the work permit and the latest information from the duty RS, RW or RE. If anything remains unclear, ask the person who issued the work permit.

Always take the precautionary measures appropriate to the work you plan to carry out.

### Safety rules

- You are never allowed to work on electrical systems that are live;
- You always need a work permit to carry out work on electrical systems or electrically driven equipment (see VMSE);
- You may only work on or near electrical systems, machines or equipment that have been visibly secured (shown to be no longer live, blocked, locked against switching back on, earthed and tagged). Check that the system is not live. This check is known as the Lock-out Tag-out procedure. Check that this procedure has been carried out. Always! (See VMSE);
- Document every electrical securing procedure; refer to the switch procedure at the relevant department (see VMSE);
- Anyone working on electrical engineering systems must be in possession of a valid appointment or instruction from his/her own employer; and in some cases from Schiphol, too. You are personally responsible for extending and keeping this appointment/instruction up to date (See VMSE).

### Approval of the work permit

A person authorised to switch will prepare the work permit and switch procedure, in advance. The RS, RW or RE are also authorised to do this.

Only authorised personnel are permitted to carry out an electrical securing procedure. And only subject to a work permit and verbal permission from an RS, RW or RE.

### Take personal responsibility!

- Before you start work, check for yourself that the installation has been correctly turned off;
- To measure is to know: follow the procedures to confirm that a system is no longer live, using correct and calibrated measuring equipment.

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## Last Minute Risk Analysis

You must carry out an LMRA before you start work. Below is a list of questions you can ask yourself:

- Do I have a VMSE work permit from Schiphol?
- Is the work permit clear, and does it cover precisely the work I am about to carry out?
- Has the work permit been discussed with all relevant parties before I start?
- Am I really authorised to carry out this work?
- Have I made sure that no part of the system is still live? And do I know for sure that everything is secured to prevent switching back on (Lock-out, Tag-out, Try-out)?
- Is my work area safe, clean and dry and are there any other risks?
- Are all electrical components properly isolated and undamaged?
- Do I have the suitable PPE, is it still usable (shelf life not expired) and do I know how to use it? Examples of the suitable PPE include shoes with insulating soles, gloves, face shields and flame-retardant clothing, and in specific cases electrical arc flash suit and face mask.
- Have I arranged for supervision of high-risk work on electrical systems so that assistance can be called in quickly in case of an emergency.

## If despite all the precautionary measures you still suffer an electric shock

Immediately report to a doctor/hospital or the medical services at Schiphol (Departure Hall 2) and tell them you have suffered an electric shock. They will carry out an ECG to ensure there is nothing wrong with you.

### ATTENTION!

If you have suffered an electric shock, physical problems may only show up much later. Avoid problems and immediately seek medical advice.

## What you can expect from Schiphol

Schiphol will do everything it can to ensure that everyone can work safely on or near electrical engineering installations. We keep our work instructions and procedures up to date and available. You can also call on us for questions or assistance: [safe\\_office@schiphol.nl](mailto:safe_office@schiphol.nl) or via your supervisor. If despite our effort there is still room for improvement, we are always open to suggestions. After all, we are partners in safety.

## What Schiphol expects from you

We want you to be responsible for safe working practice. Certainly, near or on electrical engineering systems. Avoid switching to automatic pilot, and always carry out an LMRA before you start work. Help others wherever necessary.

#### TIPS:

- Always stay alert!
- Always ask when in doubt
- Interrupt work if necessary

[www.schiphol.nl/veiligheid](http://www.schiphol.nl/veiligheid)